2023 Semiannual Groundwater Monitoring and Corrective Action Report

Plant Yates – Gypsum Landfill
Permit 038-016D(CCR)
Newnan, Georgia

February 28, 2024

2023 Semiannual Groundwater Monitoring and Corrective Action Report

Plant Yates – Gypsum Landfill
Permit 038-016D(CCR)
Newman, Georgia

February 28, 2024

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Summary

This summary of the 2023 Semiannual Monitoring and Corrective Action Report provides the status of groundwater monitoring and corrective action program July 2023 through December 2023 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. The GA EPD approved Closure Permit No. 038-016D(CCR) for Plant Yates Gypsum Landfill on January 5, 2022.

Plant Yates and the site

Groundwater at the site is monitored using a comprehensive monitoring system of wells installed to meet federal and state monitoring requirements. A permit application package for the Gypsum Landfill was submitted in November 2018 to comply with the CCR rule and approved on January 5, 2022 (Permit 038-016D(CCR)). 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 2023 semiannual reporting period, Arcadis conducted a groundwater sampling event in August 2023. 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 statistically significant level SSL-related constituent is 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.

Appendix III Parameter	August 2023
Boron	GWC-4R
Calcium	GWC-1R, GWC-2R, GWC-5R,
Chloride	GWC-4R
Sulfate	GWC-1R, GWC-2R, GWC-5R
Total Dissolved Solids	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.

Contents

Tables

Figures

Appendices

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 2023 Semiannual Groundwater Monitoring and Corrective Action Report, 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 [CFR] 257 Subpart D), specifically § 257.90(e), 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. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management 391-3-4.01.

Arcadis U.S., Inc.

2.28.24

J. Geoffrey Gay, P.E.
Technical Expert (Eng)
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Date

1 Introduction

This 2023 Semiannual Groundwater Monitoring and Corrective Action Report presents groundwater monitoring activities conducted at the Georgia Power Company (GPC) Plant Yates Gypsum Landfill (the site) from July 2023 through December 2023. 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.

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 the August semiannual monitoring events for Appendix III and IV constituents of 40 CFR Part 257, and 40 CFR Part 258 Appendix I and II metals required by the previous permit and the EPD approved Groundwater Monitoring Plan (ACC 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. A permit application to comply with GAEPD Rules was submitted in November 2018 and approved on January 5, 2022 (Permit 038-016D(CCR)). The permit provides for a discontinuation of groundwater sampling on August 15, 2024, following a demonstration that Appendix IV constituents do not statistically exceed groundwater protection standards (GWPS). Areas where CCR Removal Reports have been submitted to GA EPD are shown on **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 1.3×10^{-3} centimeters per second based on multiple rising-head and falling-head slug tests (ACC 2021). 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 from July to December 2023 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 this reporting period. During the August sampling event, groundwater samples were collected and analyzed for both 40 CFR 257 Appendix III and Appendix IV constituents to meet the requirement of 40 CFR § 257.95(b) as well as permit-required Appendix I and II constituents. 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. Details regarding the wells are included in **Table 1**, and locations are presented on **Figure 3**.

Monitoring wells are inspected semiannually to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). During the sampling events, monitoring wells were inspected, necessary corrective actions were identified and subsequently completed where necessary, as documented in **Appendix B**. There were no well maintenance issues during these periods that required corrective actions.

2.2 Assessment Monitoring

SSIs of Appendix III constituents were identified in the initial detection monitoring event (June 2019). The initial assessment monitoring event was conducted in August 2020. Pursuant to 40 CFR §§ 257.95(b) and 257.95(d)(1), groundwater samples collected in August 2023 from the CCR monitoring wells were analyzed for Appendix III and IV constituents, in addition to 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 the sampling event, static water levels were recorded from the wells in the well network for the Gypsum Landfill. Groundwater elevations recorded during the August 2023 monitoring event are summarized in **Table 4**. Sitewide and Gypsum Landfill potentiometric surface maps for August 2023 are provided on **Figures 4 and 5**, respectively. 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

The groundwater flow velocity was calculated for the site based on hydraulic gradients, average hydraulic conductivity based on updated slug test data from April 2021, 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 0.19 foot per day (71 feet per year) to 0.47 foot per day (170 feet per year). These calculated groundwater velocities across the site are generally consistent with expected velocities in the site-specific geology.

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 (NTU). If turbidity remains between 5 and 10 NTU after three hours of purging and all other parameters have stabilized, the well could be sampled;
- ±10% or ±0.2 mg/L (whichever is greater) for DO where DO >0.5 mg/L. If DO <0.5 mg/L no stabilization criteria apply.

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 during the assessment events were analyzed for Appendix III parameters as well as Appendix IV parameters in accordance with 40 CFR §§ 257.95(b) and 257.95(d)(1), and the 40 CFR Part 258 Appendix I and II metals required by the previous state permit. **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 assessment event are summarized in **Tables 6a and 6b**.

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 event are presented in **Appendix A**.

3.4 Data Quality Assurance/Quality Control and Validation

During the 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 reports, prepared by Arcadis and included in **Appendix A,** summarize 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 I, II, III, and IV groundwater monitoring data was performed on samples collected from the Gypsum Landfill groundwater monitoring network pursuant to § 257.93(f) in August 2023. 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/IV constituents and permit required Appendix I and II metals is performed.

4.1.1 Permit-Required Appendix I and II Metals

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 permit-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 upgradient well data for the wells identified in **Table 1** for Appendix IV parameters with a target of 95 percent confidence and 95 percent coverage. When data contained greater than 50 percent non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits are were used. 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 40 CFR §§ 141.62 and 141.66;
- 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.

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 August 2023 sampling event along with the GWPS.

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. 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 state permit were analyzed during the semiannual monitoring events. Concentrations of target metals from downgradient wells that exceeded their respective intrawell PLs in downgradient wells calculated from the August 2023 sampling event are listed below.

Selenium: The concentration of selenium (0.02 mg/L in August 2023) in GWC-1R exceeded the intrawell PL of 0.019 mg/L. While a PL exceedance was noted for selenium for GWC-1R, the concentration at this well is below its respective GWPS of 0.05 mg/L.

Arsenic: The concentration of arsenic (0.0053) in GWC-5R exceeded the intrawell PL of 0.005 mg/L. The concentration in this well is below its respective GWPS of 0.01 mg/L.

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 August 2023 Appendix IV data from 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 I and III parameters.

6 Conclusions and Future Actions

This 2023 Semiannual 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 I and III constituents, but no SSLs of Appendix II or IV constituents.

The next assessment monitoring event is scheduled for February 2024. The monitoring event will include sampling and analysis of all Appendix I, II, III and IV constituents.

7 References

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Tables

Table 1
Monitoring Well Network Summary
2023 Semiannual 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
Upgradient Wells							
GWA-2	4/12/2007	805.62	52.02	753.60	41.82	763.80	Upgradient
YGWA-4I	5/21/2014	784.21	48.81	735.40	38.51	745.70	Upgradient
YGWA-5I	5/21/2014	784.54	58.94	725.60	48.64	735.90	Upgradient
YGWA-5D	5/21/2014	784.53	129.13	655.40	78.83	706.00	Upgradient
YGWA-17S	9/10/2015	783.05	39.85	743.20	29.55	753.20	Upgradient
YGWA-18S	9/8/2015	790.57	39.97	750.60	29.97	760.90	Upgradient
YGWA-18I	9/8/2015	790.57	79.97	710.60	69.67	720.90	Upgradient
YGWA-20S	9/29/2015	767.12	29.52	737.60	19.22	747.90	Upgradient
YGWA-21I	9/28/2015	783.70	79.90	703.80	69.60	714.10	Upgradient
YGWA-39	7/7/2016	818.19	68.59	749.60	58.09	760.10	Upgradient
YGWA-40	7/7/2016	815.73	48.23	767.50	37.73	778.00	Upgradient
YGWA-1I	5/20/2014	836.60	53.60	783.00	43.30	793.30	Upgradient
YGWA-1D	5/20/2014	837.25	128.85	708.40	78.05	759.20	Upgradient
YGWA-2I	5/20/2014	866.25	63.75	802.50	53.45	812.80	Upgradient
YGWA-3I	5/20/2014	796.55	59.05	737.50	48.85	747.70	Upgradient
YGWA-3D	5/20/2014	796.78	134.18	662.60	83.88	712.90	Upgradient
YGWA-14S	5/20/2014	748.76	34.96	713.80	24.66	724.10	Upgradient
YGWA-30I	9/23/2015	762.58	59.48	703.10	49.18	713.40	Upgradient
YGWA-47	7/11/2016	758.22	59.19	696.41	48.62	709.60	Upgradient
Downgradient Wells							
GWC-1R	5/12/2011	773.27	36.37	736.90	26.07	747.20	Detection
GWC-2R	10/19/2010	769.76	44.00	725.76	33.70	736.06	Detection
GWC-3R	5/11/2011	775.25	38.45	736.80	28.15	747.10	Detection
GWC-4R	10/20/2010	757.48	30.20	727.28	19.90	737.58	Detection
GWC-5R	5/11/2011	782.45	42.35	740.10	32.05	750.40	Detection
GWC-6R	8/11/2009	788.98	55.25	733.73	41.94	747.04	Detection

Notes:
Elevation is presented in U.S. Survey Feet (North American Vertical Datum of 1988).

Acronyms and Abbreviations:
bTOC = below top of casing
ft = feet

Table 2
Groundwater Sampling Event Summary
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Well	Hydraulic Location	Semiannual Assessment [1]
		August 2023
GWA-2	Upgradient	X
YGWA-47	Upgradient [1]	X
YGWA-4I	Upgradient [2]	X
YGWA-5I	Upgradient [2]	X
YGWA-5D	Upgradient [2]	X
YGWA-17S	Upgradient [2]	X
YGWA-18S	Upgradient [2]	X
YGWA-18I	Upgradient [2]	X
YGWA-20S	Upgradient [2]	X
YGWA-21I	Upgradient [2]	X
YGWA-39	Upgradient [2]	X
YGWA-40	Upgradient [2]	X
YGWA-1I	Upgradient [2]	X
YGWA-1D	Upgradient [2]	X
YGWA-2I	Upgradient [2]	X
YGWA-3I	Upgradient [2]	X
YGWA-3D	Upgradient [2]	X
YGWA-14S	Upgradient [2]	X
YGWA-30I	Upgradient [2]	X
GWC-1R	Downgradient	X
GWC-2R	Downgradient	X
GWC-3R	Downgradient	X
GWC-4R	Downgradient	X
GWC-5R	Downgradient	X
GWC-6R	Downgradient	X

Notes
1. All wells analyzed for Appendix III and Appendix IV.
2. Pooled upgradient wells

Appendix I = Permit specified constituents for Detection Monitoring - 40 CFR Part 258 Appendix I
Appendix II = Permit specified constituents for Assessment Monitoring - 40 CFR Part 258 Appendix II
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Constituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Table 3
Groundwater Monitoring Parameters
2023 Semiannual Groundwater 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		

Table 4
Summary of Groundwater Elevations
2023 Semiannual 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)
Downgradient Wells - August 2023				
GWC-1R	8/14/2023	773.27	22.66	750.61
GWC-2R	8/14/2023	769.76	28.29	741.47
GWC-3R	8/14/2023	775.25	27.65	747.60
GWC-4R	8/14/2023	757.48	16.17	741.31
GWC-5R	8/14/2023	782.45	28.40	754.05
GWC-6R	8/14/2023	788.98	35.11	753.87
Upgradient Wells - August 2023				
YGWA-4I	8/14/2023	784.21	24.27	759.94
YGWA-5I	8/14/2023	784.54	20.58	763.96
YGWA-5D	8/14/2023	784.53	20.89	763.64
YGWA-17S	8/14/2023	783.05	14.38	768.67
YGWA-18S	8/14/2023	790.57	21.97	768.60
YGWA-18I	8/14/2023	790.57	24.90	765.67
YGWA-20S	8/14/2023	767.12	11.54	755.58
YGWA-21I	8/14/2023	783.70	31.80	751.90
YGWA-39	8/14/2023	818.19	17.61	800.58
YGWA-40	8/14/2023	815.73	23.70	792.03
YGWA-1I	8/14/2023	836.60	37.23	799.37
YGWA-1D	8/14/2023	837.25	49.55	787.70
YGWA-2I	8/14/2023	866.25	44.76	821.49
YGWA-3I	8/14/2023	796.55	53.07	743.48
YGWA-3D	8/14/2023	796.78	31.49	765.29
YGWA-14S	8/14/2023	748.76	18.53	730.23
YGWA-30I	8/14/2023	762.58	42.42	720.16
YGWA-47	8/14/2023	758.22	33.81	724.41
GWA-2	8/14/2023	805.62	36.83	768.79

Notes
Elevation in U.S. Survey Feet (NAVD88)

Acronyms and Abbreviations:
bTOC = below top of casing
ft = feet
NM - not measured
TOC = top of casing

Table 5
Groundwater Flow Velocity Calculations
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Equation

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

where:

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

Values Used in Calculation

Value	Source
K: 1.03E-03 cm/sec 2.91 ft/day	See note 1
i_1 = 0.032 unitless	Hydraulic gradient from: GWA-2 to GWC-4R (Aug. 2023) Distance(ft): 866.25 Elevations (ft): GWA-2: 769.39 GWC-4R: 741.31
n_e = 0.48 unitless n_e = 0.20 unitless	See note 1 See note 2

Site-specific groundwater linear velocity using porosity value of 0.48

$$v = \frac{\textit{Aug. 2023}}{\frac{(2.91)\ (0.032)}{0.48}}$$

v = 0.19 ft/day or 71 ft/year

Groundwater linear velocity using literature porosity value of 0.20

$$v = \frac{\textit{Aug. 2023}}{\frac{(2.91)\ (0.032)}{0.20}}$$

v = 0.47 ft/day or 170 ft/year

Notes

1. Groundwater Monitoring Plan, Plant Yates, Inactive CCR Landfill - Gypsum Stack (ACC 2021)
2. Default value recommended by USEPA for silty sand-type soil (USEPA 1989).

Table 6a
Groundwater Analytical Data
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Analyte		Units	GWC-1R 8/16/2023	GWC-2R 8/16/2023	GWC-3R 8/16/2023	GWC-4R 8/15/2023	GWC-5R 8/15/2023	GWC-6R 8/15/2023
Appendix III (40 CFR 257)	pH	SU	5.08	4.89	4.64	5.74	4.66	5.4
	Boron	mg/l	0.019 J	0.12	< 0.0086	1.9	0.038 J	< 0.043
	Calcium	mg/l	156	44.0	20.5	34.6	145	28.0
	Chloride	mg/l	5.3	7.0	3.4	72.7	1.9	10.4
	Fluoride	mg/l	< 0.050	< 0.050	0.087 J	< 0.050	0.056 J	< 0.050
	Sulfate	mg/l	722	239	84.1	78.6	802	80.1
	Total Dissolved Solids	mg/l	1270	450	140	395	1520	254
Appendix IV (40 CFR 257)	Antimony	mg/l	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037	< 0.0037	0.0053	< 0.0037
	Barium	mg/l	0.042	0.026	0.0096	0.022	0.010	0.028
	Beryllium	mg/l	0.00033 J	0.00021 J	0.00060	< 0.000054	0.0033	< 0.00027
	Cadmium	mg/l	0.00019 J	0.00012 J	0.00013 J	< 0.00011	0.0011	< 0.00011
	Chromium	mg/l	0.0016 J	< 0.0011	< 0.0011	< 0.0011	0.0018 J	0.0021 J
	Cobalt	mg/l	0.00063 J	0.011	0.0032 J	0.0020 J	0.0012 J	< 0.00039
	Fluoride	mg/l	< 0.050	< 0.050	0.087 J	< 0.050	0.056 J	< 0.050
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	0.0019 J	0.0044 J	< 0.00073	0.00074 J	0.0014 J	< 0.0036
	Mercury	mg/l	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
	Molybdenum	mg/l	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074
	Combined Radium - 226/228	pCi/l	1.36 U	1.69	1.32 U	1.44 U	0.830 U	0.950 U
	Selenium	mg/l	0.020	0.0033 J	0.0052	0.0021 J	0.024	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018	0.00029 J	< 0.00018
Appendix I & II Metals (State Permit) [2]	Copper	mg/l	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0012 J	0.0017 J
	Nickel	mg/l	0.0026 J	< 0.00071	< 0.00071	0.00096 J	0.0010 J	< 0.00071
	Silver	mg/l	< 0.00044	< 0.00044	< 0.00044	< 0.00044	< 0.00044	< 0.00044
	Vanadium	mg/l	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
	Zinc	mg/l	< 0.0070	< 0.0070	< 0.0070	< 0.0070	0.022	< 0.0070

Notes:
Appendix I and II parameters included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list

Acronyms and Abbreviations:
mg/L = milligrams per liter

pCi/L = picoCuries per liter

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

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 qualifited by the laboratory as estimated.

Table 6b
Upgradient Groundwater Analytical Data - August 2023
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Analyte		Units	GWA-2	YGWA-1I	YGWA-1D	YGWA-2I	YGWA-3I	YGWA-3D	YGWA-4I	YGWA-5I
			8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/16/2023	8/15/2023	8/15/2023	8/15/2023
Appendix I and II Metals	Copper	mg/l	0.0011 J							
	Nickel	mg/l	0.0098							
	Silver	mg/l	< 0.00044							
	Vanadium	mg/l	< 0.0025							
	Zinc	mg/l	0.0080 J							
Appendix III	pH	SU	5.3	5.88	6.98	6.96	7.39	7.69	5.99	5.58
	Boron	mg/l	< 0.043	0.0094 J	< 0.0086	< 0.043	< 0.043	< 0.043	< 0.0086	< 0.043
	Calcium	mg/l	20.3	1.8	13.5	23.2	24.9	27.4	7.8	2.6
	Chloride	mg/l	5.6	1.4	1.1	0.93 J	1.1	1.1	4.4	4.1
	Fluoride	mg/l	0.065 J	< 0.050	0.057 J	0.081 J	0.11	0.42	< 0.050	< 0.050
	Sulfate	mg/l	74.2	4.6	9.6	17.2	20.3	6.8	7.5	2.2
	Total Dissolved Solids	mg/l	230	65.0	121	157	148	231	99.0	76.0
Appendix IV	Antimony	mg/l	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037
	Barium	mg/l	0.030	0.0078	0.0059	0.0031 J	0.0037 J	0.0046 J	0.011	0.018
	Beryllium	mg/l	< 0.00027	< 0.000054	< 0.000054	< 0.00027	< 0.00027	< 0.00027	< 0.000054	< 0.00027
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.031	0.00072 J	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	< 0.0036	0.0020 J	0.0079 J	< 0.0036	0.025 J	0.023 J	0.0083 J	< 0.0036
	Mercury	mg/l	< 0.00013	0.00015 J	0.00015 J	0.00015 J	< 0.00013	0.00014 J	0.00013 J	0.00014 J
	Molybdenum	mg/l	< 0.00074	0.0047 J	0.0098 J	0.0071 J	0.012	0.012	< 0.00074	< 0.00074
	Combined Radium - 226/228	pCi/l	0.916 U	1.06 U	1.08 U	1.03 U	1.87	2.79	1.14	1.02 U
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018

Notes:
Appendix I and II parameters included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list. These constituents are not analyzed in the other pooled upgradient wells.
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Acronyms and Abbreviations:
mg/L = milligrams per liter
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Table 6b
Upgradient Groundwater Analytical Data - August 2023
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Analyte		Units	YGWA-5D	YGWA-14S	YGWA-17S	YGWA-18I	YGWA-18S	YGWA-20S	YGWA-21I	YGWA-30I
			8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/15/2023	8/16/2023
Appendix I and II Metals	Copper	mg/l								
	Nickel	mg/l								
	Silver	mg/l								
	Vanadium	mg/l								
	Zinc	mg/l								
Appendix III	pH	SU	7.34	5.03	5.54	5.82	5.2	7	6.84	5.55
	Boron	mg/l	< 0.043	0.017 J	< 0.043	< 0.043	< 0.0086	< 0.043	0.046 J	< 0.043
	Calcium	mg/l	25.0	1.3	2.9	5.1	0.80 J	2.2	6.1	1.4
	Chloride	mg/l	3.1	4.1	11.6	7.3	6.7	2.8	2.3	1.5
	Fluoride	mg/l	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.061 J	< 0.050
	Sulfate	mg/l	4.8	6.0	4.6	0.51 J	0.88 J	< 0.50	4.1	0.90 J
	Total Dissolved Solids	mg/l	219	69.0	74.0	96.0	81.0	62.0	126	48.0
Appendix IV	Antimony	mg/l	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037	< 0.0037
	Barium	mg/l	0.0074	0.0079	0.016	0.020	0.012	0.012	0.0075	0.0066
	Beryllium	mg/l	< 0.00027	0.00018 J	< 0.00027	< 0.00027	0.000057 J	< 0.00027	< 0.00027	< 0.00027
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011	< 0.0011	0.0013 J	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039	< 0.00039	0.011	0.0028 J
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	0.0059 J	< 0.00073	< 0.0036	< 0.0036	0.00077 J	< 0.0036	0.0062 J	< 0.0036
	Mercury	mg/l	0.00015 J	0.00016 J	< 0.00013	0.00014 J	0.00015 J	< 0.00013	< 0.00013	< 0.00013
	Molybdenum	mg/l	0.00090 J	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074
	Combined Radium - 226/228	pCi/l	3.44	0.924 U	1.23 U	1.11 U	1.04 U	1.29 U	1.68	1.37 U
	Selenium	mg/l	< 0.0014	0.0014 J	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018

Notes:
Appendix I and II parameters included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list. These constituents are not analyzed in the other pooled upgradient wells.
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Acronyms and Abbreviations:
mg/L = milligrams per liter
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< = Analyte was not detected above the laboratory method detection limit (MDL)
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 qualifited by the laboratory as estimated.

Table 6b
Upgradient Groundwater Analytical Data - August 2023
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Analyte		Units	YGWA-39	YGWA-40	YGWA-47
			8/15/2023	8/15/2022	8/15/2023
Appendix I and II Metals	Copper	mg/l			
	Nickel	mg/l			
	Silver	mg/l			
	Vanadium	mg/l			
	Zinc	mg/l			
Appendix III	pH	SU	5.78	5	5.69
	Boron	mg/l	0.15 J	0.052 J	< 0.043
	Calcium	mg/l	17.2	5.3	9.6
	Chloride	mg/l	4.5	5.6	3.5
	Fluoride	mg/l	< 0.050	< 0.050	< 0.050
	Sulfate	mg/l	7.6	16.4	47.7
	Total Dissolved Solids	mg/l	225	83.0	186
Appendix IV	Antimony	mg/l	< 0.0012	< 0.0012	< 0.0012
	Arsenic	mg/l	< 0.0037	< 0.0037	< 0.0037
	Barium	mg/l	0.031	0.034	0.032
	Beryllium	mg/l	< 0.00027	< 0.00027	< 0.00027
	Cadmium	mg/l	< 0.00011	< 0.00011	< 0.00011
	Chromium	mg/l	< 0.0011	< 0.0011	< 0.0011
	Cobalt	mg/l	0.00072 J	< 0.00039	0.00072 J
	Lead	mg/l	< 0.00012	< 0.00012	< 0.00012
	Lithium	mg/l	0.0064 J	< 0.0036	0.0040 J
	Mercury	mg/l	< 0.00013	0.00037	0.00014 J
	Molybdenum	mg/l	0.0061 J	< 0.00074	< 0.00074
	Combined Radium - 226/228	pCi/l	1.17 U	1.18 U	1.04 U
	Selenium	mg/l	< 0.0014	< 0.0014	< 0.0014
	Thallium	mg/l	< 0.00018	< 0.00018	< 0.00018

Notes:
Appendix I and II parameters included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list. These constituents are not analyzed in the other pooled upgradient wells.
Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III
Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV

Acronyms and Abbreviations:
mg/L = milligrams per liter
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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 qualifited by the laboratory as estimated.

Table 7
Background Levels and Groundwater Protection Standards
2023 Semiannual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Constituent	Units	Background [1]	GWPS
August 2022			
Antimony	mg/L	0.0047	0.006
Arsenic	mg/L	0.005	0.010
Barium	mg/L	0.21	2
Beryllium	mg/L	0.0011	0.004
Cadmium	mg/L	0.00063	0.005
Chromium	mg/L	0.0093	0.100
Cobalt	mg/L	0.035 [1]	0.035 [2]
Fluoride	mg/L	0.68	4
Lead	mg/L	0.0013	0.015
Lithium	mg/L	0.03	0.040
Mercury	mg/L	0.00064	0.002
Molybdenum	mg/L	0.014	0.1
Selenium	mg/L	0.005	0.050
Thallium	mg/L	0.001	0.002
Combined Radium - 226/228	pCi/L	6.92 [1]	6.92 [2]

Notes:

1. Site background: Tolerance limits calculated from pooled upgradient well data.

2. Background concentration is higher than the federally promulgated value (0.006 mg/L for Cobalt). is higher than radium MCL (5 mg/L). Therefore, background is the GWPS.

Acronyms and Abbreviations:

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

CFR = Code of Federal Regulations

MCL = Maximum Contaminant Level

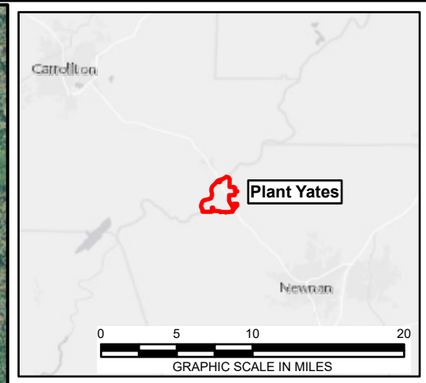
mg/L = millgrams per liter

Figures

84°55'30"W 84°55'20"W 84°55'10"W 84°55'0"W 84°54'50"W 84°54'40"W 84°54'30"W 84°54'20"W 84°54'10"W 84°54'0"W 84°53'50"W 84°53'40"W 84°53'30"W 84°53'20"W 84°53'10"W 84°53'0"W 84°52'50"W 84°52'40"W 84°52'30"W

33°28'40"N
33°28'30"N
33°28'20"N
33°28'10"N
33°28'0"N
33°27'50"N
33°27'40"N
33°27'30"N
33°27'20"N
33°27'10"N
33°27'0"N
33°26'50"N
33°26'40"N

FORMER GYPSUM STACK LANDFILL



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 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
2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

84°54'50"W 84°54'40"W 84°54'30"W 84°54'20"W 84°54'10"W 84°54'0"W 84°53'50"W 84°53'40"W 84°53'30"W 84°53'20"W 84°53'10"W 84°53'0"W 84°52'50"W

33°28'10"N
33°28'0"N
33°27'50"N
33°27'40"N
33°27'30"N
33°27'20"N
33°27'10"N
33°27'0"N
33°26'50"N

YGWA-47
YGWC-52
PZ-09S
PZ-09I
YGWC-44
YGWC-45
FORMER ASH POND 1
GWC-4R
GWC-2R
GWC-1R
GWC-6R
GWC-3R
GWC-5R
GWA-2
FORMER GYPSUM STACK LANDFILL
PZ-53
YGWC-46A
PZ-10I
PZ-10S
YGWA-6I
PZ-06D
YGWA-6S
PZ-48
YGWC-26S
YGWC-26I
AP-2 WEST
YGWC-27S
YGWC-27I
ASH POND 2
FORMER ASH POND A
YGWC-49
YGWC-28I
YGWC-28S
YGWC-29IA
YGWC-24SB
PZ-24IB
PZ-25I
PZ-25S
YGWC-36A
YAMW-1
PZ-35
ASH POND B
YGWA-30I
AP-2 AMAX COVE
PZ-31S
YGWC-50
AMA - PERIMETER ROAD
PZ-13S
PZ-13I
YGWA-14S
PZ-14I
ASH POND B'
PZ-51
YGWC-43
YGWA-17S
R6 ASH DISPOSAL AREA
YGWA-18S
YGWA-18I
YGWA-1S
PZ-01S
YGWA-1D
YAMW-3
YAMW-2
YGWC-42
ASH POND 3
YAMW-4
YGWC-41
PZ-37D
PZ-52D
PZ-37
EAST COVE
YGWA-3I
PZ-03S
YGWA-3D
PZ-53D
YGWC-23S
YGWA-2I
YGWC-38
YAMW-5
ASH MANAGEMENT AREA
YGWA-40
YGWA-39
YGWA-21I
YGWA-20S
SOUTH COVE
PZ-04S
YGWA-4I
YGWA-5I
PZ-05S
YGWA-5D

LEGEND

- SAPROLITE DETECTION MONITORING WELL LOCATION
- TRANSITION DETECTION MONITORING WELL LOCATION
- BEDROCK DETECTION MONITORING WELL LOCATION
- SAPROLITE ASSESSMENT WELL/PIEZOMETER
- TRANSITION ASSESSMENT WELL/PIEZOMETER
- BEDROCK ASSESSMENT WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY
- AREA WHERE ASH HAS BEEN CERTIFIED REMOVED AS OF 2/28/2024

NOTE:
AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 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
2023 SEMIANNUAL 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 DETECTION MONITORING
- BEDROCK DETECTION MONITORING
- PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 IMAGERY.

0 112.5 225 450
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

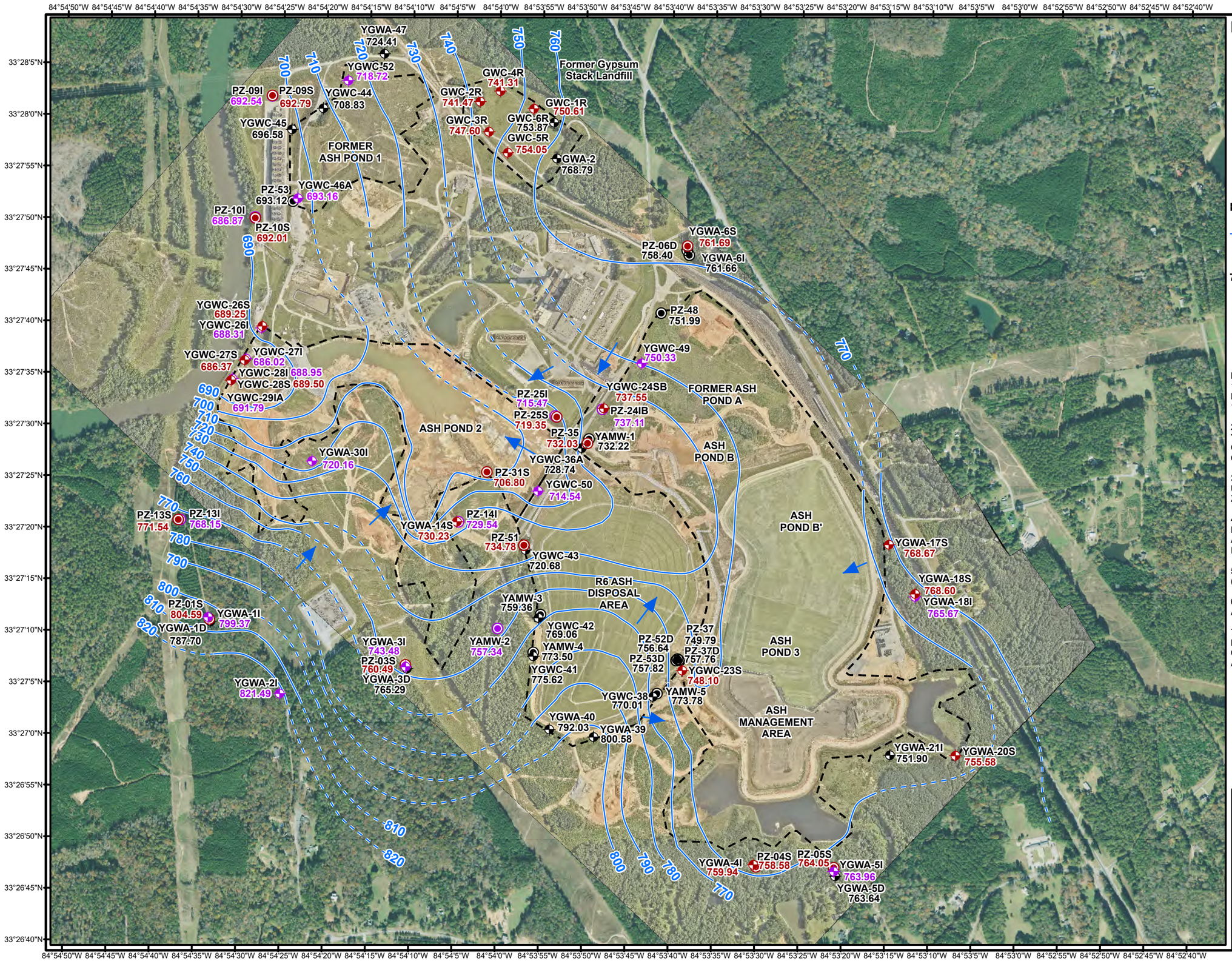
Georgia Power

PLANT YATES GYPSUM LANDFILL
NEWNAN, GA
2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

ARCADIS

FIGURE
3



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
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- 757.11 GROUNDWATER ELEVATION (FEET)

GEORGIA REGISTERED No. PE027801 PROFESSIONAL ENGINEER

NOTES:

1. SHALLOW GROUNDWATER ELEVATIONS ARE DERIVED FROM SOIL COMPRISED OF SAPROLITE, RANGING FROM 15 - 60 FEET BELOW GROUND SURFACE.

2. BEDROCK WELLS YGWA-40, YGWA-39, YGWC-38, YGWC-41, YGWC-42 USED FOR CONTOURING. ALL OTHER BEDROCK WELLS NOT USED TO CREATE CONTOURS.

3. SAPROLITE WELL GROUNDWATER ELEVATIONS WERE USED FOR CONTOURING FOR SAPROLITE/TRANSITION ZONE/BEDROCK WELL CLUSTER LOCATIONS.

4. AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 IMAGERY.

5. ELEVATION IS PRESENTED IN U.S. SURVEY FEET (NAVD 1988).

6. GROUNDWATER ELEVATIONS COLLECTED ON AUGUST 14, 2023.

7.YGWC-28S AND YGWC-28I WERE INACCESSIBLE DURING THE GAUGING EVENT DUE TO SURROUNDING CONSTRUCTION ACTIVITIES AND RAILINGS FOR WELL ACCESS WELL HAD NOT BEEN CONSTRUCTED.

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

2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

SITEWIDE GROUNDWATER ELEVATION MAP AUGUST 2023

ARCADIS

FIGURE **4**

LEGEND

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

GEORGIA REGISTERED No. PE027801 PROFESSIONAL ENGINEER JOHN C. GEORGE

NOTES:

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

2. AERIAL IMAGE SOURCES: JULY 17, 2023 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2021 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

2023 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP AUGUST 2023

ARCADIS

FIGURE
5

Appendix A

Laboratory Analytical Reports and Data Validation Reports

Georgia Power Co. – Plant Yates

Data Review Report

Metals, General Chemistry, and Radium Analyses

SDGs #92683139 and 92683140

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

Report #51404R
Review Level: Tier II
Project: 30143608.3B

Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92683139 and 92683140 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:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
YAT-GWC-6R	92683139001 92683140001	Water	8/15/2023		X	X	X
YAT-GWC-5R	92683139002 92683140002	Water	8/15/2023		X	X	X
YAT-GWC-4R	92683139003 92683140003	Water	8/15/2023		X	X	X
YAT-GLF-FD-1	92683139004 92683140004	Water	8/15/2023	YAT-GWC-4R	X	X	X
YAT-GWC-1R	92683139005 92683140005	Water	8/16/2023		X	X	X
YAT-GWC-3R	92683139006 92683140006	Water	8/16/2023		X	X	X
YAT-GWC-2R	92683139007 92683140007	Water	8/16/2023		X	X	X
YAT-GLF-EB-1	92683139008 92683140008	Water	8/16/2023		X	X	X
YAT-GLF-FB-1	92683139009 92683140009	Water	8/16/2023		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.

Analytical Data Package Documentation

The table below evaluates 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 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, 7470A, 9315, and 9320; Standard Method (SM) 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 USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA 542-R-20-006, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, October 2004, as appropriate).

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 reporting 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.

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.

The MS/MSD analysis was performed using sample YAT-GWC-4R in association with SW-846 6010D. The concentration of calcium in the unspiked sample was greater than four-times the spike concentration, hence, the SW-846 6010D MS/MSD sample results were not evaluated.

The MS/MSD analysis performed on sample location YAT-GWC-6R in association with SW-846 7470A analysis exhibited recoveries within the acceptance limits.

The MS/MSD analysis performed on sample location YAT-GLF-FD-1 in association with SW-846 6020B analysis exhibited recoveries within control limits with the exception presented in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
YAT-GLF-FD-1	Silver	< 30%	AC (94%)

Note:
AC = Acceptable

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified. The qualifications are applied to all sample results associated with the sample preparation batch.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

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.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis in association with SW-846 6010D and SW-846 6020B analysis. Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit are presented in the following table.

Sample Location	Analytes	MS/MSD RPD
YAT-GLF-FD-1	Silver	107%

The criteria used to evaluate MS/MSD RPD are presented in the following table. In the case of a MS/MSD RPD deviation, the sample results are qualified. The qualifications are applied to all sample results associated with the sample preparation batch.

Control Limit	Sample Result	Qualification
> 20% (water)	Non-detect	UJ
	Detect	J

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
YAT-GWC-4R / YAT-GLF-FD-1	Calcium	34.6	32.3	6.9%
	Boron	1.9	1.6	17.1%
	Barium	0.022	0.022	AC
	Cobalt	0.0020 J	0.0014 J	
	Lithium	0.00074 J	0.00084 J	
	Nickel	0.00096 J	0.0015 J	
	Selenium	0.0021 J	0.0021 J	

Note:
AC = Acceptable

The differences in the results between the parent sample YAT-GWC-4R and field duplicate sample YAT-GLF-FD-1 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		
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		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
Total Dissolved Solids (TDS) 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.

MS/MSD analysis was not performed using a sample from this SDG in association with anions analysis.

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 analysis performed on sample locations YAT-GWC-2R and YAT-GLF-EB-1 in association with TDS analysis exhibited acceptable differences between the results.

MS/MSD or laboratory duplicate analysis was not performed using a sample from this SDG in association with anions analysis.

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
YAT-GWC-4R / YAT-GLF-FD-1	TDS	395	373	5.7%
	Chloride	72.7	71.2	2.1%
	Sulfate	78.6	71.6	9.3%

The differences in the results between the parent sample YAT-GWC-4R and field duplicate sample YAT-GLF-FD-1 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, SM2320B, 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/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
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		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 minimum detectable concentration (MDC).

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 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*

Note:
* = 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 was detected in the method blank (batch 611586), however, the activity in the associated samples was measured as less than the MDC. Hence, no qualification of the results was required.

Radium-226 was detected in the method blanks, however, the activity was measured as less than the uncertainty and MDC. 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 this SDG.

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 analysis performed on sample locations YAT-GWC-5R and YAT-GWC-3R in association with SW-846 9315 analysis exhibited acceptable difference between the results.

Laboratory duplicate analysis was not performed using a sample from this SDG in association with SW-846 9320.

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:

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
YAT-GWC-4R / YAT-GLF-FD-1	Radium-226	0.405 ± 0.343 U	0.112 ± 0.239 U	AC
	Radium-228	0.295 ± 0.379 U	0.390 ± 0.360 U	
	Total Radium	0.700 ± 0.722 U	0.502 ± 0.599 U	

Note:
AC = Acceptable

The differences in the results between the parent sample YAT-GWC-4R and field duplicate sample YAT-GLF-FD-1 were acceptable. As noted in Section 7, the results for Radium-226, Radium-228, and Total Radium in samples YAT-GWC-4R and YAT-GLF-FD-1 were less than the MDC and should be considered not detected.

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% to 110% 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:

- YAT-GWC-2R – Radium-228
- YAT-GWC-6R, YAT-GWC-5R, YAT-GWC-4R, YAT-GLF-FD-1, YAT-GWC-1R, YAT-GWC-3R, YAT-GLF-EB-1, and YAT-GLF-FB-1 – Radium-226, Radium-228, 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	
Miscellaneous Instrumentation					
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) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		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
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: October 16, 2023

PEER REVIEW: Joseph C. Houser

DATE: October 19, 2023

Chain of Custody / Data Qualifier Summary Table

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:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Gypsum Landfill
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Bonnie Varg
Pace Profile #:	~~40840~~ 16561-7

Regulatory Agency: —

State / Location: Georgia

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): App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 903.1/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683139
1	YAT-GWC-6R	WG	G	8/15/23	1125	--	--		6	2		4							X	X	X	X	X		001
2	YAT-GWC-5R	WG	G	8/15/23	1520	--	--		6	2		4							X	X	X	X	X		002
3	YAT-GWC-1R	WG	G			--	--		6	2		4							X	X	X	X	X		
4	YAT-GWC-3R	WG	G			--	--		6	2		4							X	X	X	X	X		
5	YAT-GWC-4R	WG	G	8/15/23	1800	--	--		6	2		4							X	X	X	X	X		003
6	YAT-GWC-2R	WG	G			--	--		6	2		4							X	X	X	X	X		
7	YAT-GLF-EB-1	WG	G			--	--		6	2		4							X	X	X	X	X		
8	YAT-GLF-FB-1	WG	G			--	--		6	2		4							X	X	X	X	X		
9	YAT-GLF-FD-1	WG	G	8/15/23	--	--	--		6	2		4							X	X	X	X	X		004
10						--	--																		
11						--	--																		
12						--	--																		

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0800	Arcadis	8/16/23	0800	
App III Metals: Boron 6020B, Ca 6010D; App I/III 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0907	Ryan Williams/Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams/Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER:	(Arcadis) -	Jake Swanson		
SIGNATURE of SAMPLER:	(Arcadis) -		DATE Signed:	8/15/23

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Gypsum Landfill
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Bonnie Vang
Pace Profile #:	10840

Regulatory Agency

State / Location: Georgia

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

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

92683139

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	
1	YAT-GWC-6R	WG	G			--	--		6	2		4							X	X	X	X	X		
2	YAT-GWC-5R	WG	G			--	--		6	2		4							X	X	X	X	X		
3	YAT-GWC-1R	WG	G	8/16/23	1010	--	--		6	2		4							X	X	X	X	X		005
4	YAT-GWC-3R	WG	G	8/16/23	1200	--	--		6	2		4							X	X	X	X	X		006
5	YAT-GWC-4R	WG	G			--	--		6	2		4							X	X	X	X	X		
6	YAT-GWC-2R	WG	G	8/16/23	1320	--	--		6	2		4							X	X	X	X	X		007
7	YAT-GLF-EB-1	WG	G	8/16/23	1340	--	--		6	2		4							X	X	X	X	X		008
8	YAT-GLF-FB-1	WG	G	8/16/23	1220	--	--		6	2		4							X	X	X	X	X		009
9	YAT-GLF-FD-1	WG	G			--	--		6	2		4							X	X	X	X	X		
10						--	--																		
11						--	--																		
12						--	--																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] /Arcadis	8/17/23	0830	[signature] / Arcadis	8/17/23	0830
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] Arcadis	8/17/23	0955	Ryan William / Pace	8/17/23	0955
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan William / Pace	8/17/23	1254	[signature]	8-17	1254

SAMPLE CONDITIONS: 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: (Arcadis) - Jake Swanson

SIGNATURE of SAMPLER: (Arcadis) - [signature] DATE Signed: 8/17/23

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92651415	YAT-GWC-5R	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
	YAT-GWC-4R	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
	YAT-GLF-FD-1	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
	YAT-GWC-1R	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
	YAT-GWC-3R	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
	YAT-GWC-2R	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
	YAT-GLF-EB-1	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
	YAT-GLF-FB-1	SW846 6020B	Silver	0.0050	mg/L	R	MS %R, MS/MSD RPD
92683140	No qualifiers assigned						

Abbreviations:

mg/L = milligrams per liter

Qualifiers:

R = rejected

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 13, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between August 16, 2023 and August 17, 2023. 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 - Peachtree Corners, GA

Revision 1: There was an IT error and the wrong standard ID from Epic entered into Epic without the analyst knowledge. The lab opened an IT ticket to correct the standard ID. Report is revised.

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

Sincerely,

Bonnie Vang

Bonnie Vang
bonnie.vang@pacelabs.com
704-977-0968
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

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 Laboratory ID: 99030
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
Virginia Certification #: 460204

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683139001	**YAT-GWC-6R**	Water	08/15/23 12:25	08/16/23 09:07
92683139002	**YAT-GWC-5R**	Water	08/15/23 15:20	08/16/23 09:07
92683139003	**YAT-GWC-4R**	Water	08/15/23 18:00	08/16/23 09:07
92683139004	**YAT-GLF-FD-1**	Water	08/15/23 00:00	08/16/23 09:07
92683139005	**YAT-GWC-1R**	Water	08/16/23 10:10	08/17/23 09:55
92683139006	**YAT-GWC-3R**	Water	08/16/23 12:00	08/17/23 09:55
92683139007	**YAT-GWC-2R**	Water	08/16/23 13:20	08/17/23 09:55
92683139008	**YAT-GLF-EB-1**	Water	08/16/23 13:40	08/17/23 09:55
92683139009	**YAT-GLF-FB-1**	Water	08/16/23 12:20	08/17/23 09:55

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92683139001	**YAT-GWC-6R**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683139002	**YAT-GWC-5R**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683139003	**YAT-GWC-4R**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683139004	**YAT-GLF-FD-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683139005	**YAT-GWC-1R**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92683139006	**YAT-GWC-3R**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92683139007	**YAT-GWC-2R**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92683139008	**YAT-GLF-EB-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	18

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92683139009	**YAT-GLF-FB-1**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683139001	**YAT-GWC-6R**					
EPA 6010D	Calcium	28.0	mg/L	1.0	08/29/23 20:35	
EPA 6020B	Barium	0.028	mg/L	0.0050	08/25/23 18:38	
EPA 6020B	Chromium	0.0021J	mg/L	0.0050	08/25/23 18:38	
EPA 6020B	Copper	0.0017J	mg/L	0.0050	08/25/23 18:38	B
SM 2540C-2015	Total Dissolved Solids	254	mg/L	25.0	08/21/23 17:36	
EPA 300.0 Rev 2.1 1993	Chloride	10.4	mg/L	1.0	08/19/23 05:54	
EPA 300.0 Rev 2.1 1993	Sulfate	80.1	mg/L	1.0	08/19/23 05:54	
92683139002	**YAT-GWC-5R**					
EPA 6010D	Calcium	145	mg/L	1.0	08/29/23 20:40	
EPA 6020B	Arsenic	0.0053	mg/L	0.0050	08/28/23 15:50	
EPA 6020B	Barium	0.010	mg/L	0.0050	08/28/23 15:50	
EPA 6020B	Beryllium	0.0033	mg/L	0.00050	08/28/23 15:50	
EPA 6020B	Boron	0.038J	mg/L	0.040	08/28/23 15:50	
EPA 6020B	Cadmium	0.0011	mg/L	0.00050	08/28/23 15:50	
EPA 6020B	Chromium	0.0018J	mg/L	0.0050	08/28/23 15:50	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	08/28/23 15:50	
EPA 6020B	Copper	0.0012J	mg/L	0.0050	08/28/23 15:50	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	08/28/23 15:50	
EPA 6020B	Nickel	0.0010J	mg/L	0.0050	08/28/23 15:50	
EPA 6020B	Selenium	0.024	mg/L	0.0050	08/28/23 15:50	
EPA 6020B	Thallium	0.00029J	mg/L	0.0010	08/28/23 15:50	
EPA 6020B	Zinc	0.022	mg/L	0.010	08/28/23 15:50	
SM 2540C-2015	Total Dissolved Solids	1520	mg/L	25.0	08/21/23 17:36	
EPA 300.0 Rev 2.1 1993	Chloride	1.9	mg/L	1.0	08/19/23 06:09	
EPA 300.0 Rev 2.1 1993	Fluoride	0.056J	mg/L	0.10	08/19/23 06:09	
EPA 300.0 Rev 2.1 1993	Sulfate	802	mg/L	18.0	08/19/23 12:08	
92683139003	**YAT-GWC-4R**					
EPA 6010D	Calcium	34.6	mg/L	1.0	08/29/23 20:45	M1
EPA 6020B	Barium	0.022	mg/L	0.0050	08/28/23 15:56	
EPA 6020B	Boron	1.9	mg/L	0.040	08/28/23 15:56	
EPA 6020B	Cobalt	0.0020J	mg/L	0.0050	08/28/23 15:56	
EPA 6020B	Lithium	0.00074J	mg/L	0.030	08/28/23 15:56	
EPA 6020B	Nickel	0.00096J	mg/L	0.0050	08/28/23 15:56	
EPA 6020B	Selenium	0.0021J	mg/L	0.0050	08/28/23 15:56	
SM 2540C-2015	Total Dissolved Solids	395	mg/L	25.0	08/21/23 17:37	
EPA 300.0 Rev 2.1 1993	Chloride	72.7	mg/L	1.0	08/19/23 06:23	
EPA 300.0 Rev 2.1 1993	Sulfate	78.6	mg/L	1.0	08/19/23 06:23	
92683139004	**YAT-GLF-FD-1**					
EPA 6010D	Calcium	32.3	mg/L	1.0	08/29/23 21:07	
EPA 6020B	Barium	0.022	mg/L	0.0050	08/28/23 16:02	
EPA 6020B	Boron	1.6	mg/L	0.040	08/28/23 16:02	
EPA 6020B	Cobalt	0.0014J	mg/L	0.0050	08/28/23 16:02	
EPA 6020B	Lithium	0.00084J	mg/L	0.030	08/28/23 16:02	
EPA 6020B	Nickel	0.0015J	mg/L	0.0050	08/28/23 16:02	
EPA 6020B	Selenium	0.0021J	mg/L	0.0050	08/28/23 16:02	
SM 2540C-2015	Total Dissolved Solids	373	mg/L	25.0	08/21/23 17:37	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683139004	**YAT-GLF-FD-1**					
EPA 300.0 Rev 2.1 1993	Chloride	71.2	mg/L	1.0	08/19/23 07:06	
EPA 300.0 Rev 2.1 1993	Sulfate	71.6	mg/L	1.0	08/19/23 07:06	
92683139005	**YAT-GWC-1R**					
EPA 6010D	Calcium	156	mg/L	1.0	08/29/23 22:09	
EPA 6020B	Barium	0.042	mg/L	0.0050	08/28/23 18:10	
EPA 6020B	Beryllium	0.00033J	mg/L	0.00050	08/28/23 18:10	
EPA 6020B	Boron	0.019J	mg/L	0.040	08/28/23 18:10	
EPA 6020B	Cadmium	0.00019J	mg/L	0.00050	08/28/23 18:10	
EPA 6020B	Chromium	0.0016J	mg/L	0.0050	08/28/23 18:10	
EPA 6020B	Cobalt	0.00063J	mg/L	0.0050	08/28/23 18:10	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	08/28/23 18:10	
EPA 6020B	Nickel	0.0026J	mg/L	0.0050	08/28/23 18:10	
EPA 6020B	Selenium	0.020	mg/L	0.0050	08/28/23 18:10	
SM 2540C-2015	Total Dissolved Solids	1270	mg/L	25.0	08/22/23 12:39	
EPA 300.0 Rev 2.1 1993	Chloride	5.3	mg/L	1.0	08/19/23 17:43	
EPA 300.0 Rev 2.1 1993	Sulfate	722	mg/L	15.0	08/20/23 04:11	
92683139006	**YAT-GWC-3R**					
EPA 6010D	Calcium	20.5	mg/L	1.0	08/29/23 22:14	
EPA 6020B	Barium	0.0096	mg/L	0.0050	08/28/23 18:16	
EPA 6020B	Beryllium	0.00060	mg/L	0.00050	08/28/23 18:16	
EPA 6020B	Cadmium	0.00013J	mg/L	0.00050	08/28/23 18:16	
EPA 6020B	Cobalt	0.0032J	mg/L	0.0050	08/28/23 18:16	
EPA 6020B	Selenium	0.0052	mg/L	0.0050	08/28/23 18:16	
SM 2540C-2015	Total Dissolved Solids	140	mg/L	25.0	08/22/23 12:40	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	08/19/23 17:58	
EPA 300.0 Rev 2.1 1993	Fluoride	0.087J	mg/L	0.10	08/19/23 17:58	
EPA 300.0 Rev 2.1 1993	Sulfate	84.1	mg/L	1.0	08/19/23 17:58	
92683139007	**YAT-GWC-2R**					
EPA 6010D	Calcium	44.0	mg/L	1.0	08/29/23 22:30	
EPA 6020B	Barium	0.026	mg/L	0.0050	08/28/23 18:22	
EPA 6020B	Beryllium	0.00021J	mg/L	0.00050	08/28/23 18:22	
EPA 6020B	Boron	0.12	mg/L	0.040	08/28/23 18:22	
EPA 6020B	Cadmium	0.00012J	mg/L	0.00050	08/28/23 18:22	
EPA 6020B	Cobalt	0.011	mg/L	0.0050	08/28/23 18:22	
EPA 6020B	Lithium	0.0044J	mg/L	0.030	08/28/23 18:22	
EPA 6020B	Selenium	0.0033J	mg/L	0.0050	08/28/23 18:22	
SM 2540C-2015	Total Dissolved Solids	450	mg/L	25.0	08/23/23 17:29	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	08/19/23 18:13	
EPA 300.0 Rev 2.1 1993	Sulfate	239	mg/L	5.0	08/20/23 04:25	

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ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GWC-6R **Lab ID: 92683139001** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**28.0**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 20:35	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	0.0012	1	08/21/23 18:00	08/25/23 18:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:38	7440-38-2	
Barium	**0.028**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:38	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:48	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:48	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:38	7440-43-9	
Chromium	**0.0021J**	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:38	7440-48-4	
Copper	**0.0017J**	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/25/23 18:38	7440-50-8	B
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:38	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:48	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:38	7439-98-7	
Nickel	ND	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/25/23 18:38	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:38	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/25/23 18:38	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:38	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/25/23 18:38	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/25/23 18:38	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**254**	mg/L	25.0	25.0	1		08/21/23 17:36		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**10.4**	mg/L	1.0	0.60	1		08/19/23 05:54	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 05:54	16984-48-8	
Sulfate	**80.1**	mg/L	1.0	0.50	1		08/19/23 05:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GWC-5R **Lab ID: 92683139002** Collected: 08/15/23 15:20 Received: 08/16/23 09:07 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	**145**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 20:40	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	0.0012	1	08/21/23 18:00	08/28/23 15:50	7440-36-0	
Arsenic	**0.0053**	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 15:50	7440-38-2	
Barium	**0.010**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 15:50	7440-39-3	
Beryllium	**0.0033**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 15:50	7440-41-7	
Boron	**0.038J**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 15:50	7440-42-8	
Cadmium	**0.0011**	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 15:50	7440-43-9	
Chromium	**0.0018J**	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 15:50	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 15:50	7440-48-4	
Copper	**0.0012J**	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 15:50	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 15:50	7439-92-1	
Lithium	**0.0014J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 15:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 15:50	7439-98-7	
Nickel	**0.0010J**	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 15:50	7440-02-0	
Selenium	**0.024**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 15:50	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 15:50	7440-22-4	
Thallium	**0.00029J**	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 15:50	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 15:50	7440-62-2	
Zinc	**0.022**	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 15:50	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:31	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1520**	mg/L	25.0	25.0	1		08/21/23 17:36		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.9**	mg/L	1.0	0.60	1		08/19/23 06:09	16887-00-6	
Fluoride	**0.056J**	mg/L	0.10	0.050	1		08/19/23 06:09	16984-48-8	
Sulfate	**802**	mg/L	18.0	9.0	18		08/19/23 12:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GWC-4R **Lab ID: 92683139003** Collected: 08/15/23 18:00 Received: 08/16/23 09:07 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	**34.6**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 20:45	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/21/23 18:00	08/28/23 15:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 15:56	7440-38-2	
Barium	**0.022**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 15:56	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 15:56	7440-41-7	
Boron	**1.9**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 15:56	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 15:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 15:56	7440-47-3	
Cobalt	**0.0020J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 15:56	7440-48-4	
Copper	ND	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 15:56	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 15:56	7439-92-1	
Lithium	**0.00074J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 15:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 15:56	7439-98-7	
Nickel	**0.00096J**	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 15:56	7440-02-0	
Selenium	**0.0021J**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 15:56	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 15:56	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 15:56	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 15:56	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 15:56	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**395**	mg/L	25.0	25.0	1		08/21/23 17:37		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**72.7**	mg/L	1.0	0.60	1		08/19/23 06:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 06:23	16984-48-8	
Sulfate	**78.6**	mg/L	1.0	0.50	1		08/19/23 06:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GLF-FD-1 **Lab ID: 92683139004** Collected: 08/15/23 00:00 Received: 08/16/23 09:07 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	**32.3**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 21:07	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	0.0012	1	08/21/23 18:00	08/28/23 16:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 16:02	7440-38-2	
Barium	**0.022**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 16:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 16:02	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 16:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 16:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 16:02	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 16:02	7440-48-4	
Copper	ND	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 16:02	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 16:02	7439-92-1	
Lithium	**0.00084J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 16:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 16:02	7439-98-7	
Nickel	**0.0015J**	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 16:02	7440-02-0	
Selenium	**0.0021J**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 16:02	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 16:02	7440-22-4	M1,R1
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 16:02	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 16:02	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 16:02	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:36	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**373**	mg/L	25.0	25.0	1		08/21/23 17:37		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**71.2**	mg/L	1.0	0.60	1		08/19/23 07:06	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 07:06	16984-48-8	
Sulfate	**71.6**	mg/L	1.0	0.50	1		08/19/23 07:06	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GWC-1R **Lab ID: 92683139005** Collected: 08/16/23 10:10 Received: 08/17/23 09:55 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	**156**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 22:09	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	0.0012	1	08/21/23 18:00	08/28/23 18:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 18:10	7440-38-2	
Barium	**0.042**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 18:10	7440-39-3	
Beryllium	**0.00033J**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 18:10	7440-41-7	
Boron	**0.019J**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 18:10	7440-42-8	
Cadmium	**0.00019J**	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 18:10	7440-43-9	
Chromium	**0.0016J**	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 18:10	7440-47-3	
Cobalt	**0.00063J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 18:10	7440-48-4	
Copper	ND	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 18:10	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 18:10	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 18:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 18:10	7439-98-7	
Nickel	**0.0026J**	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 18:10	7440-02-0	
Selenium	**0.020**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 18:10	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 18:10	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 18:10	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 18:10	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 18:10	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1270**	mg/L	25.0	25.0	1		08/22/23 12:39		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.3**	mg/L	1.0	0.60	1		08/19/23 17:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 17:43	16984-48-8	
Sulfate	**722**	mg/L	15.0	7.5	15		08/20/23 04:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GWC-3R **Lab ID: 92683139006** Collected: 08/16/23 12:00 Received: 08/17/23 09:55 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	**20.5**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 22:14	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	0.0012	1	08/21/23 18:00	08/28/23 18:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 18:16	7440-38-2	
Barium	**0.0096**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 18:16	7440-39-3	
Beryllium	**0.00060**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 18:16	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 18:16	7440-42-8	
Cadmium	**0.00013J**	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 18:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 18:16	7440-47-3	
Cobalt	**0.0032J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 18:16	7440-48-4	
Copper	ND	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 18:16	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 18:16	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 18:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 18:16	7439-98-7	
Nickel	ND	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 18:16	7440-02-0	
Selenium	**0.0052**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 18:16	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 18:16	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 18:16	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 18:16	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 18:16	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:49	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**140**	mg/L	25.0	25.0	1		08/22/23 12:40		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.4**	mg/L	1.0	0.60	1		08/19/23 17:58	16887-00-6	
Fluoride	**0.087J**	mg/L	0.10	0.050	1		08/19/23 17:58	16984-48-8	
Sulfate	**84.1**	mg/L	1.0	0.50	1		08/19/23 17:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GWC-2R **Lab ID: 92683139007** Collected: 08/16/23 13:20 Received: 08/17/23 09:55 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	**44.0**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 22:30	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	0.0012	1	08/21/23 18:00	08/28/23 18:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 18:22	7440-38-2	
Barium	**0.026**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 18:22	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 18:22	7440-41-7	
Boron	**0.12**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 18:22	7440-42-8	
Cadmium	**0.00012J**	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 18:22	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 18:22	7440-47-3	
Cobalt	**0.011**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 18:22	7440-48-4	
Copper	ND	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 18:22	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 18:22	7439-92-1	
Lithium	**0.0044J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 18:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 18:22	7439-98-7	
Nickel	ND	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 18:22	7440-02-0	
Selenium	**0.0033J**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 18:22	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 18:22	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 18:22	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 18:22	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 18:22	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**450**	mg/L	25.0	25.0	1		08/23/23 17:29		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.0**	mg/L	1.0	0.60	1		08/19/23 18:13	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 18:13	16984-48-8	
Sulfate	**239**	mg/L	5.0	2.5	5		08/20/23 04:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GLF-EB-1 **Lab ID: 92683139008** Collected: 08/16/23 13:40 Received: 08/17/23 09:55 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	0.12	1	08/29/23 09:23	08/29/23 22:35	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	0.0012	1	08/21/23 18:00	08/28/23 18:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 18:34	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 18:34	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 18:34	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 18:34	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 18:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 18:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 18:34	7440-48-4	
Copper	ND	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 18:34	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 18:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 18:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 18:34	7439-98-7	
Nickel	ND	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 18:34	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 18:34	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 18:34	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 18:34	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 18:34	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 18:34	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/22/23 15:58		
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		08/19/23 18:28	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 18:28	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/19/23 18:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Sample: YAT-GLF-FB-1 **Lab ID: 92683139009** Collected: 08/16/23 12:20 Received: 08/17/23 09:55 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	0.12	1	08/29/23 09:23	08/29/23 22:40	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	0.0012	1	08/21/23 18:00	08/28/23 18:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/28/23 18:39	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/28/23 18:39	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/28/23 18:39	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/28/23 18:39	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/28/23 18:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/28/23 18:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/28/23 18:39	7440-48-4	
Copper	ND	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/28/23 18:39	7440-50-8	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/28/23 18:39	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 18:00	08/28/23 18:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/28/23 18:39	7439-98-7	
Nickel	ND	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/28/23 18:39	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/28/23 18:39	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/28/23 18:39	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/28/23 18:39	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/28/23 18:39	7440-62-2	
Zinc	ND	mg/L	0.010	0.0070	1	08/21/23 18:00	08/28/23 18:39	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 18:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/22/23 15:59		
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		08/19/23 18:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 18:43	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/19/23 18:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 796454
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683139001, 92683139002, 92683139003, 92683139004, 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

METHOD BLANK: 4126638 Matrix: Water
Associated Lab Samples: 92683139001, 92683139002, 92683139003, 92683139004, 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/29/23 20:25	

LABORATORY CONTROL SAMPLE: 4126639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4126640 4126641

Parameter	Units	92683139003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	34.6	1	1	34.9	36.9	31	227	75-125	5	20	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
9800 Kincey Ave. Suite 100
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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 794949
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92683139001

METHOD BLANK: 4119064 Matrix: Water
Associated Lab Samples: 92683139001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/25/23 17:01	
Arsenic	mg/L	ND	0.0050	0.0037	08/25/23 17:01	
Barium	mg/L	ND	0.0050	0.00067	08/25/23 17:01	
Beryllium	mg/L	ND	0.00050	0.000054	08/25/23 17:01	
Boron	mg/L	ND	0.040	0.0086	08/25/23 17:01	
Cadmium	mg/L	ND	0.00050	0.00011	08/25/23 17:01	
Chromium	mg/L	ND	0.0050	0.0011	08/25/23 17:01	
Cobalt	mg/L	ND	0.0050	0.00039	08/25/23 17:01	
Copper	mg/L	ND	0.0050	0.0010	08/25/23 17:01	
Lead	mg/L	ND	0.0010	0.00012	08/25/23 17:01	
Lithium	mg/L	ND	0.030	0.00073	08/25/23 17:01	
Molybdenum	mg/L	ND	0.010	0.00074	08/25/23 17:01	
Nickel	mg/L	ND	0.0050	0.00071	08/25/23 17:01	
Selenium	mg/L	ND	0.0050	0.0014	08/25/23 17:01	
Silver	mg/L	ND	0.0050	0.00044	08/25/23 17:01	
Thallium	mg/L	ND	0.0010	0.00018	08/25/23 17:01	
Vanadium	mg/L	ND	0.010	0.0025	08/25/23 17:01	
Zinc	mg/L	ND	0.010	0.0070	08/25/23 17:01	

LABORATORY CONTROL SAMPLE: 4119065

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	0.10	101	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Copper	mg/L	0.1	0.10	105	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.11	113	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Silver	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	104	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

LABORATORY CONTROL SAMPLE: 4119065

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Zinc	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119066 4119067

Parameter	Units	92683124003 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	0.10	0.10	101	101	75-125	0	20	
Barium	mg/L	0.0031J	0.1	0.1	0.11	0.11	103	103	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	103	105	75-125	2	20	
Boron	mg/L	ND	1	1	1.1	1.1	105	106	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Copper	mg/L	0.0011J	0.1	0.1	0.099	0.10	98	102	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.11J	0.11J	103	104	75-125		20	
Molybdenum	mg/L	0.0071J	0.1	0.1	0.11	0.11	104	105	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Silver	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Zinc	mg/L	ND	0.1	0.1	0.099	0.10	96	99	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 794952
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683139002, 92683139003, 92683139004, 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

METHOD BLANK: 4119069 Matrix: Water
Associated Lab Samples: 92683139002, 92683139003, 92683139004, 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/28/23 15:38	
Arsenic	mg/L	ND	0.0050	0.0037	08/28/23 15:38	
Barium	mg/L	ND	0.0050	0.00067	08/28/23 15:38	
Beryllium	mg/L	ND	0.00050	0.000054	08/28/23 15:38	
Boron	mg/L	ND	0.040	0.0086	08/28/23 15:38	
Cadmium	mg/L	ND	0.00050	0.00011	08/28/23 15:38	
Chromium	mg/L	ND	0.0050	0.0011	08/28/23 15:38	
Cobalt	mg/L	ND	0.0050	0.00039	08/28/23 15:38	
Copper	mg/L	ND	0.0050	0.0010	08/28/23 15:38	
Lead	mg/L	ND	0.0010	0.00012	08/28/23 15:38	
Lithium	mg/L	ND	0.030	0.00073	08/28/23 15:38	
Molybdenum	mg/L	ND	0.010	0.00074	08/28/23 15:38	
Nickel	mg/L	ND	0.0050	0.00071	08/28/23 15:38	
Selenium	mg/L	ND	0.0050	0.0014	08/28/23 15:38	
Silver	mg/L	ND	0.0050	0.00044	08/28/23 15:38	
Thallium	mg/L	ND	0.0010	0.00018	08/28/23 15:38	
Vanadium	mg/L	ND	0.010	0.0025	08/28/23 15:38	
Zinc	mg/L	ND	0.010	0.0070	08/28/23 15:38	

LABORATORY CONTROL SAMPLE: 4119070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	105	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	104	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.097	97	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

LABORATORY CONTROL SAMPLE: 4119070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Thallium	mg/L	0.1	0.096	96	80-120	
Vanadium	mg/L	0.1	0.11	105	80-120	
Zinc	mg/L	0.1	0.11	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119071 4119072

Parameter	Units	92683139004 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	0.11	104	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	3	20	
Barium	mg/L	0.022	0.1	0.1	0.12	0.12	103	100	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20	
Boron	mg/L	1.6	1	1	2.7	2.6	111	99	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	99	101	75-125	1	20	
Cobalt	mg/L	0.0014J	0.1	0.1	0.10	0.10	99	99	75-125	0	20	
Copper	mg/L	ND	0.1	0.1	0.099	0.098	98	97	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	2	20	
Lithium	mg/L	0.00084J	0.1	0.1	0.10	0.099	104	98	75-125	6	20	
Molybdenum	mg/L	ND	0.1	0.1	0.097	0.10	97	100	75-125	3	20	
Nickel	mg/L	0.0015J	0.1	0.1	0.099	0.097	97	96	75-125	1	20	
Selenium	mg/L	0.0021J	0.1	0.1	0.11	0.11	106	103	75-125	2	20	
Silver	mg/L	ND	0.1	0.1	0.029	0.094	29	94	75-125	107	20	M1,R1
Thallium	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	0	20	
Zinc	mg/L	ND	0.1	0.1	0.11	0.10	104	101	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 795037
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683139001, 92683139002, 92683139003, 92683139004, 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

METHOD BLANK: 4119610 Matrix: Water
Associated Lab Samples: 92683139001, 92683139002, 92683139003, 92683139004, 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/22/23 18:15	

LABORATORY CONTROL SAMPLE: 4119611

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119612 4119613

Parameter	Units	92683139001 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	0.0028	0.0028	111	112	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 794903
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683139001, 92683139002, 92683139003, 92683139004

METHOD BLANK: 4118696 Matrix: Water
Associated Lab Samples: 92683139001, 92683139002, 92683139003, 92683139004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/21/23 17:34	

LABORATORY CONTROL SAMPLE: 4118697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	381	95	80-120	

SAMPLE DUPLICATE: 4118698

Parameter	Units	92683137003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	404	434	7	10	

SAMPLE DUPLICATE: 4118699

Parameter	Units	92683141011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	267	261	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 795115
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683139005, 92683139006

METHOD BLANK: 4119873 Matrix: Water
Associated Lab Samples: 92683139005, 92683139006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/22/23 12:24	

LABORATORY CONTROL SAMPLE: 4119874

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	385	96	80-120	

SAMPLE DUPLICATE: 4119875

Parameter	Units	92683381006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	399	402	1	10	

SAMPLE DUPLICATE: 4119876

Parameter	Units	92683381003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	189	182	4	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 795117
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683139008, 92683139009

METHOD BLANK: 4119882 Matrix: Water
Associated Lab Samples: 92683139008, 92683139009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/22/23 15:56	

LABORATORY CONTROL SAMPLE: 4119883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	385	96	80-120	

SAMPLE DUPLICATE: 4119884

Parameter	Units	92683139008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 4119885

Parameter	Units	92683384007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	97.0	89.0	9	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 795386
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683139007

METHOD BLANK: 4121212 Matrix: Water
Associated Lab Samples: 92683139007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/23/23 17:29	

LABORATORY CONTROL SAMPLE: 4121213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	381	95	80-120	

SAMPLE DUPLICATE: 4121214

Parameter	Units	92683139007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	450	456	1	10	

SAMPLE DUPLICATE: 4121215

Parameter	Units	92683383008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	137	136	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 794488
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: 92683139001, 92683139002, 92683139003, 92683139004

METHOD BLANK: 4116660 Matrix: Water
Associated Lab Samples: 92683139001, 92683139002, 92683139003, 92683139004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/18/23 23:54	
Fluoride	mg/L	ND	0.10	0.050	08/18/23 23:54	
Sulfate	mg/L	ND	1.0	0.50	08/18/23 23:54	

LABORATORY CONTROL SAMPLE: 4116661

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	48.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116662 4116663

Parameter	Units	92683124010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.1	50	50	51.8	53.2	96	98	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.4	93	96	90-110	4	10	
Sulfate	mg/L	6.0	50	50	52.3	53.7	93	95	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116664 4116665

Parameter	Units	92683137003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.6	50	50	53.8	54.5	96	98	90-110	1	10	
Fluoride	mg/L	0.070J	2.5	2.5	2.3	2.4	91	93	90-110	2	10	
Sulfate	mg/L	154	50	50	194	194	79	79	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

QC Batch: 794746
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: 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

METHOD BLANK: 4118285 Matrix: Water
Associated Lab Samples: 92683139005, 92683139006, 92683139007, 92683139008, 92683139009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/19/23 11:26	
Fluoride	mg/L	ND	0.10	0.050	08/19/23 11:26	
Sulfate	mg/L	ND	1.0	0.50	08/19/23 11:26	

LABORATORY CONTROL SAMPLE: 4118286

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118287 4118288

Parameter	Units	92683419001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.0	50	50	55.4	57.3	97	101	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	105	108	90-110	3	10	
Sulfate	mg/L	2.8	50	50	50.7	52.7	96	100	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118289 4118290

Parameter	Units	92683310003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	237	50	50	279	280	84	86	90-110	0	10	M1
Fluoride	mg/L	0.13	2.5	2.5	3.0	3.0	113	116	90-110	2	10	M1
Sulfate	mg/L	97.5	50	50	138	139	81	83	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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QUALIFIERS

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683139001	**YAT-GWC-6R**	EPA 3010A	796454	EPA 6010D	796604
92683139002	**YAT-GWC-5R**	EPA 3010A	796454	EPA 6010D	796604
92683139003	**YAT-GWC-4R**	EPA 3010A	796454	EPA 6010D	796604
92683139004	**YAT-GLF-FD-1**	EPA 3010A	796454	EPA 6010D	796604
92683139005	**YAT-GWC-1R**	EPA 3010A	796454	EPA 6010D	796604
92683139006	**YAT-GWC-3R**	EPA 3010A	796454	EPA 6010D	796604
92683139007	**YAT-GWC-2R**	EPA 3010A	796454	EPA 6010D	796604
92683139008	**YAT-GLF-EB-1**	EPA 3010A	796454	EPA 6010D	796604
92683139009	**YAT-GLF-FB-1**	EPA 3010A	796454	EPA 6010D	796604
92683139001	**YAT-GWC-6R**	EPA 3005A	794949	EPA 6020B	795122
92683139002	**YAT-GWC-5R**	EPA 3005A	794952	EPA 6020B	795123
92683139003	**YAT-GWC-4R**	EPA 3005A	794952	EPA 6020B	795123
92683139004	**YAT-GLF-FD-1**	EPA 3005A	794952	EPA 6020B	795123
92683139005	**YAT-GWC-1R**	EPA 3005A	794952	EPA 6020B	795123
92683139006	**YAT-GWC-3R**	EPA 3005A	794952	EPA 6020B	795123
92683139007	**YAT-GWC-2R**	EPA 3005A	794952	EPA 6020B	795123
92683139008	**YAT-GLF-EB-1**	EPA 3005A	794952	EPA 6020B	795123
92683139009	**YAT-GLF-FB-1**	EPA 3005A	794952	EPA 6020B	795123
92683139001	**YAT-GWC-6R**	EPA 7470A	795037	EPA 7470A	795162
92683139002	**YAT-GWC-5R**	EPA 7470A	795037	EPA 7470A	795162
92683139003	**YAT-GWC-4R**	EPA 7470A	795037	EPA 7470A	795162
92683139004	**YAT-GLF-FD-1**	EPA 7470A	795037	EPA 7470A	795162
92683139005	**YAT-GWC-1R**	EPA 7470A	795037	EPA 7470A	795162
92683139006	**YAT-GWC-3R**	EPA 7470A	795037	EPA 7470A	795162
92683139007	**YAT-GWC-2R**	EPA 7470A	795037	EPA 7470A	795162
92683139008	**YAT-GLF-EB-1**	EPA 7470A	795037	EPA 7470A	795162
92683139009	**YAT-GLF-FB-1**	EPA 7470A	795037	EPA 7470A	795162
92683139001	**YAT-GWC-6R**	SM 2540C-2015	794903		
92683139002	**YAT-GWC-5R**	SM 2540C-2015	794903		
92683139003	**YAT-GWC-4R**	SM 2540C-2015	794903		
92683139004	**YAT-GLF-FD-1**	SM 2540C-2015	794903		
92683139005	**YAT-GWC-1R**	SM 2540C-2015	795115		
92683139006	**YAT-GWC-3R**	SM 2540C-2015	795115		
92683139007	**YAT-GWC-2R**	SM 2540C-2015	795386		
92683139008	**YAT-GLF-EB-1**	SM 2540C-2015	795117		
92683139009	**YAT-GLF-FB-1**	SM 2540C-2015	795117		
92683139001	**YAT-GWC-6R**	EPA 300.0 Rev 2.1 1993	794488		
92683139002	**YAT-GWC-5R**	EPA 300.0 Rev 2.1 1993	794488		
92683139003	**YAT-GWC-4R**	EPA 300.0 Rev 2.1 1993	794488		
92683139004	**YAT-GLF-FD-1**	EPA 300.0 Rev 2.1 1993	794488		
92683139005	**YAT-GWC-1R**	EPA 300.0 Rev 2.1 1993	794746		
92683139006	**YAT-GWC-3R**	EPA 300.0 Rev 2.1 1993	794746		
92683139007	**YAT-GWC-2R**	EPA 300.0 Rev 2.1 1993	794746		
92683139008	**YAT-GLF-EB-1**	EPA 300.0 Rev 2.1 1993	794746		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Gypsum LF
Pace Project No.: 92683139

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683139009	**YAT-GLF-FB-1**	EPA 300.0 Rev 2.1 1993	794746		

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Gft Power

Project #: WO# : 92683139

92683139

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 CM

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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: W				
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: _____

Qualtrax ID: 69614

WO#: 92683139

*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

***Check all unpreserved Nitrates for chlorine

Project #

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
3		1	1			2																			2				
4		1	1			2																			2				
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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 DENR Certification Office (i.e. 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.

Page: 1 Of 1

Section A – Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B – Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Gypsum Landfill
Project Number:	

Section C – Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Bonnie Varg
Pace Profile #:	~~40840~~ 16561-7

Regulatory Agency: Georgia

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 903.0/9320	App I / III (gypsum only)	Residual Chlorine (Y/N)	92683139
1	YAT-GWC-6R	WG	G	8/15/23	1125	--	--		6	2		4						X	X	X	X	X			001
2	YAT-GWC-5R	WG	G	8/15/23	1520	--	--		6	2		4						X	X	X	X	X			002
3	YAT-GWC-1R	WG	G			--	--		6	2		4						X	X	X	X	X			
4	YAT-GWC-3R	WG	G			--	--		6	2		4						X	X	X	X	X			
5	YAT-GWC-4R	WG	G	8/15/23	1800	--	--		6	2		4						X	X	X	X	X			003
6	YAT-GWC-2R	WG	G			--	--		6	2		4						X	X	X	X	X			
7	YAT-GLF-EB-1	WG	G			--	--		6	2		4						X	X	X	X	X			
8	YAT-GLF-FB-1	WG	G			--	--		6	2		4						X	X	X	X	X			
9	YAT-GLF-FD-1	WG	G	8/15/23	--	--	--		6	2		4						X	X	X	X	X			004
10						--	--																		
11						--	--																		
12						--	--																		

Matrix Codes: 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
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0800	Arcadis	8/16/23	0800	
App III Metals: Boron 6020B, Ca 6010D; App I/III 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0907	Ryan Williams/Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams/Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER:	(Arcadis) -	Jake Swanson		
SIGNATURE of SAMPLER:	(Arcadis) -		DATE Signed:	8/15/23

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project # WO#: 92683139

PM: BV **Due Date:** 08/30/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Date/Initials Person Examining Contents: 9-17-23 AY

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 5.9 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.9

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? -Includes Date/Time/ID/Analysis Matrix: WG	☑ Yes	☐ No	☐ N/A	9.
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:**

Qualtrax ID: 69614

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO# : 92683139**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1			1	2		2																							
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A
Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Gypsum Landfill
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Bonnie Vang
Pace Profile #:	10840

Regulatory Agency
State / Location: Georgia

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	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	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gpysum only)	Residual Chlorine (Y/N)	92683139
1	YAT-GWC-6R	WG	G			--	--		6	2		4							X	X	X	X	X		
2	YAT-GWC-5R	WG	G			--	--		6	2		4							X	X	X	X	X		
3	YAT-GWC-1R	WG	G	8/16/23	1010	--	--		6	2		4							X	X	X	X	X		005
4	YAT-GWC-3R	WG	G	8/16/23	1200	--	--		6	2		4							X	X	X	X	X		006
5	YAT-GWC-4R	WG	G			--	--		6	2		4							X	X	X	X	X		
6	YAT-GWC-2R	WG	G	8/16/23	1320	--	--		6	2		4							X	X	X	X	X		007
7	YAT-GLF-EB-1	WG	G	8/16/23	1340	--	--		6	2		4							X	X	X	X	X		008
8	YAT-GLF-FB-1	WG	G	8/16/23	1220	--	--		6	2		4							X	X	X	X	X		009
9	YAT-GLF-FD-1	WG	G			--	--		6	2		4							X	X	X	X	X		
10						--	--																		
11						--	--																		
12						--	--																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[illegible] /Arcadis	8/17/23	0830	[illegible] / Arcadis	8/17/23	0830	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[illegible] / Arcadis	8/17/23	0955	Ryan William / Pace	8/17/23	0956	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan William / Pace	8/17/23	1254	[illegible]	8-17	1254	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: (Arcadis) - Jake Swanson

SIGNATURE of SAMPLER: (Arcadis) - [illegible] DATE Signed: 8/17/23

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 14, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between August 16, 2023 and August 17, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

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CERTIFICATIONS

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

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SAMPLE SUMMARY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683140001	**YAT-GWC-6R**	Water	08/15/23 12:25	08/16/23 09:07
92683140002	**YAT-GWC-5R**	Water	08/15/23 15:20	08/16/23 09:07
92683140003	**YAT-GWC-4R**	Water	08/15/23 18:00	08/16/23 09:07
92683140004	**YAT-GLF-FD-1**	Water	08/15/23 00:00	08/16/23 09:07
92683140005	**YAT-GWC-1R**	Water	08/16/23 10:10	08/17/23 09:55
92683140006	**YAT-GWC-3R**	Water	08/16/23 12:00	08/17/23 09:55
92683140007	**YAT-GWC-2R**	Water	08/16/23 13:20	08/17/23 09:55
92683140008	**YAT-GLF-EB-1**	Water	08/16/23 13:40	08/17/23 09:55
92683140009	**YAT-GLF-FB-1**	Water	08/16/23 12:20	08/17/23 09:55

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92683140001	**YAT-GWC-6R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683140002	**YAT-GWC-5R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683140003	**YAT-GWC-4R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683140004	**YAT-GLF-FD-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683140005	**YAT-GWC-1R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683140006	**YAT-GWC-3R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683140007	**YAT-GWC-2R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683140008	**YAT-GLF-EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683140009	**YAT-GLF-FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683140001	**YAT-GWC-6R**					
EPA 9315	Radium-226	0.0757U ± 0.160 (0.372) C:67% T:NA	pCi/L		09/08/23 13:09	
EPA 9320	Radium-228	0.298U ± 0.285 (0.578) C:83% T:91%	pCi/L		09/06/23 15:46	
Total Radium Calculation	Total Radium	0.374U ± 0.445 (0.950)	pCi/L		09/08/23 17:29	
92683140002	**YAT-GWC-5R**					
EPA 9315	Radium-226	0.160U ± 0.135 (0.249) C:93% T:NA	pCi/L		09/08/23 13:09	
EPA 9320	Radium-228	0.166U ± 0.268 (0.581) C:84% T:88%	pCi/L		09/06/23 15:46	
Total Radium Calculation	Total Radium	0.326U ± 0.403 (0.830)	pCi/L		09/08/23 17:29	
92683140003	**YAT-GWC-4R**					
EPA 9315	Radium-226	0.405U ± 0.343 (0.632) C:88% T:NA	pCi/L		09/12/23 18:54	
EPA 9320	Radium-228	0.295U ± 0.379 (0.808) C:85% T:89%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	0.700U ± 0.722 (1.44)	pCi/L		09/13/23 14:27	
92683140004	**YAT-GLF-FD-1**					
EPA 9315	Radium-226	0.112U ± 0.239 (0.557) C:84% T:NA	pCi/L		09/13/23 08:26	
EPA 9320	Radium-228	0.390U ± 0.360 (0.740) C:86% T:94%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	0.502U ± 0.599 (1.30)	pCi/L		09/13/23 14:27	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683140005	**YAT-GWC-1R**					
EPA 9315	Radium-226	0.430U ± 0.407 (0.785) C:78% T:NA	pCi/L		09/13/23 13:22	
EPA 9320	Radium-228	0.454U ± 0.306 (0.573) C:80% T:86%	pCi/L		09/08/23 11:52	
Total Radium Calculation	Total Radium	0.884U ± 0.713 (1.36)	pCi/L		09/13/23 15:31	
92683140006	**YAT-GWC-3R**					
EPA 9315	Radium-226	0.449U ± 0.398 (0.764) C:92% T:NA	pCi/L		09/13/23 13:30	
EPA 9320	Radium-228	0.498U ± 0.305 (0.559) C:83% T:88%	pCi/L		09/08/23 11:52	
Total Radium Calculation	Total Radium	0.947U ± 0.703 (1.32)	pCi/L		09/13/23 15:31	
92683140007	**YAT-GWC-2R**					
EPA 9315	Radium-226	0.876 ± 0.507 (0.795) C:82% T:NA	pCi/L		09/13/23 13:31	
EPA 9320	Radium-228	0.816U ± 0.462 (0.858) C:83% T:80%	pCi/L		09/08/23 11:51	
Total Radium Calculation	Total Radium	1.69 ± 0.969 (1.65)	pCi/L		09/13/23 15:34	
92683140008	**YAT-GLF-EB-1**					
EPA 9315	Radium-226	0.414U ± 0.363 (0.677) C:85% T:NA	pCi/L		09/13/23 13:31	
EPA 9320	Radium-228	0.545U ± 0.388 (0.756) C:83% T:84%	pCi/L		09/08/23 11:51	
Total Radium Calculation	Total Radium	0.959U ± 0.751 (1.43)	pCi/L		09/13/23 15:34	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683140009	**YAT-GLF-FB-1**					
EPA 9315	Radium-226	0.138U ± 0.300 (0.705) C:81% T:NA	pCi/L		09/13/23 13:31	
EPA 9320	Radium-228	0.515U ± 0.369 (0.726) C:83% T:91%	pCi/L		09/08/23 11:51	
Total Radium Calculation	Total Radium	0.653U ± 0.669 (1.43)	pCi/L		09/13/23 15:34	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GWC-6R **Lab ID: 92683140001** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**0.0757U ± 0.160 (0.372) C:67% T:NA**	pCi/L	09/08/23 13:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.298U ± 0.285 (0.578) C:83% T:91%**	pCi/L	09/06/23 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.374U ± 0.445 (0.950)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GWC-5R **Lab ID: 92683140002** Collected: 08/15/23 15:20 Received: 08/16/23 09:07 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	**0.160U ± 0.135 (0.249) C:93% T:NA**	pCi/L	09/08/23 13:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.166U ± 0.268 (0.581) C:84% T:88%**	pCi/L	09/06/23 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.326U ± 0.403 (0.830)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GWC-4R **Lab ID: 92683140003** Collected: 08/15/23 18:00 Received: 08/16/23 09:07 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	**0.405U ± 0.343 (0.632) C:88% T:NA**	pCi/L	09/12/23 18:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.295U ± 0.379 (0.808) C:85% T:89%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.700U ± 0.722 (1.44)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GLF-FD-1 **Lab ID: 92683140004** Collected: 08/15/23 00:00 Received: 08/16/23 09:07 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	**0.112U ± 0.239 (0.557) C:84% T:NA**	pCi/L	09/13/23 08:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.390U ± 0.360 (0.740) C:86% T:94%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.502U ± 0.599 (1.30)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GWC-1R **Lab ID: 92683140005** Collected: 08/16/23 10:10 Received: 08/17/23 09:55 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample 009 = 1/2 bottle received leaking, transferred into BP1U bottle. Samples 001-004 logged prior on different WO.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.430U ± 0.407 (0.785) C:78% T:NA**	pCi/L	09/13/23 13:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.454U ± 0.306 (0.573) C:80% T:86%**	pCi/L	09/08/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.884U ± 0.713 (1.36)**	pCi/L	09/13/23 15:31	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GWC-3R **Lab ID: 92683140006** Collected: 08/16/23 12:00 Received: 08/17/23 09:55 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	**0.449U ± 0.398 (0.764) C:92% T:NA**	pCi/L	09/13/23 13:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.498U ± 0.305 (0.559) C:83% T:88%**	pCi/L	09/08/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.947U ± 0.703 (1.32)**	pCi/L	09/13/23 15:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GWC-2R **Lab ID: 92683140007** Collected: 08/16/23 13:20 Received: 08/17/23 09:55 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	**0.876 ± 0.507 (0.795) C:82% T:NA**	pCi/L	09/13/23 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.816U ± 0.462 (0.858) C:83% T:80%**	pCi/L	09/08/23 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.69 ± 0.969 (1.65)**	pCi/L	09/13/23 15:34	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GLF-EB-1 **Lab ID: 92683140008** Collected: 08/16/23 13:40 Received: 08/17/23 09:55 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	**0.414U ± 0.363 (0.677) C:85% T:NA**	pCi/L	09/13/23 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.545U ± 0.388 (0.756) C:83% T:84%**	pCi/L	09/08/23 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.959U ± 0.751 (1.43)**	pCi/L	09/13/23 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Sample: YAT-GLF-FB-1 **Lab ID: 92683140009** Collected: 08/16/23 12:20 Received: 08/17/23 09:55 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	**0.138U ± 0.300 (0.705) C:81% T:NA**	pCi/L	09/13/23 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.515U ± 0.369 (0.726) C:83% T:91%**	pCi/L	09/08/23 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.653U ± 0.669 (1.43)**	pCi/L	09/13/23 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

QC Batch: 611649
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683140001, 92683140002

METHOD BLANK: 2977146 Matrix: Water
Associated Lab Samples: 92683140001, 92683140002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.101 ± 0.125 (0.261) C:93% T:NA	pCi/L	09/08/23 11:33	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

QC Batch: 612655
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683140005, 92683140006

METHOD BLANK: 2982189 Matrix: Water
Associated Lab Samples: 92683140005, 92683140006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0574 ± 0.265 (0.671) C:94% T:NA	pCi/L	09/13/23 11:43	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

QC Batch: 611586
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683140001, 92683140002, 92683140003, 92683140004

METHOD BLANK: 2976847 Matrix: Water
Associated Lab Samples: 92683140001, 92683140002, 92683140003, 92683140004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.830 ± 0.342 (0.491) C:81% T:89%	pCi/L	09/06/23 15:45	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

QC Batch: 612656
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683140007, 92683140008, 92683140009

METHOD BLANK: 2982190 Matrix: Water
Associated Lab Samples: 92683140007, 92683140008, 92683140009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.438 ± 0.430 (0.847) C:79% T:NA	pCi/L	09/13/23 13:30	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

QC Batch: 612651
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683140003, 92683140004

METHOD BLANK: 2982186 Matrix: Water
Associated Lab Samples: 92683140003, 92683140004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.199 ± 0.286 (0.622) C:88% T:NA	pCi/L	09/12/23 18:19	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

QC Batch: 611590 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683140005, 92683140006, 92683140007, 92683140008, 92683140009

METHOD BLANK: 2976857 Matrix: Water
Associated Lab Samples: 92683140005, 92683140006, 92683140007, 92683140008, 92683140009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0613 ± 0.274 (0.661) C:83% T:83%	pCi/L	09/08/23 11:54	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Gypsum LF- RADs
Pace Project No.: 92683140

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683140001	**YAT-GWC-6R**	EPA 9315	611649		
92683140002	**YAT-GWC-5R**	EPA 9315	611649		
92683140003	**YAT-GWC-4R**	EPA 9315	612651		
92683140004	**YAT-GLF-FD-1**	EPA 9315	612651		
92683140005	**YAT-GWC-1R**	EPA 9315	612655		
92683140006	**YAT-GWC-3R**	EPA 9315	612655		
92683140007	**YAT-GWC-2R**	EPA 9315	612656		
92683140008	**YAT-GLF-EB-1**	EPA 9315	612656		
92683140009	**YAT-GLF-FB-1**	EPA 9315	612656		
92683140001	**YAT-GWC-6R**	EPA 9320	611586		
92683140002	**YAT-GWC-5R**	EPA 9320	611586		
92683140003	**YAT-GWC-4R**	EPA 9320	611586		
92683140004	**YAT-GLF-FD-1**	EPA 9320	611586		
92683140005	**YAT-GWC-1R**	EPA 9320	611590		
92683140006	**YAT-GWC-3R**	EPA 9320	611590		
92683140007	**YAT-GWC-2R**	EPA 9320	611590		
92683140008	**YAT-GLF-EB-1**	EPA 9320	611590		
92683140009	**YAT-GLF-FB-1**	EPA 9320	611590		
92683140001	**YAT-GWC-6R**	Total Radium Calculation	614334		
92683140002	**YAT-GWC-5R**	Total Radium Calculation	614334		
92683140003	**YAT-GWC-4R**	Total Radium Calculation	615223		
92683140004	**YAT-GLF-FD-1**	Total Radium Calculation	615223		
92683140005	**YAT-GWC-1R**	Total Radium Calculation	615247		
92683140006	**YAT-GWC-3R**	Total Radium Calculation	615247		
92683140007	**YAT-GWC-2R**	Total Radium Calculation	615249		
92683140008	**YAT-GLF-EB-1**	Total Radium Calculation	615249		
92683140009	**YAT-GLF-FB-1**	Total Radium Calculation	615249		

Pace ANALYTICAL SERVICES

DOC_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Gift Power

Project #: WO# : 92683140

92683140

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 CMH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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: W				
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

***Check all unpreserved Nitrates for chlorine

Project WO#: 92683140

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
3		1	1			2																			2				
4		1	1			2																			2				
5																													
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10																													
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Gypsum Landfill	Pace Project Manager:	Bonnie Vang
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App III (gypsum only)	Residual Chlorine (Y/N)	92683140
1	YAT-GWC-6R	WG	G	8/15/23	1225	--	--		6	2		4							X	X	X	X	X		09
2	YAT-GWC-5R	WG	G	8/15/23	1520	--	--		6	2		4							X	X	X	X	X		07
3	YAT-GWC-1R	WG	G			--	--		6	2		4							X	X	X	X	X		
4	YAT-GWC-3R	WG	G			--	--		6	2		4							X	X	X	X	X		
5	YAT-GWC-4R	WG	G	8/15/23	1300	--	--		6	2		4							X	X	X	X	X		05
6	YAT-GWC-2R	WG	G			--	--		6	2		4							X	X	X	X	X		
7	YAT-GLF-EB-1	WG	G			--	--		6	2		4							X	X	X	X	X		
8	YAT-GLF-FB-1	WG	G			--	--		6	2		4							X	X	X	X	X		
9	YAT-GLF-FD-1	WG	G	8/15/23	--	--	--		6	2		4							X	X	X	X	X		09
10						--	--																		
11						--	--																		
12						--	--																		

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	(Arcadis)	8/16/23	0800	(Arcadis)	8/16/23	0800	
App III Metals: Boron 6020B, Ca 6010D; App III 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0907	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	(Arcadis) - Jake Swanson					
SIGNATURE of SAMPLER:	(Arcadis) -	DATE Signed: 8/15/23				

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92683140**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Date/Initials Person Examining Contents: 9-17-23 AV

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 5.9 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.9

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? -Includes Date/Time/ID/Analysis Matrix: WG	☑ Yes	☐ No	☐ N/A	9.
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:

Qualtrax ID: 69614

WO#: 92683140

***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

Project #

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

*****Check all unpreserved Nitrates for chlorine**

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1			1	2		2																							
2			1	2		2																							
3			1	2		2																							
4			1	2		2																							
5			1	2		2																							
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Gypsum Landfill	Pace Project Manager:	Bonnie Vang
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: —

State / Location: Georgia

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	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	9L683MO
1	YAT-GWC-6R	WG	G			--	--		6	2		4						X	X	X	X	X			
2	YAT-GWC-5R	WG	G			--	--		6	2		4						X	X	X	X	X			
3	YAT-GWC-1R	WG	G	8/16/23	1010	--	--		6	2		4						X	X	X	X	X			005
4	YAT-GWC-3R	WG	G	8/16/23	1200	--	--		6	2		4						X	X	X	X	X			111
5	YAT-GWC-4R	WG	G			--	--		6	2		4						X	X	X	X	X			
6	YAT-GWC-2R	WG	G	8/16/23	1320	--	--		6	2		4						X	X	X	X	X			427
7	YAT-GLF-EB-1	WG	G	8/16/23	1340	--	--		6	2		4						X	X	X	X	X			008
8	YAT-GLF-FB-1	WG	G	8/16/23	1220	--	--		6	2		4						X	X	X	X	X			109
9	YAT-GLF-FD-1	WG	G			--	--		6	2		4						X	X	X	X	X			
10						--	--																		
11						--	--																		
12						--	--																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/17/23	0830	/Arcadis	8/17/23	0830	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/17/23	0955	Ryan William /Pace	8/17/23	0955	
App IV; Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg);	Ryan William /Pace	8/17/23	1254		8-17	1254	

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	(Arcadis) -	Jake Swanson			
SIGNATURE of SAMPLER:	(Arcadis) -		DATE Signed:	8/17/23	

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-228
Analyst:	ZPC
Date:	8/31/2023
Worklist:	75029
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976847
MB concentration:	0.830
M/B 2 Sigma CSU:	0.342
MB MDC:	0.491
MB Numerical Performance Indicator:	4.76
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

OK

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75029	LCSD75029
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.931	39.931
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.817
Target Conc. (pCi/L, g, F):	4.889	4.888
Uncertainty (Calculated):	0.240	0.240
Result (pCi/L, g, F):	3.930	3.696
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.909	0.843
Numerical Performance Indicator:	-2.00	-2.67
Percent Recovery:	80.39%	75.60%
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.:	LCS75029	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75029	
Sample Result (pCi/L, g, F):	3.930	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.909	
Sample Duplicate Result (pCi/L, g, F):	3.696	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.843	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.370	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.14%	
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.

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/5/2023
Worklist:	75032
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976857
MB concentration:	-0.061
M/B 2 Sigma CSU:	0.274
MB MDC:	0.661
MB Numerical Performance Indicator:	-0.44
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75032	LCSD75032
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.906	39.906
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.820
Target Conc. (pCi/L, g, F):	4.890	4.868
Uncertainty (Calculated):	0.240	0.239
Result (pCi/L, g, F):	5.009	4.854
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.056	1.035
Numerical Performance Indicator:	0.22	-0.03
Percent Recovery:	102.44%	99.70%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS75032	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75032	
Sample Result (pCi/L, g, F):	5.009	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.056	
Sample Duplicate Result (pCi/L, g, F):	4.854	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.035	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.206	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.71%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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:		

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:

9/11/23

LAM 9/12/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	75042
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2977146
MB concentration:	0.101
M/B 2 Sigma CSU:	0.125
MB MDC:	0.261
MB Numerical Performance Indicator:	1.59
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75042	LCSD75042
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.013	24.013
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.503
Target Conc. (pCi/L, g, F):	4.790	4.775
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	6.088	6.235
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.071	1.103
Numerical Performance Indicator:	2.37	2.59
Percent Recovery:	127.10%	130.59%
Status vs Numerical Indicator:	Warning	Warning
Status vs Recovery:	N/A	N/A
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 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.:	LCS75042	92683140002
Duplicate Sample I.D.	LCSD75042	92683140002DUP
Sample Result (pCi/L, g, F):	6.088	0.160
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.071	0.135
Sample Duplicate Result (pCi/L, g, F):	6.235	0.280
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.103	0.167
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.187	-1.090
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.70%	54.18%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	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 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:

9/8/23

LAM 9/8/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/12/2023
Worklist:	75103
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982186
MB concentration:	0.199
M/B 2 Sigma CSU:	0.286
MB MDC:	0.622
MB Numerical Performance Indicator:	1.36
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75103	LCSD75103
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.509
Target Conc. (pCi/L, g, F):	4.965	4.920
Uncertainty (Calculated):	0.233	0.231
Result (pCi/L, g, F):	5.960	4.641
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.214	1.014
Numerical Performance Indicator:	1.58	-0.53
Percent Recovery:	120.03%	94.32%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75103	92682115021
Duplicate Sample I.D.	LCSD75103	92682115021DUP
Sample Result (pCi/L, g, F):	5.960	0.432
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.214	0.300
Sample Duplicate Result (pCi/L, g, F):	4.641	0.258
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.014	0.271
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.634	0.844
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	23.99%	50.51%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	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 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:

LAM 9/13/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/13/2023
Worklist:	75105
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982189
MB concentration:	0.057
M/B 2 Sigma CSU:	0.265
MB MDC:	0.671
MB Numerical Performance Indicator:	0.42
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75105	LCSD75105
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.510	0.510
Target Conc. (pCi/L, g, F):	4.910	4.909
Uncertainty (Calculated):	0.231	0.231
Result (pCi/L, g, F):	4.531	4.579
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.154	1.103
Numerical Performance Indicator:	-0.63	-0.57
Percent Recovery:	92.27%	93.28%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75105	92683140006
Duplicate Sample I.D.	LCSD75105	92683140006DUP
Sample Result (pCi/L, g, F):	4.531	0.449
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.154	0.398
Sample Duplicate Result (pCi/L, g, F):	4.579	0.240
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.103	0.307
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.059	0.813
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.09%	60.45%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	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 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:

VAM 9/13/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/13/2023
Worklist:	75106
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982190
MB concentration:	0.438
M/B 2 Sigma CSU:	0.430
MB MDC:	0.847
MB Numerical Performance Indicator:	2.00
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75106	**LCSD75106**
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.501
Target Conc. (pCi/L, g, F):	4.948	4.999
Uncertainty (Calculated):	0.233	0.235
Result (pCi/L, g, F):	4.951	4.002
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.188	1.046
Numerical Performance Indicator:	0.00	-1.82
Percent Recovery:	100.06%	80.06%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75106	92683386026
Duplicate Sample I.D.	LCSD75106	92683386026DUP
Sample Result (pCi/L, g, F):	4.951	0.428
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.188	0.368
Sample Duplicate Result (pCi/L, g, F):	4.002	0.305
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.046	0.323
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.175	0.489
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	22.21%	33.36%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	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 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:

LAM 9/13/23

Upgradient Wells

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 31, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between August 16, 2023 and August 17, 2023. 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 - Peachtree Corners, GA

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

Sincerely,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

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CERTIFICATIONS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

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 Laboratory ID: 99030
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
Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683124001	**YAT-YGWA-1I**	Water	08/15/23 13:45	08/16/23 09:07
92683124002	**YAT-YGWA-1D**	Water	08/15/23 11:20	08/16/23 09:07
92683124003	**YAT-YGWA-2I**	Water	08/15/23 15:45	08/16/23 09:07
92683124004	**YAT-YGWA-3D**	Water	08/15/23 17:10	08/16/23 09:07
92683124005	**YAT-YGWA-4I**	Water	08/15/23 12:25	08/16/23 09:07
92683124006	**YAT-YGWA-5I**	Water	08/15/23 10:20	08/16/23 09:07
92683124007	**YAT-YGWA-5D**	Water	08/15/23 11:13	08/16/23 09:07
92683124008	**YAT-YGWA-18S**	Water	08/15/23 11:35	08/16/23 09:07
92683124009	**YAT-YGWA-18I**	Water	08/15/23 15:40	08/16/23 09:07
92683124010	**YAT-YGWA-14S**	Water	08/15/23 17:30	08/16/23 09:07
92683124011	**YAT-YGWA-47**	Water	08/15/23 09:43	08/16/23 09:07
92683124012	**YAT-GWA-2**	Water	08/15/23 10:20	08/16/23 09:07
92683124013	**YAT-YGWA-17S**	Water	08/15/23 14:50	08/16/23 09:07
92683124014	**YAT-YGWA-20S**	Water	08/15/23 12:25	08/16/23 09:07
92683124015	**YAT-YGWA-21I**	Water	08/15/23 10:35	08/16/23 09:07
92683124016	**YAT-YGWA-39**	Water	08/15/23 16:11	08/16/23 09:07
92683124017	**YAT-YGWA-40**	Water	08/15/23 17:20	08/16/23 09:07
92683124018	**YAT-YGWA-30I**	Water	08/16/23 12:20	08/17/23 09:55
92683124019	**YAT-YGWA-3I**	Water	08/16/23 10:50	08/17/23 09:55

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92683124001	**YAT-YGWA-1I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124002	**YAT-YGWA-1D**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124003	**YAT-YGWA-2I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124004	**YAT-YGWA-3D**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124005	**YAT-YGWA-4I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124006	**YAT-YGWA-5I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124007	**YAT-YGWA-5D**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124008	**YAT-YGWA-18S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124009	**YAT-YGWA-18I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124010	**YAT-YGWA-14S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124011	**YAT-YGWA-47**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124012	**YAT-GWA-2**	EPA 6010D	MS	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124013	**YAT-YGWA-17S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124014	**YAT-YGWA-20S**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124015	**YAT-YGWA-21I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124016	**YAT-YGWA-39**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124017	**YAT-YGWA-40**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92683124018	**YAT-YGWA-30I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3
92683124019	**YAT-YGWA-3I**	EPA 6010D	MS	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2015	DL1	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124001	**YAT-YGWA-1I**					
EPA 6010D	Calcium	1.8	mg/L	1.0	08/24/23 19:18	
EPA 6020B	Barium	0.0078	mg/L	0.0050	08/25/23 17:09	
EPA 6020B	Boron	0.0094J	mg/L	0.040	08/25/23 17:09	
EPA 6020B	Cobalt	0.00072J	mg/L	0.0050	08/25/23 17:09	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	08/25/23 17:09	
EPA 6020B	Molybdenum	0.0047J	mg/L	0.010	08/25/23 17:09	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:17	
SM 2540C-2015	Total Dissolved Solids	65.0	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.4	mg/L	1.0	08/18/23 21:15	
EPA 300.0 Rev 2.1 1993	Sulfate	4.6	mg/L	1.0	08/18/23 21:15	
92683124002	**YAT-YGWA-1D**					
EPA 6010D	Calcium	13.5	mg/L	1.0	08/24/23 19:23	
EPA 6020B	Barium	0.0059	mg/L	0.0050	08/25/23 17:12	
EPA 6020B	Lithium	0.0079J	mg/L	0.030	08/25/23 17:12	
EPA 6020B	Molybdenum	0.0098J	mg/L	0.010	08/25/23 17:12	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:20	
SM 2540C-2015	Total Dissolved Solids	121	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/18/23 21:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.057J	mg/L	0.10	08/18/23 21:29	
EPA 300.0 Rev 2.1 1993	Sulfate	9.6	mg/L	1.0	08/18/23 21:29	
92683124003	**YAT-YGWA-2I**					
EPA 6010D	Calcium	23.2	mg/L	1.0	08/24/23 19:29	
EPA 6020B	Barium	0.0031J	mg/L	0.0050	08/25/23 17:16	
EPA 6020B	Molybdenum	0.0071J	mg/L	0.010	08/25/23 17:16	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:22	
SM 2540C-2015	Total Dissolved Solids	157	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	0.93J	mg/L	1.0	08/18/23 21:44	
EPA 300.0 Rev 2.1 1993	Fluoride	0.081J	mg/L	0.10	08/18/23 21:44	
EPA 300.0 Rev 2.1 1993	Sulfate	17.2	mg/L	1.0	08/18/23 21:44	
92683124004	**YAT-YGWA-3D**					
EPA 6010D	Calcium	27.4	mg/L	1.0	08/24/23 19:34	
EPA 6020B	Barium	0.0046J	mg/L	0.0050	08/25/23 17:31	
EPA 6020B	Lithium	0.023J	mg/L	0.15	08/28/23 13:28	D3
EPA 6020B	Molybdenum	0.012	mg/L	0.010	08/25/23 17:31	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:25	
SM 2540C-2015	Total Dissolved Solids	231	mg/L	25.0	08/21/23 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/18/23 22:27	
EPA 300.0 Rev 2.1 1993	Fluoride	0.42	mg/L	0.10	08/18/23 22:27	
EPA 300.0 Rev 2.1 1993	Sulfate	6.8	mg/L	1.0	08/18/23 22:27	
92683124005	**YAT-YGWA-4I**					
EPA 6010D	Calcium	7.8	mg/L	1.0	08/28/23 21:13	M1
EPA 6020B	Barium	0.011	mg/L	0.0050	08/25/23 17:35	
EPA 6020B	Lithium	0.0083J	mg/L	0.030	08/25/23 17:35	
EPA 7470A	Mercury	0.00013J	mg/L	0.00020	08/22/23 17:28	
SM 2540C-2015	Total Dissolved Solids	99.0	mg/L	25.0	08/21/23 13:11	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124005	**YAT-YGWA-4I**					
EPA 300.0 Rev 2.1 1993	Chloride	4.4	mg/L	1.0	08/18/23 22:41	
EPA 300.0 Rev 2.1 1993	Sulfate	7.5	mg/L	1.0	08/18/23 22:41	
92683124006	**YAT-YGWA-5I**					
EPA 6010D	Calcium	2.6	mg/L	1.0	08/28/23 21:33	
EPA 6020B	Barium	0.018	mg/L	0.0050	08/25/23 17:46	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:30	
SM 2540C-2015	Total Dissolved Solids	76.0	mg/L	25.0	08/21/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	08/18/23 22:56	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	08/18/23 22:56	
92683124007	**YAT-YGWA-5D**					
EPA 6010D	Calcium	25.0	mg/L	1.0	08/28/23 21:39	
EPA 6020B	Barium	0.0074	mg/L	0.0050	08/25/23 17:50	
EPA 6020B	Lithium	0.0059J	mg/L	0.15	08/28/23 13:40	D3
EPA 6020B	Molybdenum	0.00090J	mg/L	0.010	08/25/23 17:50	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:33	
SM 2540C-2015	Total Dissolved Solids	219	mg/L	25.0	08/21/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	3.1	mg/L	1.0	08/18/23 23:10	
EPA 300.0 Rev 2.1 1993	Sulfate	4.8	mg/L	1.0	08/18/23 23:10	
92683124008	**YAT-YGWA-18S**					
EPA 6010D	Calcium	0.80J	mg/L	1.0	08/28/23 21:44	
EPA 6020B	Barium	0.012	mg/L	0.0050	08/25/23 17:53	
EPA 6020B	Beryllium	0.000057J	mg/L	0.00050	08/25/23 17:53	
EPA 6020B	Chromium	0.0013J	mg/L	0.0050	08/25/23 17:53	
EPA 6020B	Lithium	0.00077J	mg/L	0.030	08/25/23 17:53	
EPA 7470A	Mercury	0.00015J	mg/L	0.00020	08/22/23 17:44	
SM 2540C-2015	Total Dissolved Solids	81.0	mg/L	25.0	08/21/23 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	6.7	mg/L	1.0	08/18/23 23:25	
EPA 300.0 Rev 2.1 1993	Sulfate	0.88J	mg/L	1.0	08/18/23 23:25	
92683124009	**YAT-YGWA-18I**					
EPA 6010D	Calcium	5.1	mg/L	1.0	08/28/23 21:49	
EPA 6020B	Barium	0.020	mg/L	0.0050	08/25/23 17:57	
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:46	
SM 2540C-2015	Total Dissolved Solids	96.0	mg/L	25.0	08/21/23 13:12	
EPA 300.0 Rev 2.1 1993	Chloride	7.3	mg/L	1.0	08/18/23 23:39	
EPA 300.0 Rev 2.1 1993	Sulfate	0.51J	mg/L	1.0	08/18/23 23:39	
92683124010	**YAT-YGWA-14S**					
EPA 6010D	Calcium	1.3	mg/L	1.0	08/28/23 22:04	
EPA 6020B	Barium	0.0079	mg/L	0.0050	08/25/23 18:01	
EPA 6020B	Beryllium	0.00018J	mg/L	0.00050	08/25/23 18:01	
EPA 6020B	Boron	0.017J	mg/L	0.040	08/25/23 18:01	
EPA 6020B	Selenium	0.0014J	mg/L	0.0050	08/25/23 18:01	
EPA 7470A	Mercury	0.00016J	mg/L	0.00020	08/22/23 17:49	
SM 2540C-2015	Total Dissolved Solids	69.0	mg/L	25.0	08/21/23 13:14	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	08/19/23 00:22	

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124010	**YAT-YGWA-14S**					
EPA 300.0 Rev 2.1 1993	Sulfate	6.0	mg/L	1.0	08/19/23 00:22	
92683124011	**YAT-YGWA-47**					
EPA 6010D	Calcium	9.6	mg/L	1.0	08/28/23 22:10	
EPA 6020B	Barium	0.032	mg/L	0.0050	08/25/23 18:04	
EPA 6020B	Cobalt	0.00072J	mg/L	0.0050	08/25/23 18:04	
EPA 6020B	Lithium	0.0040J	mg/L	0.15	08/28/23 13:58	D3
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/22/23 17:52	
SM 2540C-2015	Total Dissolved Solids	186	mg/L	25.0	08/21/23 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	08/19/23 01:35	
EPA 300.0 Rev 2.1 1993	Sulfate	47.7	mg/L	1.0	08/19/23 01:35	
92683124012	**YAT-GWA-2**					
EPA 6010D	Calcium	20.3	mg/L	1.0	08/24/23 19:39	
EPA 6020B	Barium	0.030	mg/L	0.0050	08/25/23 18:08	
EPA 6020B	Cobalt	0.031	mg/L	0.0050	08/25/23 18:08	
EPA 6020B	Copper	0.0011J	mg/L	0.0050	08/25/23 18:08	B
EPA 6020B	Nickel	0.0098	mg/L	0.0050	08/25/23 18:08	
EPA 6020B	Zinc	0.0080J	mg/L	0.010	08/25/23 18:08	
SM 2540C-2015	Total Dissolved Solids	230	mg/L	25.0	08/21/23 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	08/19/23 01:49	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	08/19/23 01:49	
EPA 300.0 Rev 2.1 1993	Sulfate	74.2	mg/L	1.0	08/19/23 01:49	
92683124013	**YAT-YGWA-17S**					
EPA 6010D	Calcium	2.9	mg/L	1.0	08/28/23 22:15	
EPA 6020B	Barium	0.016	mg/L	0.0050	08/25/23 18:12	
SM 2540C-2015	Total Dissolved Solids	74.0	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	11.6	mg/L	1.0	08/19/23 02:04	
EPA 300.0 Rev 2.1 1993	Sulfate	4.6	mg/L	1.0	08/19/23 02:04	
92683124014	**YAT-YGWA-20S**					
EPA 6010D	Calcium	2.2	mg/L	1.0	08/28/23 22:20	
EPA 6020B	Barium	0.012	mg/L	0.0050	08/25/23 18:16	
SM 2540C-2015	Total Dissolved Solids	62.0	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	08/19/23 02:18	
92683124015	**YAT-YGWA-21I**					
EPA 6010D	Calcium	6.1	mg/L	1.0	08/28/23 22:25	
EPA 6020B	Barium	0.0075	mg/L	0.0050	08/25/23 18:19	
EPA 6020B	Boron	0.046J	mg/L	0.20	08/29/23 17:06	D3
EPA 6020B	Cobalt	0.011	mg/L	0.0050	08/25/23 18:19	
EPA 6020B	Lithium	0.0062J	mg/L	0.15	08/29/23 17:06	D3
SM 2540C-2015	Total Dissolved Solids	126	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	2.3	mg/L	1.0	08/19/23 02:32	
EPA 300.0 Rev 2.1 1993	Fluoride	0.061J	mg/L	0.10	08/19/23 02:32	
EPA 300.0 Rev 2.1 1993	Sulfate	4.1	mg/L	1.0	08/19/23 02:32	
92683124016	**YAT-YGWA-39**					
EPA 6010D	Calcium	17.2	mg/L	1.0	08/28/23 22:30	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683124016	**YAT-YGWA-39**					
EPA 6020B	Barium	0.031	mg/L	0.0050	08/25/23 18:31	
EPA 6020B	Boron	0.15J	mg/L	0.20	08/28/23 14:36	D3
EPA 6020B	Cobalt	0.00072J	mg/L	0.0050	08/25/23 18:31	
EPA 6020B	Lithium	0.0064J	mg/L	0.15	08/28/23 14:36	D3
EPA 6020B	Molybdenum	0.0061J	mg/L	0.010	08/25/23 18:31	
SM 2540C-2015	Total Dissolved Solids	225	mg/L	25.0	08/21/23 13:16	
EPA 300.0 Rev 2.1 1993	Chloride	4.5	mg/L	1.0	08/19/23 02:47	
EPA 300.0 Rev 2.1 1993	Sulfate	7.6	mg/L	1.0	08/19/23 02:47	
92683124017	**YAT-YGWA-40**					
EPA 6010D	Calcium	5.3	mg/L	1.0	08/28/23 22:35	
EPA 6020B	Barium	0.034	mg/L	0.0050	08/25/23 18:34	
EPA 6020B	Boron	0.052J	mg/L	0.20	08/28/23 14:42	D3
EPA 7470A	Mercury	0.00037	mg/L	0.00020	08/22/23 18:07	
SM 2540C-2015	Total Dissolved Solids	83.0	mg/L	25.0	08/21/23 13:17	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	08/19/23 03:01	
EPA 300.0 Rev 2.1 1993	Sulfate	16.4	mg/L	1.0	08/19/23 03:01	
92683124018	**YAT-YGWA-30I**					
EPA 6010D	Calcium	1.4	mg/L	1.0	08/29/23 22:45	
EPA 6020B	Barium	0.0066	mg/L	0.0050	08/25/23 18:42	
EPA 6020B	Cobalt	0.0028J	mg/L	0.0050	08/25/23 18:42	
SM 2540C-2015	Total Dissolved Solids	48.0	mg/L	25.0	08/22/23 16:00	
EPA 300.0 Rev 2.1 1993	Chloride	1.5	mg/L	1.0	08/19/23 18:58	
EPA 300.0 Rev 2.1 1993	Sulfate	0.90J	mg/L	1.0	08/19/23 18:58	
92683124019	**YAT-YGWA-3I**					
EPA 6010D	Calcium	24.9	mg/L	1.0	08/29/23 22:55	
EPA 6020B	Barium	0.0037J	mg/L	0.0050	08/25/23 18:45	
EPA 6020B	Lithium	0.025J	mg/L	0.15	08/28/23 15:00	D3
EPA 6020B	Molybdenum	0.012	mg/L	0.010	08/25/23 18:45	
SM 2540C-2015	Total Dissolved Solids	148	mg/L	25.0	08/22/23 16:00	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/19/23 19:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/19/23 19:43	M1
EPA 300.0 Rev 2.1 1993	Sulfate	20.3	mg/L	1.0	08/19/23 19:43	

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-1I **Lab ID: 92683124001** Collected: 08/15/23 13:45 Received: 08/16/23 09:07 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	**1.8**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:18	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	0.0012	1	08/21/23 18:00	08/25/23 17:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:09	7440-38-2	
Barium	**0.0078**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:09	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:09	7440-41-7	
Boron	**0.0094J**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:09	7440-47-3	
Cobalt	**0.00072J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:09	7439-92-1	
Lithium	**0.0020J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:09	7439-93-2	
Molybdenum	**0.0047J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:09	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:17	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**65.0**	mg/L	25.0	25.0	1		08/21/23 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.4**	mg/L	1.0	0.60	1		08/18/23 21:15	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 21:15	16984-48-8	
Sulfate	**4.6**	mg/L	1.0	0.50	1		08/18/23 21:15	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-1D **Lab ID: 92683124002** Collected: 08/15/23 11:20 Received: 08/16/23 09:07 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	**13.5**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:23	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	0.0012	1	08/21/23 18:00	08/25/23 17:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:12	7440-38-2	
Barium	**0.0059**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:12	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:12	7439-92-1	
Lithium	**0.0079J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:12	7439-93-2	
Molybdenum	**0.0098J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:12	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**121**	mg/L	25.0	25.0	1		08/21/23 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		08/18/23 21:29	16887-00-6	
Fluoride	**0.057J**	mg/L	0.10	0.050	1		08/18/23 21:29	16984-48-8	
Sulfate	**9.6**	mg/L	1.0	0.50	1		08/18/23 21:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-2I **Lab ID: 92683124003** Collected: 08/15/23 15:45 Received: 08/16/23 09:07 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	**23.2**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:29	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	0.0012	1	08/21/23 18:00	08/25/23 17:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:16	7440-38-2	
Barium	**0.0031J**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:16	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:11	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:11	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:16	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:11	7439-93-2	D3
Molybdenum	**0.0071J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:16	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**157**	mg/L	25.0	25.0	1		08/21/23 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.93J**	mg/L	1.0	0.60	1		08/18/23 21:44	16887-00-6	
Fluoride	**0.081J**	mg/L	0.10	0.050	1		08/18/23 21:44	16984-48-8	
Sulfate	**17.2**	mg/L	1.0	0.50	1		08/18/23 21:44	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-3D **Lab ID: 92683124004** Collected: 08/15/23 17:10 Received: 08/16/23 09:07 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	**27.4**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:34	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	0.0012	1	08/21/23 18:00	08/25/23 17:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:31	7440-38-2	
Barium	**0.0046J**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:31	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:28	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:28	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:31	7439-92-1	
Lithium	**0.023J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:28	7439-93-2	D3
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**231**	mg/L	25.0	25.0	1		08/21/23 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		08/18/23 22:27	16887-00-6	
Fluoride	**0.42**	mg/L	0.10	0.050	1		08/18/23 22:27	16984-48-8	
Sulfate	**6.8**	mg/L	1.0	0.50	1		08/18/23 22:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-4I **Lab ID: 92683124005** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**7.8**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:13	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.0012	1	08/21/23 18:00	08/25/23 17:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:35	7440-38-2	
Barium	**0.011**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:35	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:35	7439-92-1	
Lithium	**0.0083J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:35	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00013J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:28	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**99.0**	mg/L	25.0	25.0	1		08/21/23 13:11		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.4**	mg/L	1.0	0.60	1		08/18/23 22:41	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 22:41	16984-48-8	
Sulfate	**7.5**	mg/L	1.0	0.50	1		08/18/23 22:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-5I **Lab ID: 92683124006** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**2.6**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:33	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	0.0012	1	08/21/23 18:00	08/25/23 17:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:46	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:46	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:34	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:34	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:46	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:46	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:46	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:46	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:34	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:46	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**76.0**	mg/L	25.0	25.0	1		08/21/23 13:11		
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		08/18/23 22:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 22:56	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	0.50	1		08/18/23 22:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-5D **Lab ID: 92683124007** Collected: 08/15/23 11:13 Received: 08/16/23 09:07 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	**25.0**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:39	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	0.0012	1	08/21/23 18:00	08/25/23 17:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:50	7440-38-2	
Barium	**0.0074**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:50	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:40	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:40	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:50	7439-92-1	
Lithium	**0.0059J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:40	7439-93-2	D3
Molybdenum	**0.00090J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:50	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**219**	mg/L	25.0	25.0	1		08/21/23 13:11		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.1**	mg/L	1.0	0.60	1		08/18/23 23:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 23:10	16984-48-8	
Sulfate	**4.8**	mg/L	1.0	0.50	1		08/18/23 23:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-18S **Lab ID: 92683124008** Collected: 08/15/23 11:35 Received: 08/16/23 09:07 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	**0.80J**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:44	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	0.0012	1	08/21/23 18:00	08/25/23 17:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:53	7440-38-2	
Barium	**0.012**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:53	7440-39-3	
Beryllium	**0.000057J**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 17:53	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 17:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:53	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:53	7439-92-1	
Lithium	**0.00077J**	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 17:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:44	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**81.0**	mg/L	25.0	25.0	1		08/21/23 13:11		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.7**	mg/L	1.0	0.60	1		08/18/23 23:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 23:25	16984-48-8	
Sulfate	**0.88J**	mg/L	1.0	0.50	1		08/18/23 23:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-18I **Lab ID: 92683124009** Collected: 08/15/23 15:40 Received: 08/16/23 09:07 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	**5.1**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 21:49	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	0.0012	1	08/21/23 18:00	08/25/23 17:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 17:57	7440-38-2	
Barium	**0.020**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 17:57	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:46	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:46	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 17:57	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 17:57	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 17:57	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 17:57	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:46	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 17:57	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 17:57	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 17:57	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:46	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**96.0**	mg/L	25.0	25.0	1		08/21/23 13:12		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.3**	mg/L	1.0	0.60	1		08/18/23 23:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/18/23 23:39	16984-48-8	
Sulfate	**0.51J**	mg/L	1.0	0.50	1		08/18/23 23:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-14S **Lab ID: 92683124010** Collected: 08/15/23 17:30 Received: 08/16/23 09:07 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	**1.3**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:04	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	0.0012	1	08/21/23 18:00	08/25/23 18:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:01	7440-38-2	
Barium	**0.0079**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:01	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.00050	0.000054	1	08/21/23 18:00	08/25/23 18:01	7440-41-7	
Boron	**0.017J**	mg/L	0.040	0.0086	1	08/21/23 18:00	08/25/23 18:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:01	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/21/23 18:00	08/25/23 18:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:01	7439-98-7	
Selenium	**0.0014J**	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00016J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:49	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**69.0**	mg/L	25.0	25.0	1		08/21/23 13:14		
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		08/19/23 00:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 00:22	16984-48-8	
Sulfate	**6.0**	mg/L	1.0	0.50	1		08/19/23 00:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-47 **Lab ID: 92683124011** Collected: 08/15/23 09:43 Received: 08/16/23 09:07 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	**9.6**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:10	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	0.0012	1	08/21/23 18:00	08/25/23 18:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:04	7440-38-2	
Barium	**0.032**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:04	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 13:58	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 13:58	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:04	7440-47-3	
Cobalt	**0.00072J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:04	7439-92-1	
Lithium	**0.0040J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 13:58	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:04	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**186**	mg/L	25.0	25.0	1		08/21/23 13:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.5**	mg/L	1.0	0.60	1		08/19/23 01:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 01:35	16984-48-8	
Sulfate	**47.7**	mg/L	1.0	0.50	1		08/19/23 01:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-GWA-2 **Lab ID: 92683124012** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**20.3**	mg/L	1.0	0.12	1	08/24/23 09:50	08/24/23 19:39	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	0.0012	1	08/21/23 18:00	08/25/23 18:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:08	7440-38-2	
Barium	**0.030**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:08	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:04	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:04	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:08	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:08	7440-47-3	
Cobalt	**0.031**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:08	7440-48-4	
Copper	**0.0011J**	mg/L	0.0050	0.0010	1	08/21/23 18:00	08/25/23 18:08	7440-50-8	B
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:08	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:04	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:08	7439-98-7	
Nickel	**0.0098**	mg/L	0.0050	0.00071	1	08/21/23 18:00	08/25/23 18:08	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:08	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/21/23 18:00	08/25/23 18:08	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:08	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0025	1	08/21/23 18:00	08/25/23 18:08	7440-62-2	
Zinc	**0.0080J**	mg/L	0.010	0.0070	1	08/21/23 18:00	08/25/23 18:08	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**230**	mg/L	25.0	25.0	1		08/21/23 13:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		08/19/23 01:49	16887-00-6	
Fluoride	**0.065J**	mg/L	0.10	0.050	1		08/19/23 01:49	16984-48-8	
Sulfate	**74.2**	mg/L	1.0	0.50	1		08/19/23 01:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-17S **Lab ID: 92683124013** Collected: 08/15/23 14:50 Received: 08/16/23 09:07 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	**2.9**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:15	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	0.0012	1	08/21/23 18:00	08/25/23 18:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:12	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:12	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:24	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:24	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:12	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:24	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:12	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**74.0**	mg/L	25.0	25.0	1		08/21/23 13:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**11.6**	mg/L	1.0	0.60	1		08/19/23 02:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 02:04	16984-48-8	
Sulfate	**4.6**	mg/L	1.0	0.50	1		08/19/23 02:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-20S **Lab ID: 92683124014** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**2.2**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:20	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	0.0012	1	08/21/23 18:00	08/25/23 18:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:16	7440-38-2	
Barium	**0.012**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:16	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:30	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:30	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:16	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:30	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:16	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 17:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**62.0**	mg/L	25.0	25.0	1		08/21/23 13:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.8**	mg/L	1.0	0.60	1		08/19/23 02:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 02:18	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		08/19/23 02:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-21I **Lab ID: 92683124015** Collected: 08/15/23 10:35 Received: 08/16/23 09:07 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	**6.1**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:25	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	0.0012	1	08/21/23 18:00	08/25/23 18:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:19	7440-38-2	
Barium	**0.0075**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:19	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/29/23 17:06	7440-41-7	D3
Boron	**0.046J**	mg/L	0.20	0.043	5	08/21/23 18:00	08/29/23 17:06	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:19	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:19	7440-47-3	
Cobalt	**0.011**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:19	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:19	7439-92-1	
Lithium	**0.0062J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/29/23 17:06	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:19	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 18:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**126**	mg/L	25.0	25.0	1		08/21/23 13:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.3**	mg/L	1.0	0.60	1		08/19/23 02:32	16887-00-6	
Fluoride	**0.061J**	mg/L	0.10	0.050	1		08/19/23 02:32	16984-48-8	
Sulfate	**4.1**	mg/L	1.0	0.50	1		08/19/23 02:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-39 **Lab ID: 92683124016** Collected: 08/15/23 16:11 Received: 08/16/23 09:07 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	**17.2**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:30	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	0.0012	1	08/21/23 18:00	08/25/23 18:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:31	7440-38-2	
Barium	**0.031**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:31	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:36	7440-41-7	D3
Boron	**0.15J**	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:36	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:31	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:31	7440-47-3	
Cobalt	**0.00072J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:31	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:31	7439-92-1	
Lithium	**0.0064J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:36	7439-93-2	D3
Molybdenum	**0.0061J**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:31	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:31	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 18:05	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**225**	mg/L	25.0	25.0	1		08/21/23 13:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.5**	mg/L	1.0	0.60	1		08/19/23 02:47	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 02:47	16984-48-8	
Sulfate	**7.6**	mg/L	1.0	0.50	1		08/19/23 02:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-40 **Lab ID: 92683124017** Collected: 08/15/23 17:20 Received: 08/16/23 09:07 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	**5.3**	mg/L	1.0	0.12	1	08/26/23 17:26	08/28/23 22:35	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	0.0012	1	08/21/23 18:00	08/25/23 18:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:34	7440-38-2	
Barium	**0.034**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:34	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:42	7440-41-7	D3
Boron	**0.052J**	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:42	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:34	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:34	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:42	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:34	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00037**	mg/L	0.00020	0.00013	1	08/22/23 11:20	08/22/23 18:07	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**83.0**	mg/L	25.0	25.0	1		08/21/23 13:17		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.6**	mg/L	1.0	0.60	1		08/19/23 03:01	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 03:01	16984-48-8	
Sulfate	**16.4**	mg/L	1.0	0.50	1		08/19/23 03:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-30I **Lab ID: 92683124018** Collected: 08/16/23 12:20 Received: 08/17/23 09:55 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	**1.4**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 22:45	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	0.0012	1	08/21/23 18:00	08/25/23 18:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:42	7440-38-2	
Barium	**0.0066**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:42	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 14:54	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 14:54	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:42	7440-47-3	
Cobalt	**0.0028J**	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:42	7439-92-1	
Lithium	ND	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 14:54	7439-93-2	D3
Molybdenum	ND	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 19:00	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**48.0**	mg/L	25.0	25.0	1		08/22/23 16:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.5**	mg/L	1.0	0.60	1		08/19/23 18:58	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/19/23 18:58	16984-48-8	
Sulfate	**0.90J**	mg/L	1.0	0.50	1		08/19/23 18:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Sample: YAT-YGWA-3I **Lab ID: 92683124019** Collected: 08/16/23 10:50 Received: 08/17/23 09:55 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	**24.9**	mg/L	1.0	0.12	1	08/29/23 09:23	08/29/23 22:55	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	0.0012	1	08/21/23 18:00	08/25/23 18:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0037	1	08/21/23 18:00	08/25/23 18:45	7440-38-2	
Barium	**0.0037J**	mg/L	0.0050	0.00067	1	08/21/23 18:00	08/25/23 18:45	7440-39-3	
Beryllium	ND	mg/L	0.0025	0.00027	5	08/21/23 18:00	08/28/23 15:00	7440-41-7	D3
Boron	ND	mg/L	0.20	0.043	5	08/21/23 18:00	08/28/23 15:00	7440-42-8	D3
Cadmium	ND	mg/L	0.00050	0.00011	1	08/21/23 18:00	08/25/23 18:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/21/23 18:00	08/25/23 18:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/21/23 18:00	08/25/23 18:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.00012	1	08/21/23 18:00	08/25/23 18:45	7439-92-1	
Lithium	**0.025J**	mg/L	0.15	0.0036	5	08/21/23 18:00	08/28/23 15:00	7439-93-2	D3
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	08/21/23 18:00	08/25/23 18:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/21/23 18:00	08/25/23 18:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/21/23 18:00	08/25/23 18:45	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.00013	1	08/22/23 13:00	08/22/23 19:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**148**	mg/L	25.0	25.0	1		08/22/23 16:00		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		08/19/23 19:43	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		08/19/23 19:43	16984-48-8	M1
Sulfate	**20.3**	mg/L	1.0	0.50	1		08/19/23 19:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795463
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124012

METHOD BLANK: 4121755 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/24/23 18:37	

LABORATORY CONTROL SAMPLE: 4121756

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4121757 4121758

Parameter	Units	92682927022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	107	1	1	100	103	-623	-414	75-125	2	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795958
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4124394 Matrix: Water
Associated Lab Samples: 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/28/23 21:02	

LABORATORY CONTROL SAMPLE: 4124395

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4124396 4124397

Parameter	Units	92683124005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.8	1	1	8.9	9.1	106	127	75-125	2	20	M1

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 796454
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124018, 92683124019

METHOD BLANK: 4126638 Matrix: Water
Associated Lab Samples: 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/29/23 20:25	

LABORATORY CONTROL SAMPLE: 4126639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4126640 4126641

Parameter	Units	92683139003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	34.6	1	1	34.9	36.9	31	227	75-125	5	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794949
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017, 92683124018, 92683124019

METHOD BLANK: 4119064
Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017, 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.0012	08/25/23 17:01	
Arsenic	mg/L	ND	0.0050	0.0037	08/25/23 17:01	
Barium	mg/L	ND	0.0050	0.00067	08/25/23 17:01	
Beryllium	mg/L	ND	0.00050	0.000054	08/25/23 17:01	
Boron	mg/L	ND	0.040	0.0086	08/25/23 17:01	
Cadmium	mg/L	ND	0.00050	0.00011	08/25/23 17:01	
Chromium	mg/L	ND	0.0050	0.0011	08/25/23 17:01	
Cobalt	mg/L	ND	0.0050	0.00039	08/25/23 17:01	
Copper	mg/L	ND	0.0050	0.0010	08/25/23 17:01	
Lead	mg/L	ND	0.0010	0.00012	08/25/23 17:01	
Lithium	mg/L	ND	0.030	0.00073	08/25/23 17:01	
Molybdenum	mg/L	ND	0.010	0.00074	08/25/23 17:01	
Nickel	mg/L	ND	0.0050	0.00071	08/25/23 17:01	
Selenium	mg/L	ND	0.0050	0.0014	08/25/23 17:01	
Silver	mg/L	ND	0.0050	0.00044	08/25/23 17:01	
Thallium	mg/L	ND	0.0010	0.00018	08/25/23 17:01	
Vanadium	mg/L	ND	0.010	0.0025	08/25/23 17:01	
Zinc	mg/L	ND	0.010	0.0070	08/25/23 17:01	

LABORATORY CONTROL SAMPLE: 4119065

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	0.10	101	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Copper	mg/L	0.1	0.10	105	80-120	
Lead	mg/L	0.1	0.10	104	80-120	
Lithium	mg/L	0.1	0.11	113	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

LABORATORY CONTROL SAMPLE: 4119065

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Selenium	mg/L	0.1	0.10	104	80-120	
Silver	mg/L	0.1	0.10	100	80-120	
Thallium	mg/L	0.1	0.10	104	80-120	
Vanadium	mg/L	0.1	0.10	101	80-120	
Zinc	mg/L	0.1	0.10	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119066 4119067

Parameter	Units	92683124003 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	0.10	0.10	101	101	75-125	0	20	
Barium	mg/L	0.0031J	0.1	0.1	0.11	0.11	103	103	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	103	105	75-125	2	20	
Boron	mg/L	ND	1	1	1.1	1.1	105	106	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Copper	mg/L	0.0011J	0.1	0.1	0.099	0.10	98	102	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.11J	0.11J	103	104	75-125		20	
Molybdenum	mg/L	0.0071J	0.1	0.1	0.11	0.11	104	105	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Silver	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Zinc	mg/L	ND	0.1	0.1	0.099	0.10	96	99	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795036
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4119606 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/22/23 16:32	

LABORATORY CONTROL SAMPLE: 4119607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119608 4119609

Parameter	Units	92682398009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00013J	0.0025	0.0025	0.0034	0.0034	131	132	75-125	0	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795037
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124018, 92683124019

METHOD BLANK: 4119610 Matrix: Water
Associated Lab Samples: 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.00013	08/22/23 18:15	

LABORATORY CONTROL SAMPLE: 4119611

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4119612 4119613

Parameter	Units	92683139001 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	0.0028	0.0028	111	112	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794901
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4118686 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009, 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/21/23 13:08	

LABORATORY CONTROL SAMPLE: 4118687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	402	100	80-120	

SAMPLE DUPLICATE: 4118688

Parameter	Units	92683065001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	669	640	4	10	

SAMPLE DUPLICATE: 4118689

Parameter	Units	92683124010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	69.0	68.0	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 795117
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92683124018, 92683124019

METHOD BLANK: 4119882 Matrix: Water
Associated Lab Samples: 92683124018, 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/22/23 15:56	

LABORATORY CONTROL SAMPLE: 4119883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	385	96	80-120	

SAMPLE DUPLICATE: 4119884

Parameter	Units	92683139008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 4119885

Parameter	Units	92683384007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	97.0	89.0	9	10	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794487
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: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009

METHOD BLANK: 4116654 Matrix: Water
Associated Lab Samples: 92683124001, 92683124002, 92683124003, 92683124004, 92683124005, 92683124006, 92683124007, 92683124008, 92683124009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/18/23 16:41	
Fluoride	mg/L	ND	0.10	0.050	08/18/23 16:41	
Sulfate	mg/L	ND	1.0	0.50	08/18/23 16:41	

LABORATORY CONTROL SAMPLE: 4116655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	48.1	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116656 4116657

Parameter	Units	92683111001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	101	50	50	140	143	79	84	90-110	2	10	M1
Fluoride	mg/L	8.0	2.5	2.5	9.2	9.3	48	53	90-110	1	10	M1
Sulfate	mg/L	555	50	50	590	596	70	82	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116658 4116659

Parameter	Units	92682998003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	216	50	50	259	257	86	81	90-110	1	10	M1
Fluoride	mg/L	0.12	2.5	2.5	2.4	2.4	91	93	90-110	2	10	
Sulfate	mg/L	96.1	50	50	128	127	64	62	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794488
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: 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

METHOD BLANK: 4116660 Matrix: Water
Associated Lab Samples: 92683124010, 92683124011, 92683124012, 92683124013, 92683124014, 92683124015, 92683124016, 92683124017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/18/23 23:54	
Fluoride	mg/L	ND	0.10	0.050	08/18/23 23:54	
Sulfate	mg/L	ND	1.0	0.50	08/18/23 23:54	

LABORATORY CONTROL SAMPLE: 4116661

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	48.2	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116662 4116663

Parameter	Units	92683124010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.1	50	50	51.8	53.2	96	98	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.3	2.4	93	96	90-110	4	10	
Sulfate	mg/L	6.0	50	50	52.3	53.7	93	95	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4116664 4116665

Parameter	Units	92683137003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.6	50	50	53.8	54.5	96	98	90-110	1	10	
Fluoride	mg/L	0.070J	2.5	2.5	2.3	2.4	91	93	90-110	2	10	
Sulfate	mg/L	154	50	50	194	194	79	79	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794746
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: 92683124018

METHOD BLANK: 4118285 Matrix: Water
Associated Lab Samples: 92683124018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/19/23 11:26	
Fluoride	mg/L	ND	0.10	0.050	08/19/23 11:26	
Sulfate	mg/L	ND	1.0	0.50	08/19/23 11:26	

LABORATORY CONTROL SAMPLE: 4118286

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	49.5	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118287 4118288

Parameter	Units	92683419001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.0	50	50	55.4	57.3	97	101	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	105	108	90-110	3	10	
Sulfate	mg/L	2.8	50	50	50.7	52.7	96	100	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118289 4118290

Parameter	Units	92683310003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	237	50	50	279	280	84	86	90-110	0	10	M1
Fluoride	mg/L	0.13	2.5	2.5	3.0	3.0	113	116	90-110	2	10	M1
Sulfate	mg/L	97.5	50	50	138	139	81	83	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

QC Batch: 794747
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: 92683124019

METHOD BLANK: 4118291 Matrix: Water
Associated Lab Samples: 92683124019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/19/23 19:13	
Fluoride	mg/L	ND	0.10	0.050	08/19/23 19:13	
Sulfate	mg/L	ND	1.0	0.50	08/19/23 19:13	

LABORATORY CONTROL SAMPLE: 4118292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	49.7	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118293 4118294

Parameter	Units	92683124019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.1	50	50	50.4	50.8	99	99	90-110	1	10	
Fluoride	mg/L	0.11	2.5	2.5	2.9	2.9	110	112	90-110	2	10	M1
Sulfate	mg/L	20.3	50	50	68.5	69.0	96	97	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4118295 4118296

Parameter	Units	92683384010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.3	50	50	51.7	52.3	99	100	90-110	1	10	
Fluoride	mg/L	0.062J	2.5	2.5	3.2	3.3	126	130	90-110	3	10	M1
Sulfate	mg/L	151	50	50	194	194	86	87	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683124001	**YAT-YGWA-1I**	EPA 3010A	795463	EPA 6010D	795706
92683124002	**YAT-YGWA-1D**	EPA 3010A	795463	EPA 6010D	795706
92683124003	**YAT-YGWA-2I**	EPA 3010A	795463	EPA 6010D	795706
92683124004	**YAT-YGWA-3D**	EPA 3010A	795463	EPA 6010D	795706
92683124005	**YAT-YGWA-4I**	EPA 3010A	795958	EPA 6010D	796217
92683124006	**YAT-YGWA-5I**	EPA 3010A	795958	EPA 6010D	796217
92683124007	**YAT-YGWA-5D**	EPA 3010A	795958	EPA 6010D	796217
92683124008	**YAT-YGWA-18S**	EPA 3010A	795958	EPA 6010D	796217
92683124009	**YAT-YGWA-18I**	EPA 3010A	795958	EPA 6010D	796217
92683124010	**YAT-YGWA-14S**	EPA 3010A	795958	EPA 6010D	796217
92683124011	**YAT-YGWA-47**	EPA 3010A	795958	EPA 6010D	796217
92683124012	**YAT-GWA-2**	EPA 3010A	795463	EPA 6010D	795706
92683124013	**YAT-YGWA-17S**	EPA 3010A	795958	EPA 6010D	796217
92683124014	**YAT-YGWA-20S**	EPA 3010A	795958	EPA 6010D	796217
92683124015	**YAT-YGWA-21I**	EPA 3010A	795958	EPA 6010D	796217
92683124016	**YAT-YGWA-39**	EPA 3010A	795958	EPA 6010D	796217
92683124017	**YAT-YGWA-40**	EPA 3010A	795958	EPA 6010D	796217
92683124018	**YAT-YGWA-30I**	EPA 3010A	796454	EPA 6010D	796604
92683124019	**YAT-YGWA-3I**	EPA 3010A	796454	EPA 6010D	796604
92683124001	**YAT-YGWA-1I**	EPA 3005A	794949	EPA 6020B	795122
92683124002	**YAT-YGWA-1D**	EPA 3005A	794949	EPA 6020B	795122
92683124003	**YAT-YGWA-2I**	EPA 3005A	794949	EPA 6020B	795122
92683124004	**YAT-YGWA-3D**	EPA 3005A	794949	EPA 6020B	795122
92683124005	**YAT-YGWA-4I**	EPA 3005A	794949	EPA 6020B	795122
92683124006	**YAT-YGWA-5I**	EPA 3005A	794949	EPA 6020B	795122
92683124007	**YAT-YGWA-5D**	EPA 3005A	794949	EPA 6020B	795122
92683124008	**YAT-YGWA-18S**	EPA 3005A	794949	EPA 6020B	795122
92683124009	**YAT-YGWA-18I**	EPA 3005A	794949	EPA 6020B	795122
92683124010	**YAT-YGWA-14S**	EPA 3005A	794949	EPA 6020B	795122
92683124011	**YAT-YGWA-47**	EPA 3005A	794949	EPA 6020B	795122
92683124012	**YAT-GWA-2**	EPA 3005A	794949	EPA 6020B	795122
92683124013	**YAT-YGWA-17S**	EPA 3005A	794949	EPA 6020B	795122
92683124014	**YAT-YGWA-20S**	EPA 3005A	794949	EPA 6020B	795122
92683124015	**YAT-YGWA-21I**	EPA 3005A	794949	EPA 6020B	795122
92683124016	**YAT-YGWA-39**	EPA 3005A	794949	EPA 6020B	795122
92683124017	**YAT-YGWA-40**	EPA 3005A	794949	EPA 6020B	795122
92683124018	**YAT-YGWA-30I**	EPA 3005A	794949	EPA 6020B	795122
92683124019	**YAT-YGWA-3I**	EPA 3005A	794949	EPA 6020B	795122
92683124001	**YAT-YGWA-1I**	EPA 7470A	795036	EPA 7470A	795161
92683124002	**YAT-YGWA-1D**	EPA 7470A	795036	EPA 7470A	795161
92683124003	**YAT-YGWA-2I**	EPA 7470A	795036	EPA 7470A	795161
92683124004	**YAT-YGWA-3D**	EPA 7470A	795036	EPA 7470A	795161
92683124005	**YAT-YGWA-4I**	EPA 7470A	795036	EPA 7470A	795161
92683124006	**YAT-YGWA-5I**	EPA 7470A	795036	EPA 7470A	795161
92683124007	**YAT-YGWA-5D**	EPA 7470A	795036	EPA 7470A	795161
92683124008	**YAT-YGWA-18S**	EPA 7470A	795036	EPA 7470A	795161

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683124009	**YAT-YGWA-18I**	EPA 7470A	795036	EPA 7470A	795161
92683124010	**YAT-YGWA-14S**	EPA 7470A	795036	EPA 7470A	795161
92683124011	**YAT-YGWA-47**	EPA 7470A	795036	EPA 7470A	795161
92683124012	**YAT-GWA-2**	EPA 7470A	795036	EPA 7470A	795161
92683124013	**YAT-YGWA-17S**	EPA 7470A	795036	EPA 7470A	795161
92683124014	**YAT-YGWA-20S**	EPA 7470A	795036	EPA 7470A	795161
92683124015	**YAT-YGWA-21I**	EPA 7470A	795036	EPA 7470A	795161
92683124016	**YAT-YGWA-39**	EPA 7470A	795036	EPA 7470A	795161
92683124017	**YAT-YGWA-40**	EPA 7470A	795036	EPA 7470A	795161
92683124018	**YAT-YGWA-30I**	EPA 7470A	795037	EPA 7470A	795162
92683124019	**YAT-YGWA-3I**	EPA 7470A	795037	EPA 7470A	795162
92683124001	**YAT-YGWA-1I**	SM 2540C-2015	794901		
92683124002	**YAT-YGWA-1D**	SM 2540C-2015	794901		
92683124003	**YAT-YGWA-2I**	SM 2540C-2015	794901		
92683124004	**YAT-YGWA-3D**	SM 2540C-2015	794901		
92683124005	**YAT-YGWA-4I**	SM 2540C-2015	794901		
92683124006	**YAT-YGWA-5I**	SM 2540C-2015	794901		
92683124007	**YAT-YGWA-5D**	SM 2540C-2015	794901		
92683124008	**YAT-YGWA-18S**	SM 2540C-2015	794901		
92683124009	**YAT-YGWA-18I**	SM 2540C-2015	794901		
92683124010	**YAT-YGWA-14S**	SM 2540C-2015	794901		
92683124011	**YAT-YGWA-47**	SM 2540C-2015	794901		
92683124012	**YAT-GWA-2**	SM 2540C-2015	794901		
92683124013	**YAT-YGWA-17S**	SM 2540C-2015	794901		
92683124014	**YAT-YGWA-20S**	SM 2540C-2015	794901		
92683124015	**YAT-YGWA-21I**	SM 2540C-2015	794901		
92683124016	**YAT-YGWA-39**	SM 2540C-2015	794901		
92683124017	**YAT-YGWA-40**	SM 2540C-2015	794901		
92683124018	**YAT-YGWA-30I**	SM 2540C-2015	795117		
92683124019	**YAT-YGWA-3I**	SM 2540C-2015	795117		
92683124001	**YAT-YGWA-1I**	EPA 300.0 Rev 2.1 1993	794487		
92683124002	**YAT-YGWA-1D**	EPA 300.0 Rev 2.1 1993	794487		
92683124003	**YAT-YGWA-2I**	EPA 300.0 Rev 2.1 1993	794487		
92683124004	**YAT-YGWA-3D**	EPA 300.0 Rev 2.1 1993	794487		
92683124005	**YAT-YGWA-4I**	EPA 300.0 Rev 2.1 1993	794487		
92683124006	**YAT-YGWA-5I**	EPA 300.0 Rev 2.1 1993	794487		
92683124007	**YAT-YGWA-5D**	EPA 300.0 Rev 2.1 1993	794487		
92683124008	**YAT-YGWA-18S**	EPA 300.0 Rev 2.1 1993	794487		
92683124009	**YAT-YGWA-18I**	EPA 300.0 Rev 2.1 1993	794487		
92683124010	**YAT-YGWA-14S**	EPA 300.0 Rev 2.1 1993	794488		
92683124011	**YAT-YGWA-47**	EPA 300.0 Rev 2.1 1993	794488		
92683124012	**YAT-GWA-2**	EPA 300.0 Rev 2.1 1993	794488		
92683124013	**YAT-YGWA-17S**	EPA 300.0 Rev 2.1 1993	794488		
92683124014	**YAT-YGWA-20S**	EPA 300.0 Rev 2.1 1993	794488		
92683124015	**YAT-YGWA-21I**	EPA 300.0 Rev 2.1 1993	794488		
92683124016	**YAT-YGWA-39**	EPA 300.0 Rev 2.1 1993	794488		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgradient
Pace Project No.: 92683124

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683124017	**YAT-YGWA-40**	EPA 300.0 Rev 2.1 1993	794488		
92683124018	**YAT-YGWA-30I**	EPA 300.0 Rev 2.1 1993	794746		
92683124019	**YAT-YGWA-3I**	EPA 300.0 Rev 2.1 1993	794747		

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: WO# : 92683124

92683124

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 CMH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.3

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: W				
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**

*****Check all unpreserved Nitrates for chlorine**

Project #

WO#: 92683124

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
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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 DENR Certification Office (i.e. 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.

Page: 1 Of 1

Section A
Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonne
Pace Profile #:	~~10840~~ 1656

Regulatory Agency
State / Location
Georgia

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	App III/IV Metals ~~+ Ca, Na, K~~	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	7268 3124
1	YAT-YGWA-39	WG	G			-	-		6	2		4							X	X	X	X			
2	YAT-YGWA-40	WG	G			-	-		6	2		4							X	X	X	X			
3	YAT-YGWA-1I	WG	G	8/15/23	1345	-	-		6	2		4							X	X	X	X			001
4	YAT-YGWA-1D	WG	G	8/15/23	1120	-	-		6	2		4							X	X	X	X			002
5	YAT-YGWA-2I	WG	G	8/15/23	1545	-	-		6	2		4							X	X	X	X			003
6	YAT-YGWA-3I	WG	G			-	-		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G	8/15/23	1710	-	-		6	2		4							X	X	X	X			004
8						-	-																		
9						-	-																		
10						-	-																		
11						-	-																		
12						-	-																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] /Arcadis	8/15/23	1805	[illegible] / Pace	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] /Arcadis	8/16/23	0907	Ryan William / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	Ryan William / Pace	8/16/23	1115	[illegible]	8/16/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: (Arcadis) - David Prouty

SIGNATURE of SAMPLER: (Arcadis) [signature] DATE Signed: 8/15/23

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

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Gft Power

Project # WO#: 92683124

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/14/23 CMH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.3

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: W				
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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olier~~ Barnes
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840 Jay

Regulatory Agency: Georgia

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	App III/IV Metals + Boron, Ca	Cl, F, SO4	TDS (2540C)	RAD 9315/8320	App I (gypsum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X				
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X			
3	YAT-YGWA-4I	WG	G	8/15/23	1725	--	--		6	2		4							X	X	X	X				005
4	YAT-YGWA-5I	WG	G	8/15/23	1020	--	--		6	2		4							X	X	X	X				006
5	YAT-YGWA-5D	WG	G	8/15/23	1113	--	--		6	2		4							X	X	X	X				007
6	YAT-YGWA-17S	WG	G			--	--		6	2		4							X	X	X	X				
7	YAT-YGWA-18S	WG	G	8/15/23	1455	--	--		6	2		4							X	X	X	X				008
8	YAT-YGWA-18I	WG	G	8/15/23	1540	--	--		6	2		4							X	X	X	X				009
9	YAT-YGWA-20S	WG	G			--	--		6	2		4							X	X	X	X				
10	YAT-YGWA-21I	WG	G			--	--		6	2		4							X	X	X	X				
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X				
12	YAT-YGWA-14S	WG	G	8/15/23	1730	--	--		6	2		4							X	X	X	X				010

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0755		8/16/23	0755	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0901	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Kim Lapsevynski					
SIGNATURE of SAMPLER:		DATE Signed: 8/16/23				

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

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: **WO# : 92683124**

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

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 CMH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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: W				
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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A
Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonnie Vang
Pace Profile #:	10840

Regulatory Agency	
State / Location	Georgia

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	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Metals ~~+ Ca, Na, K~~	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gpysum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-47	WG	G	8/15/23	0943	–	–		6	2		4							X	X	X	X			011
2	YAT-GWA-2	WG	G			–	–		6	2		4							X	X	X	X	X		
3	YAT-YGWA-4I	WG	G			–	–		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			–	–		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			–	–		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G			–	–		6	2		4							X	X	X	X			
7	YAT-YGWA-18S	WG	G			–	–		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			–	–		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G			–	–		6	2		4							X	X	X	X			
10	YAT-YGWA-21I	WG	G			–	–		6	2		4							X	X	X	X			
11	YAT-YGWA-30I	WG	G			–	–		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			–	–		6	2		4							X	X	X	X			

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	Mark Chest /Arcadis	8/16/23	0907	Ryan William / Pace	8/16/23	0907	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Ryan William / Pace	8/16/23	1115	[illegible signature]	8/16/23	1115	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Chest

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #:

WO#: 92683124

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 DM

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.3

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: W				
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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO# : 92683124**

PM: BV **Due Date: 08/30/23**

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		—	—			2																			2				
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	lgucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	App III/IV Metals + Cl, NO3, F	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	926831Z4
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G	8/15/23	1020	--	--		6	2		4							X	X	X	X	X			-012
3	YAT-YGWA-4I	WG	G			--	--		6	2		4							X	X	X	X				
4	YAT-YGWA-5I	WG	G			--	--		6	2		4							X	X	X	X				
5	YAT-YGWA-5D	WG	G			--	--		6	2		4							X	X	X	X				
6	YAT-YGWA-17S	WG	G			--	--		6	2		4							X	X	X	X				
7	YAT-YGWA-18S	WG	G			--	--		6	2		4							X	X	X	X				
8	YAT-YGWA-18I	WG	G			--	--		6	2		4							X	X	X	X				
9	YAT-YGWA-20S	WG	G			--	--		6	2		4							X	X	X	X				
10	YAT-YGWA-21I	WG	G			--	--		6	2		4							X	X	X	X				
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X				
12	YAT-YGWA-14S	WG	G			--	--		6	2		4							X	X	X	X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0900		8/16/23	0800	
App III Metals: Boron 6020B, Ca 6010D; App III 6020B: Zn, Ag, Ni, V		8/16/23	0907		8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).		8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Jake Swanson					
SIGNATURE of SAMPLER:		DATE Signed: 8/15/23				

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92683124

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 CM

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.3

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: W				
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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG8U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
2		1	1			2																			2				
3		1	1			2																			2				
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	jaucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole DiCicco~~ Brian Jang
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	Analysis Test Y/N	App III/IV Metals + Sb+Ba+Be	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X		
3	YAT-YGWA-4I	WG	G			--	--		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			--	--		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			--	--		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G	8/15	1450	--	--		6	2		4							X	X	X	X			013
7	YAT-YGWA-18S	WG	G			--	--		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			--	--		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G	8/15	1225	--	--		6	2		4							X	X	X	X			014
10	YAT-YGWA-21I	WG	G	8/15	1035	--	--		6	2		4							X	X	X	X			015
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			--	--		6	2		4							X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/15/23	1805	/Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0907	Ryan Williams/Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams/Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Jessica Ware					
SIGNATURE of SAMPLER:		DATE Signed: 8/15/23				

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202392	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olso~~ Barnis
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: State / Location: Georgia

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	Analysis Test Y/N	App III/IV Metals-Sec/NEK	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683124
1	YAT-YGWA-39	WG	G	8/15	1611	–	–		6	2		4							X	X	X	X			016
2	YAT-YGWA-40	WG	G	8/15	1720	–	–		6	2		4							X	X	X	X			017
3	YAT-YGWA-1I	WG	G			–	–		6	2		4							X	X	X	X			
4	YAT-YGWA-1D	WG	G			–	–		6	2		4							X	X	X	X			
5	YAT-YGWA-2I	WG	G			–	–		6	2		4							X	X	X	X			
6	YAT-YGWA-3I	WG	G			–	–		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G			–	–		6	2		4							X	X	X	X			
8						–	–																		
9						–	–																		
10						–	–																		
11						–	–																		
12						–	–																		

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/15/23	1805	/Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App IV 6020B: Zn, Ag, Ni, V	/Arcadis	8/16/23	0907	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se); 7040A: Mercury (Hg)	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE							
PRINT Name of SAMPLER:	(Arcadis) Jessica Ware						
SIGNATURE of SAMPLER:	(Arcadis)	DATE Signed:	8/15/23	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt
	Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Tamaqua ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO#: 92683124

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Date/Initials Person Examining Contents: 2-17-23 AY

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 5.7 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.7

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? -Includes Date/Time/ID/Analysis Matrix: WG	☑ Yes	☐ No	☐ N/A	9.
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:

WO#: 92683124

Project #

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

**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

***Check all unpreserved Nitrates for chlorine

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. 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.

Page: 1 of 2

Section A
Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-202392
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C
Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonnie Vang
Pace Profile #:	~~10840~~

Georgia

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

92683124

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	App III/IV Metals	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	
	YAT-YGWA-47	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-GWA-2	WG	G			–	–		6	2		4						X	X	X	X	X		
	YAT-YGWA-4I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-5I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-5D	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-17S	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-18S	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-18I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-20S	WG	G			–	–		6	2		4						X	X	X	X			
10	YAT-YGWA-21I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-30I	WG	G	8/16/23	1220	–	–		6	2		4						X	X	X	X			018
	YAT-YGWA-14S	WG	G			–	–		6	2		4						X	X	X	X			

Anions Suite 300.0 (Cl, F, Sulfate)
App III Metals: Boron 6020B, Ca 6010D;
App I/II 6020B: Zn, Ag, Ni, V
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)
7040A: Mercury (Hg)

Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
[signature] /Arcadis	8/17/23	0833	[signature] /Arcadis	8/17/23	0325
[signature] /Arcadis	8/17/23		Ryan William /Pace	8/17/23	0955
Ryan William /Pace	8/17/23	1254	[signature]	8-17	1254

PRINT Name of SAMPLER: David Traut
SIGNATURE of SAMPLER: [signature]
DATE Signed: 8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ [illegible] ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Date/Initials Person Examining Contents: 8-17-23 AY

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 5.7 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.7

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? -includes Date/Time/ID/Analysis Matrix: WG	☑ Yes	☐ No	☐ N/A	9.
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:

Quality ID: 00011

***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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683124**

PM: BV Due Date: 08/30/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. 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.

Page: 2 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202382	Address:	
Email To:	lauonker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	Nicole D'Oleo
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

State / Location: Georgia

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	App III/IV Metals +Ca,Na,K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683124
	YAT-YGWA-39	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-40	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-1I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-1D	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-2I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-3I	WG	G	8/16/23	1050	–	–		6	2		4						X	X	X	X			019
	YAT-YGWA-3D	WG	G			–	–		6	2		4						X	X	X	X			

Additional Comments	Relinquished by / Affiliation	Date	Time	Accepted by / Affiliation	Date	Time
Anions Suite 300.0 (Cl, F, Sulfate)	[illegible signature] (Arcadis)	8/17/23	0833	[illegible signature]	8/17/23	0832
App III Metals: Boron 6020B, Ca 6010D; App III 6020B: Zn, Ag, Ni, V	[illegible signature]	8/17/23		Ryan Williams / Pace	8/17/23	0955
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams / Pace	8/17/23	1254	[illegible signature]	8/17	1254

PRINT Name of SAMPLER: (Arcadis) - David Prouty

SIGNATURE of SAMPLER: (Arcadis) [illegible signature] DATE Signed: 8/16/23

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

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 14, 2023

Lauren Hartley
Southern Company
241 Ralph McGill Blvd NE
Bin 10160
Atlanta, GA 30308

RE: Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Dear Lauren Hartley:

Enclosed are the analytical results for sample(s) received by the laboratory between August 16, 2023 and August 17, 2023. 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,

Bonnie Vang
bonnie.vang@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Geoffrey Gay, Arcadis-ATL
Laura Midkiff, Southern Company
Alex Simpson, Arcadis
Becky Steever, Arcadis
Jessica Ware, Arcadis
Albert Zumbuhl, Arcadis

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
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 #: PA014572023-03
New Hampshire/TNI Certification #: 297622
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 #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92683132001	**YAT-YGWA-1I**	Water	08/15/23 13:45	08/16/23 09:07
92683132002	**YAT-YGWA-1D**	Water	08/15/23 11:20	08/16/23 09:07
92683132003	**YAT-YGWA-2I**	Water	08/15/23 15:45	08/16/23 09:07
92683132004	**YAT-YGWA-3D**	Water	08/15/23 17:10	08/16/23 09:07
92683132005	**YAT-YGWA-4I**	Water	08/15/23 12:25	08/16/23 09:07
92683132006	**YAT-YGWA-5I**	Water	08/15/23 10:20	08/16/23 09:07
92683132007	**YAT-YGWA-5D**	Water	08/15/23 11:13	08/16/23 09:07
92683132008	**YAT-YGWA-18S**	Water	08/15/23 11:35	08/16/23 09:07
92683132009	**YAT-YGWA-18I**	Water	08/15/23 15:40	08/16/23 09:07
92683132010	**YAT-YGWA-14S**	Water	08/15/23 17:30	08/16/23 09:07
92683132011	**YAT-YGWA-47**	Water	08/15/23 09:43	08/16/23 09:07
92683132012	**YAT-GWA-2**	Water	08/15/23 10:20	08/16/23 09:07
92683132013	**YAT-YGWA-17S**	Water	08/15/23 14:50	08/16/23 09:07
92683132014	**YAT-YGWA-20S**	Water	08/15/23 12:25	08/16/23 09:07
92683132015	**YAT-YGWA-21I**	Water	08/15/23 10:35	08/16/23 09:07
92683132016	**YAT-YGWA-39**	Water	08/15/23 16:11	08/16/23 09:07
92683132017	**YAT-YGWA-40**	Water	08/15/23 17:20	08/16/23 09:07
92683132018	**YAT-YGWA-30I**	Water	08/16/23 12:20	08/17/23 09:55
92683132019	**YAT-YGWA-3I**	Water	08/16/23 10:50	08/17/23 09:55

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92683132001	**YAT-YGWA-1I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132002	**YAT-YGWA-1D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132003	**YAT-YGWA-2I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132004	**YAT-YGWA-3D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132005	**YAT-YGWA-4I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132006	**YAT-YGWA-5I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132007	**YAT-YGWA-5D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132008	**YAT-YGWA-18S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132009	**YAT-YGWA-18I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132010	**YAT-YGWA-14S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132011	**YAT-YGWA-47**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132012	**YAT-GWA-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92683132013	**YAT-YGWA-17S**	EPA 9315	SLC	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132014	**YAT-YGWA-20S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132015	**YAT-YGWA-21I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132016	**YAT-YGWA-39**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132017	**YAT-YGWA-40**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132018	**YAT-YGWA-30I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
92683132019	**YAT-YGWA-3I**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132001	**YAT-YGWA-1I**					
EPA 9315	Radium-226	0.150U ± 0.130 (0.239) C:91% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	0.576U ± 0.415 (0.817) C:80% T:89%	pCi/L		09/06/23 12:41	
Total Radium Calculation	Total Radium	0.726U ± 0.545 (1.06)	pCi/L		09/08/23 17:29	
92683132002	**YAT-YGWA-1D**					
EPA 9315	Radium-226	0.273U ± 0.177 (0.294) C:87% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	0.662U ± 0.411 (0.782) C:82% T:95%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.935U ± 0.588 (1.08)	pCi/L		09/08/23 17:29	
92683132003	**YAT-YGWA-2I**					
EPA 9315	Radium-226	0.355 ± 0.194 (0.299) C:86% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	0.256U ± 0.340 (0.726) C:85% T:87%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.611U ± 0.534 (1.03)	pCi/L		09/08/23 17:29	
92683132004	**YAT-YGWA-3D**					
EPA 9315	Radium-226	1.27 ± 0.349 (0.256) C:83% T:NA	pCi/L		09/08/23 13:11	
EPA 9320	Radium-228	1.52 ± 0.529 (0.765) C:83% T:87%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	2.79 ± 0.878 (1.02)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132005	**YAT-YGWA-4I**					
EPA 9315	Radium-226	0.684 ± 0.241 (0.237) C:89% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.456U ± 0.389 (0.790) C:86% T:88%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	1.14 ± 0.630 (1.03)	pCi/L		09/08/23 17:29	
92683132006	**YAT-YGWA-5I**					
EPA 9315	Radium-226	0.0709U ± 0.127 (0.288) C:79% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.775 ± 0.405 (0.729) C:85% T:94%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.846U ± 0.532 (1.02)	pCi/L		09/08/23 17:29	
92683132007	**YAT-YGWA-5D**					
EPA 9315	Radium-226	2.44 ± 0.525 (0.265) C:85% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.995 ± 0.414 (0.664) C:83% T:93%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	3.44 ± 0.939 (0.929)	pCi/L		09/08/23 17:29	
92683132008	**YAT-YGWA-18S**					
EPA 9315	Radium-226	-0.00970U ± 0.121 (0.326) C:84% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.347U ± 0.345 (0.713) C:84% T:92%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.347U ± 0.466 (1.04)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132009	**YAT-YGWA-18I**					
EPA 9315	Radium-226	0.108U ± 0.121 (0.245) C:93% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.547U ± 0.432 (0.862) C:78% T:87%	pCi/L		09/06/23 15:49	
Total Radium Calculation	Total Radium	0.655U ± 0.553 (1.11)	pCi/L		09/08/23 17:29	
92683132010	**YAT-YGWA-14S**					
EPA 9315	Radium-226	0.0870U ± 0.121 (0.259) C:82% T:NA	pCi/L		09/08/23 13:12	
EPA 9320	Radium-228	0.565U ± 0.353 (0.665) C:84% T:95%	pCi/L		09/06/23 15:50	
Total Radium Calculation	Total Radium	0.652U ± 0.474 (0.924)	pCi/L		09/08/23 17:29	
92683132011	**YAT-YGWA-47**					
EPA 9315	Radium-226	0.502 ± 0.236 (0.326) C:73% T:NA	pCi/L		09/08/23 13:08	
EPA 9320	Radium-228	0.445U ± 0.356 (0.711) C:85% T:89%	pCi/L		09/06/23 15:50	
Total Radium Calculation	Total Radium	0.947U ± 0.592 (1.04)	pCi/L		09/08/23 17:29	
92683132012	**YAT-GWA-2**					
EPA 9315	Radium-226	0.230U ± 0.166 (0.285) C:77% T:NA	pCi/L		09/08/23 13:09	
EPA 9320	Radium-228	0.603U ± 0.352 (0.631) C:85% T:82%	pCi/L		09/06/23 15:46	
Total Radium Calculation	Total Radium	0.833U ± 0.518 (0.916)	pCi/L		09/08/23 17:29	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132013	**YAT-YGWA-17S**					
EPA 9315	Radium-226	-0.125U ± 0.202 (0.646) C:89% T:NA	pCi/L		09/12/23 18:20	
EPA 9320	Radium-228	0.0388U ± 0.250 (0.579) C:84% T:90%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	0.0388U ± 0.452 (1.23)	pCi/L		09/13/23 14:27	
92683132014	**YAT-YGWA-20S**					
EPA 9315	Radium-226	0.0694U ± 0.199 (0.482) C:94% T:NA	pCi/L		09/13/23 08:26	
EPA 9320	Radium-228	0.0952U ± 0.357 (0.807) C:80% T:89%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	0.165U ± 0.556 (1.29)	pCi/L		09/13/23 14:27	
92683132015	**YAT-YGWA-21I**					
EPA 9315	Radium-226	0.608 ± 0.351 (0.537) C:86% T:NA	pCi/L		09/13/23 08:28	
EPA 9320	Radium-228	1.07 ± 0.492 (0.853) C:84% T:88%	pCi/L		09/06/23 15:47	
Total Radium Calculation	Total Radium	1.68 ± 0.843 (1.39)	pCi/L		09/13/23 14:27	
92683132016	**YAT-YGWA-39**					
EPA 9315	Radium-226	0.441U ± 0.299 (0.494) C:90% T:NA	pCi/L		09/13/23 10:02	
EPA 9320	Radium-228	0.167U ± 0.308 (0.676) C:85% T:92%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.608U ± 0.607 (1.17)	pCi/L		09/13/23 14:27	

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SUMMARY OF DETECTION

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92683132017	**YAT-YGWA-40**					
EPA 9315	Radium-226	0.325U ± 0.300 (0.580) C:84% T:NA	pCi/L		09/13/23 10:02	
EPA 9320	Radium-228	-0.0884U ± 0.244 (0.597) C:86% T:91%	pCi/L		09/06/23 15:48	
Total Radium Calculation	Total Radium	0.325U ± 0.544 (1.18)	pCi/L		09/13/23 14:27	
92683132018	**YAT-YGWA-30I**					
EPA 9315	Radium-226	0.218U ± 0.283 (0.590) C:86% T:NA	pCi/L		09/13/23 13:31	
EPA 9320	Radium-228	0.677U ± 0.409 (0.777) C:82% T:91%	pCi/L		09/08/23 11:52	
Total Radium Calculation	Total Radium	0.895U ± 0.692 (1.37)	pCi/L		09/13/23 15:34	
92683132019	**YAT-YGWA-3I**					
EPA 9315	Radium-226	1.00 ± 0.537 (0.830) C:82% T:NA	pCi/L		09/13/23 13:31	
EPA 9320	Radium-228	0.868 ± 0.395 (0.664) C:85% T:87%	pCi/L		09/08/23 11:52	
Total Radium Calculation	Total Radium	1.87 ± 0.932 (1.49)	pCi/L		09/13/23 15:34	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-1I **Lab ID: 92683132001** Collected: 08/15/23 13:45 Received: 08/16/23 09:07 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	**0.150U ± 0.130 (0.239) C:91% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.576U ± 0.415 (0.817) C:80% T:89%**	pCi/L	09/06/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.726U ± 0.545 (1.06)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-1D **Lab ID: 92683132002** Collected: 08/15/23 11:20 Received: 08/16/23 09:07 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	**0.273U ± 0.177 (0.294) C:87% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.662U ± 0.411 (0.782) C:82% T:95%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.935U ± 0.588 (1.08)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-2I **Lab ID: 92683132003** Collected: 08/15/23 15:45 Received: 08/16/23 09:07 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	**0.355 ± 0.194 (0.299) C:86% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.256U ± 0.340 (0.726) C:85% T:87%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.611U ± 0.534 (1.03)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-3D **Lab ID: 92683132004** Collected: 08/15/23 17:10 Received: 08/16/23 09:07 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	**1.27 ± 0.349 (0.256) C:83% T:NA**	pCi/L	09/08/23 13:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.52 ± 0.529 (0.765) C:83% T:87%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.79 ± 0.878 (1.02)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-4I **Lab ID: 92683132005** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**0.684 ± 0.241 (0.237) C:89% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.456U ± 0.389 (0.790) C:86% T:88%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.14 ± 0.630 (1.03)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-5I **Lab ID: 92683132006** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**0.0709U ± 0.127 (0.288) C:79% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.775 ± 0.405 (0.729) C:85% T:94%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.846U ± 0.532 (1.02)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-5D **Lab ID: 92683132007** Collected: 08/15/23 11:13 Received: 08/16/23 09:07 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	**2.44 ± 0.525 (0.265) C:85% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.995 ± 0.414 (0.664) C:83% T:93%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.44 ± 0.939 (0.929)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-18S **Lab ID: 92683132008** Collected: 08/15/23 11:35 Received: 08/16/23 09:07 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	**-0.00970U ± 0.121 (0.326) C:84% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.347U ± 0.345 (0.713) C:84% T:92%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.347U ± 0.466 (1.04)**	pCi/L	09/08/23 17:29	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-18I **Lab ID: 92683132009** Collected: 08/15/23 15:40 Received: 08/16/23 09:07 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	**0.108U ± 0.121 (0.245) C:93% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.547U ± 0.432 (0.862) C:78% T:87%**	pCi/L	09/06/23 15:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.655U ± 0.553 (1.11)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-14S **Lab ID: 92683132010** Collected: 08/15/23 17:30 Received: 08/16/23 09:07 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	**0.0870U ± 0.121 (0.259) C:82% T:NA**	pCi/L	09/08/23 13:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.565U ± 0.353 (0.665) C:84% T:95%**	pCi/L	09/06/23 15:50	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.652U ± 0.474 (0.924)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-47 **Lab ID: 92683132011** Collected: 08/15/23 09:43 Received: 08/16/23 09:07 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	**0.502 ± 0.236 (0.326) C:73% T:NA**	pCi/L	09/08/23 13:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.445U ± 0.356 (0.711) C:85% T:89%**	pCi/L	09/06/23 15:50	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.947U ± 0.592 (1.04)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-GWA-2 **Lab ID: 92683132012** Collected: 08/15/23 10:20 Received: 08/16/23 09:07 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	**0.230U ± 0.166 (0.285) C:77% T:NA**	pCi/L	09/08/23 13:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.603U ± 0.352 (0.631) C:85% T:82%**	pCi/L	09/06/23 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.833U ± 0.518 (0.916)**	pCi/L	09/08/23 17:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-17S **Lab ID: 92683132013** Collected: 08/15/23 14:50 Received: 08/16/23 09:07 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	**-0.125U ± 0.202 (0.646) C:89% T:NA**	pCi/L	09/12/23 18:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0388U ± 0.250 (0.579) C:84% T:90%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0388U ± 0.452 (1.23)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-20S **Lab ID: 92683132014** Collected: 08/15/23 12:25 Received: 08/16/23 09:07 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	**0.0694U ± 0.199 (0.482) C:94% T:NA**	pCi/L	09/13/23 08:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0952U ± 0.357 (0.807) C:80% T:89%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.165U ± 0.556 (1.29)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-21I **Lab ID: 92683132015** Collected: 08/15/23 10:35 Received: 08/16/23 09:07 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	**0.608 ± 0.351 (0.537) C:86% T:NA**	pCi/L	09/13/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.07 ± 0.492 (0.853) C:84% T:88%**	pCi/L	09/06/23 15:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.68 ± 0.843 (1.39)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-39 **Lab ID: 92683132016** Collected: 08/15/23 16:11 Received: 08/16/23 09:07 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	**0.441U ± 0.299 (0.494) C:90% T:NA**	pCi/L	09/13/23 10:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.167U ± 0.308 (0.676) C:85% T:92%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.608U ± 0.607 (1.17)**	pCi/L	09/13/23 14:27	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-40 **Lab ID: 92683132017** Collected: 08/15/23 17:20 Received: 08/16/23 09:07 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	**0.325U ± 0.300 (0.580) C:84% T:NA**	pCi/L	09/13/23 10:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0884U ± 0.244 (0.597) C:86% T:91%**	pCi/L	09/06/23 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.325U ± 0.544 (1.18)**	pCi/L	09/13/23 14:27	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-30I **Lab ID: 92683132018** Collected: 08/16/23 12:20 Received: 08/17/23 09:55 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	**0.218U ± 0.283 (0.590) C:86% T:NA**	pCi/L	09/13/23 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.677U ± 0.409 (0.777) C:82% T:91%**	pCi/L	09/08/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.895U ± 0.692 (1.37)**	pCi/L	09/13/23 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Sample: YAT-YGWA-3I **Lab ID: 92683132019** Collected: 08/16/23 10:50 Received: 08/17/23 09:55 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	**1.00 ± 0.537 (0.830) C:82% T:NA**	pCi/L	09/13/23 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.868 ± 0.395 (0.664) C:85% T:87%**	pCi/L	09/08/23 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.87 ± 0.932 (1.49)**	pCi/L	09/13/23 15:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611649
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009, 92683132010, 92683132011, 92683132012

METHOD BLANK: 2977146
Matrix: Water
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009, 92683132010, 92683132011, 92683132012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.101 ± 0.125 (0.261) C:93% T:NA	pCi/L	09/08/23 11:33	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611584
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009

METHOD BLANK: 2976835 Matrix: Water
Associated Lab Samples: 92683132001, 92683132002, 92683132003, 92683132004, 92683132005, 92683132006, 92683132007, 92683132008, 92683132009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.100 ± 0.312 (0.703) C:75% T:95%	pCi/L	09/06/23 12:40	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611586
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132010, 92683132011, 92683132012, 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

METHOD BLANK: 2976847 Matrix: Water
Associated Lab Samples: 92683132010, 92683132011, 92683132012, 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.830 ± 0.342 (0.491) C:81% T:89%	pCi/L	09/06/23 15:45	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 612656
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132018, 92683132019

METHOD BLANK: 2982190 Matrix: Water
Associated Lab Samples: 92683132018, 92683132019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.438 ± 0.430 (0.847) C:79% T:NA	pCi/L	09/13/23 13:30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch:	612651	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

METHOD BLANK: 2982186 Matrix: Water

Associated Lab Samples: 92683132013, 92683132014, 92683132015, 92683132016, 92683132017

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.199 ± 0.286 (0.622) C:88% T:NA	pCi/L	09/12/23 18:19	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

QC Batch: 611590
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92683132018, 92683132019

METHOD BLANK: 2976857 Matrix: Water
Associated Lab Samples: 92683132018, 92683132019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0613 ± 0.274 (0.661) C:83% T:83%	pCi/L	09/08/23 11:54	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683132001	**YAT-YGWA-1I**	EPA 9315	611649		
92683132002	**YAT-YGWA-1D**	EPA 9315	611649		
92683132003	**YAT-YGWA-2I**	EPA 9315	611649		
92683132004	**YAT-YGWA-3D**	EPA 9315	611649		
92683132005	**YAT-YGWA-4I**	EPA 9315	611649		
92683132006	**YAT-YGWA-5I**	EPA 9315	611649		
92683132007	**YAT-YGWA-5D**	EPA 9315	611649		
92683132008	**YAT-YGWA-18S**	EPA 9315	611649		
92683132009	**YAT-YGWA-18I**	EPA 9315	611649		
92683132010	**YAT-YGWA-14S**	EPA 9315	611649		
92683132011	**YAT-YGWA-47**	EPA 9315	611649		
92683132012	**YAT-GWA-2**	EPA 9315	611649		
92683132013	**YAT-YGWA-17S**	EPA 9315	612651		
92683132014	**YAT-YGWA-20S**	EPA 9315	612651		
92683132015	**YAT-YGWA-21I**	EPA 9315	612651		
92683132016	**YAT-YGWA-39**	EPA 9315	612651		
92683132017	**YAT-YGWA-40**	EPA 9315	612651		
92683132018	**YAT-YGWA-30I**	EPA 9315	612656		
92683132019	**YAT-YGWA-3I**	EPA 9315	612656		
92683132001	**YAT-YGWA-1I**	EPA 9320	611584		
92683132002	**YAT-YGWA-1D**	EPA 9320	611584		
92683132003	**YAT-YGWA-2I**	EPA 9320	611584		
92683132004	**YAT-YGWA-3D**	EPA 9320	611584		
92683132005	**YAT-YGWA-4I**	EPA 9320	611584		
92683132006	**YAT-YGWA-5I**	EPA 9320	611584		
92683132007	**YAT-YGWA-5D**	EPA 9320	611584		
92683132008	**YAT-YGWA-18S**	EPA 9320	611584		
92683132009	**YAT-YGWA-18I**	EPA 9320	611584		
92683132010	**YAT-YGWA-14S**	EPA 9320	611586		
92683132011	**YAT-YGWA-47**	EPA 9320	611586		
92683132012	**YAT-GWA-2**	EPA 9320	611586		
92683132013	**YAT-YGWA-17S**	EPA 9320	611586		
92683132014	**YAT-YGWA-20S**	EPA 9320	611586		
92683132015	**YAT-YGWA-21I**	EPA 9320	611586		
92683132016	**YAT-YGWA-39**	EPA 9320	611586		
92683132017	**YAT-YGWA-40**	EPA 9320	611586		
92683132018	**YAT-YGWA-30I**	EPA 9320	611590		
92683132019	**YAT-YGWA-3I**	EPA 9320	611590		
92683132001	**YAT-YGWA-1I**	Total Radium Calculation	614334		
92683132002	**YAT-YGWA-1D**	Total Radium Calculation	614334		
92683132003	**YAT-YGWA-2I**	Total Radium Calculation	614334		
92683132004	**YAT-YGWA-3D**	Total Radium Calculation	614334		
92683132005	**YAT-YGWA-4I**	Total Radium Calculation	614334		
92683132006	**YAT-YGWA-5I**	Total Radium Calculation	614334		
92683132007	**YAT-YGWA-5D**	Total Radium Calculation	614334		
92683132008	**YAT-YGWA-18S**	Total Radium Calculation	614334		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Pooled Upgra- RADs
Pace Project No.: 92683132

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92683132009	**YAT-YGWA-18I**	Total Radium Calculation	614334		
92683132010	**YAT-YGWA-14S**	Total Radium Calculation	614334		
92683132011	**YAT-YGWA-47**	Total Radium Calculation	614334		
92683132012	**YAT-GWA-2**	Total Radium Calculation	614334		
92683132013	**YAT-YGWA-17S**	Total Radium Calculation	615223		
92683132014	**YAT-YGWA-20S**	Total Radium Calculation	615223		
92683132015	**YAT-YGWA-21I**	Total Radium Calculation	615223		
92683132016	**YAT-YGWA-39**	Total Radium Calculation	615223		
92683132017	**YAT-YGWA-40**	Total Radium Calculation	615223		
92683132018	**YAT-YGWA-30I**	Total Radium Calculation	615249		
92683132019	**YAT-YGWA-3I**	Total Radium Calculation	615249		

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Gft Power

Project #: WO# : 92683132

92683132

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

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/14/23 CMH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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: W				
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**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																			2				
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	laucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-2023S2
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	~~Nicole D'Oleo~~ Bonnie Vang
Pace Profile #:	10840

Regulatory Agency

State / Location: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gpysum only)	Residual Chlorine (Y/N)	92683132
1	YAT-YGWA-39	WG	G			–	–		6	2		4							X	X	X	X			
2	YAT-YGWA-40	WG	G			–	–		6	2		4							X	X	X	X			
3	YAT-YGWA-1I	WG	G	8/15/23	1345	–	–		6	2		4							X	X	X	X			001
4	YAT-YGWA-1D	WG	G	8/15/23	1120	–	–		6	2		4							X	X	X	X			002
5	YAT-YGWA-2I	WG	G	8/15/23	1545	–	–		6	2		4							X	X	X	X			003
6	YAT-YGWA-3I	WG	G			–	–		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G	8/14/23	1710	–	–		6	2		4							X	X	X	X			004
8						–	–																		
9						–	–																		
10						–	–																		
11						–	–																		
12						–	–																		

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] /Arcadis	8/15/23	1805	[signature] /Arcadis	8/15/23	1809	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] /Arcadis	8/14/23	0907	Ryan William / Pace	8/14/23	0917	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan William / Pace	8/14/23	1115	[signature]	8/14/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: (Arcadis) - David Prouty

SIGNATURE of SAMPLER: (Arcadis) [signature] DATE Signed: 8/15/23

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: WO#: 92683132

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

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 Cmf

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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: W				
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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2 1																			2 1				
2		1	1			1 2																			2 1				
3		1	1			2 1																			2 1				
4		1	1			2 1																			2 1				
5		1	1			2 1																			2 1				
6		1	1			2 1																			2 1				
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olio~~ Bonnie Jung
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Requested Analysis Filtered (Y/N) | State / Location: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / III (gypsum only)	Residual Chlorine (Y/N)	92683/32
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X				
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X			
3	YAT-YGWA-4I	WG	G	8/15/23	1725	--	--		6	2		4							X	X	X	X				WS
4	YAT-YGWA-5I	WG	G	8/15/23	1020	--	--		6	2		4							X	X	X	X				WG
5	YAT-YGWA-5D	WG	G	8/15/23	1113	--	--		6	2		4							X	X	X	X				WS
6	YAT-YGWA-17S	WG	G			--	--		6	2		4							X	X	X	X				
7	YAT-YGWA-18S	WG	G	8/15/23	1455	--	--		6	2		4							X	X	X	X				WG
8	YAT-YGWA-18I	WG	G	8/15/23	1540	--	--		6	2		4							X	X	X	X				WG
9	YAT-YGWA-20S	WG	G			--	--		6	2		4							X	X	X	X				
10	YAT-YGWA-21I	WG	G			--	--		6	2		4							X	X	X	X				
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X				
12	YAT-YGWA-14S	WG	G	8/15/23	1730	--	--		6	2		4							X	X	X	X				GW

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0755		8/16/23	0755	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0901	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg);	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Kim Lapsevynski					
SIGNATURE of SAMPLER:		DATE Signed: 8/16/23				

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92683132**

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

PM: BV **Due Date: 09/07/23**

CLIENT: 92-GP-Yates

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/initials Person Examining Contents: 8/16/23 CM

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 2.3

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: W				
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**

*****Check all unpreserved Nitrates for chlorine**

Project #

WO#: 92683132

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. 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.

Page: 1 Of 1

Section A — Required Client Information:
- Company: GA Power
- Address: Atlanta, GA
- Email To: laucoker@southernco.com
- Phone: 470.620.6176 Fax:
- Requested Due Date: Standard

Section B — Required Project Information:
- Report To: SCS Contacts
- Copy To: Arcadis Contacts
- Task No: YAT-CCR-ASSMT-2023S2
- Purchase Order #:
- Project Name: Plant Yates Pooled Upgradient
- Project Number:

Section C — Invoice Information:
- Attention: Southern Co.
- Company Name:
- Address:
- Pace Quote:
- Pace Project Manager: ~~Nicole D'Oleo~~ Bonnie Vang
- Pace Profile #: 10840

Regulatory Agency:
State / Location: Georgia

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

Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N): 92683132 / 011

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)
1	YAT-YGWA-47	WG	G	8/15/23	0943	–	–		6	2		4						X	X	X	X	
2	YAT-GWA-2	WG	G			–	–		6	2		4						X	X	X	X	X
3	YAT-YGWA-4I	WG	G			–	–		6	2		4						X	X	X	X	
4	YAT-YGWA-5I	WG	G			–	–		6	2		4						X	X	X	X	
5	YAT-YGWA-5D	WG	G			–	–		6	2		4						X	X	X	X	
6	YAT-YGWA-17S	WG	G			–	–		6	2		4						X	X	X	X	
7	YAT-YGWA-18S	WG	G			–	–		6	2		4						X	X	X	X	
8	YAT-YGWA-18I	WG	G			–	–		6	2		4						X	X	X	X	
9	YAT-YGWA-20S	WG	G			–	–		6	2		4						X	X	X	X	
10	YAT-YGWA-21I	WG	G			–	–		6	2		4						X	X	X	X	
11	YAT-YGWA-30I	WG	G			–	–		6	2		4						X	X	X	X	
12	YAT-YGWA-14S	WG	G			–	–		6	2		4						X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	Mark Chest / Arcadis	8/16/23	0907	Ryan William / Pace	8/16/23	0907	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Ryan William / Pace	8/16/23	1115	[signature]	8/16/23	1115	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).							

SAMPLER NAME AND SIGNATURE
- PRINT Name of SAMPLER: Mark Chest
- SIGNATURE of SAMPLER: [signature]
- DATE Signed: 8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Off Power

Project #: **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 CMH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.3

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: W				
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:

WO# : 92683132

PM: BV **Due Date: 09/07/23**

CLIENT: 92-GP-Yates

***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**

*****Check all unpreserved Nitrates for chlorine**

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Steijle Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		—	—			2																			2				
2																													
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 1

Section A — Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	lsucoker@southernco.com
Phone:	470.620.6176 Fax
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Task No:	YAT-CCR-ASSMT-202352
Purchase Order #:	
Project Name:	Plant Yates Pooled Upgradient
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency: —

State / Location: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	92683132
1	YAT-YGWA-47	WG	G			–	–		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G	8/15/23	1020	–	–		6	2		4							X	X	X	X	X		0.12
3	YAT-YGWA-4I	WG	G			–	–		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			–	–		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			–	–		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G			–	–		6	2		4							X	X	X	X			
7	YAT-YGWA-18S	WG	G			–	–		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			–	–		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G			–	–		6	2		4							X	X	X	X			
10	YAT-YGWA-21I	WG	G			–	–		6	2		4							X	X	X	X			
11	YAT-YGWA-30I	WG	G			–	–		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			–	–		6	2		4							X	X	X	X			

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/16/23	0900	/Pace	8/16/23	0800	
App III Metals: Boron 6020B, Ca 6010D; App I/III 6020B: Zn, Ag, Ni, V	/Arcadis	8/16/23	0907	/Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	/Pace	8/16/23	1115	/Pace	8/16/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Luke Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/15/23

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

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92683132

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/16/23 CMH

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

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230

Cooler Temp: 2.3 Correction Factor: Add/Subtract (°C) 0.0 Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp Corrected (°C): 2.3

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: W				
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

***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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)	BP4B-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-)	AG3S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			2																		2	2				
2		1	1			2																		2	2				
3		1	1			2																		2	2				
4		1	1			2																		2	2				
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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 DENR Certification Office (i.e. 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.

Page : 1 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202392	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Otto~~ Brooke Jany
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	Analysis Test Y/N	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	9266313
1	YAT-YGWA-47	WG	G			--	--		6	2		4							X	X	X	X			
2	YAT-GWA-2	WG	G			--	--		6	2		4							X	X	X	X	X		
3	YAT-YGWA-4I	WG	G			--	--		6	2		4							X	X	X	X			
4	YAT-YGWA-5I	WG	G			--	--		6	2		4							X	X	X	X			
5	YAT-YGWA-5D	WG	G			--	--		6	2		4							X	X	X	X			
6	YAT-YGWA-17S	WG	G	8/15	1450	--	--		6	2		4							X	X	X	X			013
7	YAT-YGWA-18S	WG	G			--	--		6	2		4							X	X	X	X			
8	YAT-YGWA-18I	WG	G			--	--		6	2		4							X	X	X	X			
9	YAT-YGWA-20S	WG	G	8/15	1225	--	--		6	2		4							X	X	X	X			014
10	YAT-YGWA-21I	WG	G	8/15	1035	--	--		6	2		4							X	X	X	X			015
11	YAT-YGWA-30I	WG	G			--	--		6	2		4							X	X	X	X			
12	YAT-YGWA-14S	WG	G			--	--		6	2		4							X	X	X	X			

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/15/23	1805	/ Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	Arcadis	8/16/23	0907	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg).	Ryan Williams / Pace	8/16/23	1115	/	8/16/23	1115	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jessica Ware

SIGNATURE of SAMPLER: DATE Signed: 8/15/23

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202352	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Olen~~ Bonnie Young
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

Regulatory Agency: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	
1	YAT-YGWA-39	WG	G	8/15	1611	--	--		6	2		4							X	X	X	X			1116
2	YAT-YGWA-40	WG	G	8/15	1720	--	--		6	2		4							X	X	X	X			1117
3	YAT-YGWA-1I	WG	G			--	--		6	2		4							X	X	X	X			
4	YAT-YGWA-1D	WG	G			--	--		6	2		4							X	X	X	X			
5	YAT-YGWA-2I	WG	G			--	--		6	2		4							X	X	X	X			
6	YAT-YGWA-3I	WG	G			--	--		6	2		4							X	X	X	X			
7	YAT-YGWA-3D	WG	G			--	--		6	2		4							X	X	X	X			
8						--	--																		
9						--	--																		
10						--	--																		
11						--	--																		
12						--	--																		

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	/Arcadis	8/15/23	1805	/Arcadis	8/15/23	1805	
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	/Arcadis	8/16/23	0907	Ryan Williams / Pace	8/16/23	0907	
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se); 7040A: Mercury (Hg)	Ryan Williams / Pace	8/16/23	1115		8/16/23	1115	

SAMPLER NAME AND SIGNATURE				TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	(Arcadis): Jessica Ware						
SIGNATURE of SAMPLER:	(Arcadis):	DATE Signed:	8/15/23				

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92683132

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Date/Initials Person Examining Contents: 9-17-23 AY

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 5.7 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 5.7

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: WG				
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:

Qualtrax ID: 82814

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

***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**

*****Check all unpreserved Nitrates for chlorine**

Project #

WO#: 92683132

PM: BV **Due Date: 09/07/23**

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. 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.

Page: 1 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-2023S2	Address:	
Email To:	laucoker@southernco.com	Purchase Order #:		Pace Quote:	
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	~~Nicole D'Oleo~~ Brooke Vary
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

State / Location: Georgia

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

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

ITEM #	SAMPLE ID	MATRIX CODE	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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	
	YAT-YGWA-47	WG	G			–	–		6	2		4						X	X	X	X			92683132
	YAT-GWA-2	WG	G			–	–		6	2		4						X	X	X	X	X		
	YAT-YGWA-4I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-5I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-5D	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-17S	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-18S	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-18I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-20S	WG	G			–	–		6	2		4						X	X	X	X			
10	YAT-YGWA-21I	WG	G			–	–		6	2		4						X	X	X	X			
	YAT-YGWA-30I	WG	G	8/18/23	1220	–	–		6	2		4						X	X	X	X			018
	YAT-YGWA-14S	WG	G			–	–		6	2		4						X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] /Arcadis	8/17/23	0833	[signature]	8/17/23	0833
App III Metals: Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V	[signature] /Arcadis	8/17/23		Ryan William /Pace	8/17/23	0955
App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)	Ryan William /Pace	8/17/23	1254	[signature]	8-17	1254

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: David Trout

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/16/23

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

DC#_Title: ENV-FRM-HUN1-0083 v02_Sample Condition Upon Receipt

Effective Date: 11/14/2022

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ ~~Kernersville~~ ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92683132**

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Date/Initials Person Examining Contents: 9-17-23 AY

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

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 5.7 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 5.7

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: WG				
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:

Qualtrax ID: 69614

WO#: 92683132

***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**

*****Check all unpreserved Nitrates for chlorine**

Project #

PM: BV Due Date: 09/07/23

CLIENT: 92-GP-Yates

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)	BP4B-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)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (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)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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 DENR Certification Office (i.e. 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.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GA Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
		Task No:	YAT-CCR-ASSMT-202382	Address:	
Email To:	jaucoke@southernco.com	Purchase Order #:		Pace Quote:	Bonnie Young
Phone:	470.620.6176 Fax	Project Name:	Plant Yates Pooled Upgradient	Pace Project Manager:	Alicole DiCioo
Requested Due Date:	Standard	Project Number:		Pace Profile #:	10840

State / Location: Georgia

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	App III/IV Metals + Ca, Na, K	Cl, F, SO4	TDS (2540C)	RAD 9315/9320	App I / II (gypsum only)	Residual Chlorine (Y/N)	
	YAT-YGWA-3S	WG	G			-	-		6	2		4						X	X	X	X			G2063132
	YAT-YGWA-4D	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-1I	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-1D	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-2I	WG	G			-	-		6	2		4						X	X	X	X			
	YAT-YGWA-3I	WG	G	8/16/23	1050	-	-		6	2		4						X	X	X	X			G19
	YAT-YGWA-3D	WG	G			-	-		6	2		4						X	X	X	X			
						-	-																	
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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

Anions Suite 300.0 (Cl, F, Sulfate)

App III Metals- Boron 6020B, Ca 6010D; App I/II 6020B: Zn, Ag, Ni, V

App IV: Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se) 7040A: Mercury (Hg)

[signature]	(Arcadis)	8/17/23	0853	[signature]	8/17/23	0832
[signature]		8/17/23		Ryan Williams	8/17/23	0955
Ryan Williams		8/17/23	1259	[signature]	8/17	1259

PRINT Name of SAMPLER: (Arcadis) - David Prouty

SIGNATURE of SAMPLER: (Arcadis) [signature] DATE Signed: 8/16/23

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-228
Analyst: JJS1
Date: 8/31/2023
Worklist: 75028
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976835
MB concentration:	0.100
M/B 2 Sigma CSU:	0.312
MB MDC:	0.703
MB Numerical Performance Indicator:	0.63
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75028	LCSD75028
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.931	39.931
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.820	0.817
Target Conc. (pCi/L, g, F):	4.871	4.885
Uncertainty (Calculated):	0.239	0.239
Result (pCi/L, g, F):	4.767	3.683
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.036	0.867
Numerical Performance Indicator:	-0.19	-2.62
Percent Recovery:	97.85%	75.39%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS75028	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75028	
Sample Result (pCi/L, g, F):	4.767	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.036	
Sample Duplicate Result (pCi/L, g, F):	3.683	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.867	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.573	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	25.93%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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:		

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:

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	ZPC
Date:	8/31/2023
Worklist:	75029
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976847
MB concentration:	0.830
M/B 2 Sigma CSU:	0.342
MB MDC:	0.491
MB Numerical Performance Indicator:	4.76
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

OK

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75029	LCSD75029
Count Date:	9/6/2023	9/6/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.931	39.931
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.817
Target Conc. (pCi/L, g, F):	4.889	4.888
Uncertainty (Calculated):	0.240	0.240
Result (pCi/L, g, F):	3.930	3.696
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.909	0.843
Numerical Performance Indicator:	-2.00	-2.67
Percent Recovery:	80.39%	75.60%
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		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	LCS75029	
Duplicate Sample I.D.	LCSD75029	
Sample Result (pCi/L, g, F):	3.930	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.909	
Sample Duplicate Result (pCi/L, g, F):	3.696	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.843	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.370	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.14%	
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.

VAL
9/8/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/5/2023
Worklist:	75032
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2976857
MB concentration:	-0.061
M/B 2 Sigma CSU:	0.274
MB MDC:	0.661
MB Numerical Performance Indicator:	-0.44
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75032	LCSD75032
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	23-043	23-043
Decay Corrected Spike Concentration (pCi/mL):	39.906	39.906
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.816	0.820
Target Conc. (pCi/L, g, F):	4.890	4.868
Uncertainty (Calculated):	0.240	0.239
Result (pCi/L, g, F):	5.009	4.854
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.056	1.035
Numerical Performance Indicator:	0.22	-0.03
Percent Recovery:	102.44%	99.70%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS75032	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD75032	
Sample Result (pCi/L, g, F):	5.009	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.056	
Sample Duplicate Result (pCi/L, g, F):	4.854	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.035	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.206	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.71%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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:		

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:

9/11/23

LAM 9/12/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/2/2023
Worklist:	75042
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2977146
MB concentration:	0.101
M/B 2 Sigma CSU:	0.125
MB MDC:	0.261
MB Numerical Performance Indicator:	1.59
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75042	LCSD75042
Count Date:	9/8/2023	9/8/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.013	24.013
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.503
Target Conc. (pCi/L, g, F):	4.790	4.775
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	6.088	6.235
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.071	1.103
Numerical Performance Indicator:	2.37	2.59
Percent Recovery:	127.10%	130.59%
Status vs Numerical Indicator:	Warning	Warning
Status vs Recovery:	N/A	N/A
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 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.:	LCS75042	92683140002
Duplicate Sample I.D.	LCSD75042	92683140002DUP
Sample Result (pCi/L, g, F):	6.088	0.160
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.071	0.135
Sample Duplicate Result (pCi/L, g, F):	6.235	0.280
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.103	0.167
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	-0.187	-1.090
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.70%	54.18%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	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 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:

9/8/23

LAM 9/8/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/12/2023
Worklist:	75103
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982186
MB concentration:	0.199
M/B 2 Sigma CSU:	0.286
MB MDC:	0.622
MB Numerical Performance Indicator:	1.36
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75103	LCSD75103
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.509
Target Conc. (pCi/L, g, F):	4.965	4.920
Uncertainty (Calculated):	0.233	0.231
Result (pCi/L, g, F):	5.960	4.641
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.214	1.014
Numerical Performance Indicator:	1.58	-0.53
Percent Recovery:	120.03%	94.32%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75103	92682115021
Duplicate Sample I.D.	LCSD75103	92682115021DUP
Sample Result (pCi/L, g, F):	5.960	0.432
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.214	0.300
Sample Duplicate Result (pCi/L, g, F):	4.641	0.258
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.014	0.271
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.634	0.844
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	23.99%	50.51%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	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 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:

LAM 9/13/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/13/2023
Worklist:	75106
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982190
MB concentration:	0.438
M/B 2 Sigma CSU:	0.430
MB MDC:	0.847
MB Numerical Performance Indicator:	2.00
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75106	LCSD75106
Count Date:	9/13/2023	9/13/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.501
Target Conc. (pCi/L, g, F):	4.948	4.999
Uncertainty (Calculated):	0.233	0.235
Result (pCi/L, g, F):	4.951	4.002
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.188	1.046
Numerical Performance Indicator:	0.00	-1.82
Percent Recovery:	100.06%	80.06%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
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 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.:	LCS75106	92683386026
Duplicate Sample I.D.	LCSD75106	92683386026DUP
Sample Result (pCi/L, g, F):	4.951	0.428
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.188	0.368
Sample Duplicate Result (pCi/L, g, F):	4.002	0.305
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.046	0.323
Are sample and/or duplicate results below RL?	NO	See Below ##
Duplicate Numerical Performance Indicator:	1.175	0.489
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	22.21%	33.36%
Duplicate Status vs Numerical Indicator:	Pass	Pass
Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	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 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:

LAM 9/13/23

Appendix B

Field Sampling Reports

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: Kim Lapszynski

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	867242
Turbidity Meter	Geotech	22043965

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 7:50			**Time Finish 8:40**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	25.09	± 0.1	GWMP
pH (SU)	7.00	7.00	24.87	± 0.1	GWMP
pH (SU)	10.00	10.00	25.00	± 0.1	GWMP
D.O. (%)	N/A	100.00	26.86	± 10%	NA
ORP (mV)	229.0	229	26.86	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	111		
	800	783		
	<0.10	0.02		

Calibration Check					
Time Start 12:45			**Time Finish 13:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	25.09	± 0.1	GWMP
pH (SU)	7.00	7	24.87	± 0.1	GWMP
pH (SU)	10.00	10	25.00	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.1	± 10% of standard	EPA 2023
	100	111		
	800	804		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: David Prouty

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	661797
Turbidity Meter	Geotech	22043966

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:00			**Time Finish 8:45**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.80	± 0.1	GWMP
pH (SU)	7.00	7.02	21.61	± 0.1	GWMP
pH (SU)	10.00	10.05	21.77	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.38	± 10%	NA
ORP (mV)	229.0	229	22.35	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	101		
	800	--		
	<0.10	0.11		

Calibration Check					
Time Start 12:30			**Time Finish 13:12**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	26.96	± 0.1	GWMP
pH (SU)	7.00	7	26.94	± 0.1	GWMP
pH (SU)	10.00	9.95	27.04	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	--	± 10% of standard	EPA 2023
	100	--		
	800	--		
	<0.10	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: Jake Swanson

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613192
Turbidity Meter	Geotech	--

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 7:45			**Time Finish 8:30**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.34	± 0.1	GWMP
pH (SU)	7.00	7.02	21.36	± 0.1	GWMP
pH (SU)	10.00	10.05	21.82	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.76	± 10%	NA
ORP (mV)	229.0	229	22.02	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Calibration Check					
Time Start 12:20			**Time Finish 12:50**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	30.55	± 0.1	GWMP
pH (SU)	7.00	6.99	31.19	± 0.1	GWMP
pH (SU)	10.00	9.95	30.94	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/15/2023

Calibrated By: Jessica Ware

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	887121
Turbidity Meter	Geotech	21063282

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:00			**Time Finish 8:45**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.68	± 0.1	GWMP
pH (SU)	7.00	7.02	21.76	± 0.1	GWMP
pH (SU)	10.00	10.05	22.21	± 0.1	GWMP
D.O. (%)	N/A	100.00	22.45	± 10%	NA
ORP (mV)	229.0	229	23.34	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.2	± 10% of standard	EPA 2023
	100	100		
	800	801		
	<0.10	0.02		

Calibration Check					
Time Start 12:30			**Time Finish 13:00**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	28.19	± 0.1	GWMP
pH (SU)	7.00	7	28.25	± 0.1	GWMP
pH (SU)	10.00	9.95	28.83	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.8	± 10% of standard	EPA 2023
	100	101		
	800	806		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Mark Chest

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	663604
Turbidity Meter	Geotech	U112809X

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 9:30			**Time Finish 10:20**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.26	± 0.1	GWMP
pH (SU)	7.00	7.00	23.26	± 0.1	GWMP
pH (SU)	10.00	10.00	23.45	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.92	± 10%	NA
ORP (mV)	229.0	231.1	24.47	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	96.4		
	800	789		
	<0.10	0.02		

Calibration Check					
Time Start 12:20			**Time Finish 12:40**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	26.46	± 0.1	GWMP
pH (SU)	7.00	7	27.27	± 0.1	GWMP
pH (SU)	10.00	10	26.31	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.4	± 10% of standard	EPA 2023
	100	99.1		
	800	783		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Jessica Ware

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613224
Turbidity Meter	Geotech	21063282

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:45		**Time Finish 9:15**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	24.25	± 0.1	GWMP
pH (SU)	7.00	7.00	25.34	± 0.1	GWMP
pH (SU)	10.00	10.00	24.54	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.15	± 10%	NA
ORP (mV)	229.0	229	25.38	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.8	± 10% of standard	EPA 2023
	100	100		
	800	806		
	<0.10	0.02		

Calibration Check					
Time Start 17:00		**Time Finish 17:20**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	28.79	± 0.1	GWMP
pH (SU)	7.00	6.99	28.31	± 0.1	GWMP
pH (SU)	10.00	9.95	28.55	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20.3	± 10% of standard	EPA 2023
	100	102		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Kim Lapszynski

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	867242
Turbidity Meter	Geotech	22043965

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:45		**Time Finish 9:15**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	22.08	± 0.1	GWMP
pH (SU)	7.00	7.02	22.15	± 0.1	GWMP
pH (SU)	10.00	10.05	22.03	± 0.1	GWMP
D.O. (%)	N/A	100.00	22.55	± 10%	NA
ORP (mV)	229.0	229	21.94	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	97.6		
	800	796		
	<0.10	0.02		

Calibration Check					
Time Start 13:31		**Time Finish 14:00**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	30.44	± 0.1	GWMP
pH (SU)	7.00	6.99	31.78	± 0.1	GWMP
pH (SU)	10.00	9.95	29.63	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	18	± 10% of standard	EPA 2023
	100	97.6		
	800	797		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: David Prouty

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	661797
Turbidity Meter	Geotech	22043966

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:45		**Time Finish 9:10**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.32	± 0.1	GWMP
pH (SU)	7.00	7.00	23.11	± 0.1	GWMP
pH (SU)	10.00	10.00	23.25	± 0.1	GWMP
D.O. (%)	N/A	100.00	22.98	± 10%	NA
ORP (mV)	229.0	230	24.32	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	100		
	800	--		
	<0.10	0.1		

Calibration Check					
Time Start 13:30		**Time Finish 13:45**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4	25.87	± 0.1	GWMP
pH (SU)	7.00	7	26.03	± 0.1	GWMP
pH (SU)	10.00	10	26.21	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	--	± 10% of standard	EPA 2023
	100	--		
	800	--		
	<0.10	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/16/2023

Calibrated By: Jake Swanson

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613192
Turbidity Meter	Geotech	--

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 0:00			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	21.66	± 0.1	GWMP
pH (SU)	7.00	7.02	20.82	± 0.1	GWMP
pH (SU)	10.00	10.05	21.45	± 0.1	GWMP
D.O. (%)	N/A	100.00	24.35	± 10%	NA
ORP (mV)	229.0	229	21.19	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Calibration Check					
Time Start 13:31			**Time Finish 14:00**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.02	34.01	± 0.1	GWMP
pH (SU)	7.00	6.99	32	± 0.1	GWMP
pH (SU)	10.00	9.91	35.23	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: David Prouty

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	661797
Turbidity Meter	Geotech	22043966

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:40			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	26.19	± 0.1	GWMP
pH (SU)	7.00	7.00	23.33	± 0.1	GWMP
pH (SU)	10.00	10.00	25.73	± 0.1	GWMP
D.O. (%)	N/A	100.00	24.73	± 10%	NA
ORP (mV)	229.0	226.9	26.66	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	101		
	800	--		
	<0.10	101		

Calibration Check					
Time Start NA			**Time Finish NA**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	--	--	± 10% of standard	EPA 2023
pH (SU)	4.00	--	--	± 0.1	GWMP
pH (SU)	7.00	--	--	± 0.1	GWMP
pH (SU)	10.00	--	--	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	--	--	± 10% of standard	EPA 2023
	--	--		
	--	--		
	--	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: Kim Lapszynski

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	867242
Turbidity Meter	Geotech	22043965

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:43			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	23.53	± 0.1	GWMP
pH (SU)	7.00	7.00	23.55	± 0.1	GWMP
pH (SU)	10.00	10.00	23.50	± 0.1	GWMP
D.O. (%)	N/A	100.00	23.35	± 10%	NA
ORP (mV)	229.0	229	22.96	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	21	± 10% of standard	EPA 2023
	100	100		
	800	785		
	<0.10	0.02		

Calibration Check					
Time Start NA			**Time Finish NA**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	--	--	± 10% of standard	EPA 2023
pH (SU)	4.00	--	--	± 0.1	GWMP
pH (SU)	7.00	--	--	± 0.1	GWMP
pH (SU)	10.00	--	--	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	--	--	± 10% of standard	EPA 2023
	--	--		
	--	--		
	--	--		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: Jake Swanson

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613192
Turbidity Meter	Geotech	--

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:43			**Time Finish 9:15**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	24.16	± 0.1	GWMP
pH (SU)	7.00	7.00	23.24	± 0.1	GWMP
pH (SU)	10.00	10.00	23.75	± 0.1	GWMP
D.O. (%)	N/A	100.00	24.65	± 10%	NA
ORP (mV)	229.0	229	23.50	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Calibration Check					
Time Start 13:00			**Time Finish 13:30**		
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (^{o}C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.01	29.87	± 0.1	GWMP
pH (SU)	7.00	6.99	30.47	± 0.1	GWMP
pH (SU)	10.00	9.95	31.14	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	20	± 10% of standard	EPA 2023
	100	100		
	800	800		
	<0.10	0.02		

Notes:

Field Instrumentation Calibration Form

Site Name: Plant Yates

Date: 8/17/2023

Calibrated By: Jessica Ware

Field Conditions:Sunny Hot

Instrument	Manufactuer/ Model	Serial Number
Water Quality Meter	Aquatroll 600	613224
Turbidity Meter	Geotech	21063282

Calibration Standard Information				
Parameter	**Standard**	**Lot #**	**Date of Expiration**	**Brand**
Specific Conductance (µS/cm)	1,413	3G01148	Apr-24	Insitu
pH (SU)	4.00	3GD708	Apr-25	Insitu
pH (SU)	7.00	3GE0720	May-25	Insitu
pH (SU)	10.00	3GD1219	Apr-25	Insitu
D.O. (%)	N/A	--	--	--
ORP (mV)	229.0	3GF0202	Mar-24	Insitu

Calibration					
Time Start 8:40		**Time Finish 9:10**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	1,413	25.00	± 10% of standard	EPA 2023
pH (SU)	4.00	4.00	22.83	± 0.1	GWMP
pH (SU)	7.00	7.00	22.64	± 0.1	GWMP
pH (SU)	10.00	10.00	23.10	± 0.1	GWMP
D.O. (%)	N/A	100.00	27.08	± 10%	NA
ORP (mV)	229.0	229	23.90	± 10	EPA 2023

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	20	19.9	± 10% of standard	EPA 2023
	100	100		
	800	807		
	<0.10	0.04		

Calibration Check					
Time Start NA		**Time Finish NA**			
Parameter	**Standard**	**Calibration Value**	**Calibration Solution Temperature (°C)**	**Acceptance Criteria**	**Reference**
Specific Conductance (µS/cm)	1,413	--	--	± 10% of standard	EPA 2023
pH (SU)	4.00	--	--	± 0.1	GWMP
pH (SU)	7.00	--	--	± 0.1	GWMP
pH (SU)	10.00	--	--	± 0.1	GWMP

	Standard	Calibration Value	Acceptance Criteria	Reference
Turbidity (NTU)	--	--	± 10% of standard	EPA 2023
	--	--		
	--	--		
	--	--		

Notes:

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	Gypsum Landfill
Date:	8/14/2023
Sampler:	Mark Chest
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
GWC-6R	8/14/2023	10:46:00	35.11	51.87	Vegetation around well
GWC-1R	8/14/2023	10:52:00	22.66	36.41	High grass around well
GWC-4R	8/14/2023	10:59:00	16.17	30.20	High grass around the well
GWC-2R	8/14/2023	11:12:00	28.29	44.00	Grass high
GWC-3R	8/14/2023	11:21:00	27.65	38.35	High grass
GWC-5R	8/14/2023	11:27:00	28.40	42.77	High grass

Groundwater Sampling Form

Updated : 8/15/2023 4:50:19 PM +00:00

Project Number	30143622	**Well ID**	GWC-6R			**Date**	8/15/2023
Project Location	Gypsum Landfill		**Weather(°F)**	Sunny and clear 85 °F, Sunny, winds at 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)	35.09	**Total Depth (ft-bmp)**	51.87	**Water Column(ft)**	16.78	**Gallons in Well**	2.73
MP Elevation	788.98	**Pump Intake (ft-bmp)**	46	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:25	**Well Volumes Purged**	0.36	**Sample ID**	GWC-6R	**Sampled by**	Jake Swanson
Purge Start	11:47	**Gallons Purged**	0.99	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:12						

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)
11:47:00	00:00	150	35.06	6.04	355.30	0.11	5.87	21.00	190.10
11:52:00	05:00	150	35.51	5.64	342.70	0.05	4.76	19.70	216.89
11:57:00	10:00	150	35.55	5.48	344.88	0.15	4.61	19.30	225.97
12:02:00	15:00	150	35.57	5.42	350.12	0.02	4.42	19.30	227.83
12:07:00	20:00	150	35.58	5.35	350.01	0.02	4.37	19.60	229.99
12:12:00	25:00	150	35.59	5.40	350.45	0.05	4.34	19.70	229.00

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 7:30:31 PM +00:00

Project Number	30143622	**Well ID**	GWC-5R			**Date**	8/15/2023
Project Location	Gypsum Landfill		**Weather(°F)**	Sunny 90 degrees F °F, Sunny, winds at 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)	28.42	**Total Depth (ft-bmp)**	42.77	**Water Column(ft)**	14.35	**Gallons in Well**	2.33
MP Elevation	782.45	**Pump Intake (ft-bmp)**	37	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:20	**Well Volumes Purged**	0.43	**Sample ID**	GWC-5R	**Sampled by**	Jake Swanson
Purge Start	13:48	**Gallons Purged**	0.99	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:04						

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)
13:48:00	00:00	200	28.42	5.00	1547.60	3.84	8.45	22.70	252.69
13:53:00	05:00	200	29.87	4.76	1752.31	10.10	8.13	20.10	272.79
13:58:00	10:00	150	30.07	4.60	1708.95	8.03	8.11	20.20	302.45
14:03:00	15:00	100	30.1	4.56	1661.89	9.88	8.18	20.10	319.60
14:08:00	20:00	100	29.98	4.52	1648.64	10.30	8.15	20.50	323.50
14:13:00	25:24	100	29.98	4.52	1649.73	9.45	8.16	20.00	327.53
14:19:00	30:41	100	29.98	4.54	1623.07	9.12	8.09	19.80	332.74
14:24:00	35:41	100	29.98	4.58	1611.73	7.86	8.13	19.50	338.90
14:29:00	40:41	100	29.98	4.59	1597.50	7.54	8.14	19.40	345.45
14:34:00	45:41	100	29.98	4.60	1574.98	6.64	8.11	19.40	348.62
14:39:00	50:41	100	29.98	4.61	1575.86	6.13	8.08	19.50	352.78
14:44:00	55:41	100	29.98	4.62	1569.65	5.99	8.09	19.40	354.27
14:49:00	00:41	100	29.98	4.63	1554.65	4.72	8.09	19.30	351.98
14:55:00	06:38	100	30.06	4.63	1519.43	2.39	8.12	19.40	355.63
15:00:00	11:38	100	30.05	4.64	1511.62	3.12	8.08	19.60	361.32
15:05:00	16:38	100	30.03	4.66	1504.54	2.44	8.12	19.40	363.57

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: Lightning at 1404 to 1510

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 10:46:22 PM +00:00

Project Number	30143622	**Well ID**	GWC-4R			**Date**	8/15/2023
Project Location	Gypsum Landfill		**Weather(°F)**	90 °F, Sunny, winds at 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)	16.05	**Total Depth (ft-bmp)**	30.2	**Water Column(ft)**	14.15	**Gallons in Well**	2.30
MP Elevation	757.48	**Pump Intake (ft-bmp)**	25	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	18:00	**Well Volumes Purged**	2.45	**Sample ID**	GWC-4R	**Sampled by**	Jake Swanson
Purge Start	15:48	**Gallons Purged**	5.64	**Replicate/ Code No.**	YAT-GLF-FD-1	**Color**	Clear
Purge End	17:54						

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)
15:48:00	00:00	200	16.05	6.19	826.47	40.30	0.44	21.40	109.32
15:53:00	05:00	200	16.62	6.14	826.98	7.09	0.20	21.00	101.60
15:58:00	10:00	200	16.66	6.09	821.40	5.84	0.12	20.60	101.71
16:03:00	15:00	200	16.7	6.06	806.87	3.51	0.14	20.90	112.13
16:08:00	20:00	200	16.77	6.02	765.42	4.34	0.20	20.10	117.16
16:13:00	25:00	200	16.82	6.00	746.70	5.92	0.31	21.00	123.54
16:18:00	30:00	200	16.82	5.98	716.33	5.08	0.42	21.40	131.17
16:23:00	35:00	200	16.76	5.99	703.86	5.57	0.55	21.20	136.98
16:29:00	41:42	200	16.75	5.97	669.29	6.60	0.76	20.60	146.42
16:34:00	46:42	150	16.73	5.97	663.05	7.22	0.89	20.90	151.56
16:39:00	51:42	150	16.59	5.93	628.00	3.27	1.04	22.20	158.35
16:44:00	56:42	150	16.5	5.96	614.36	4.85	1.19	22.20	161.74
16:49:00	01:42	150	16.5	5.95	604.05	3.61	1.30	21.90	163.51
16:54:00	06:42	150	16.5	5.94	599.46	2.43	1.44	21.80	167.10
16:59:00	11:42	150	16.5	5.93	589.24	1.95	1.56	21.40	170.81
17:03:00	15:29	150	16.5	5.91	581.39	1.62	1.66	21.30	175.04
17:08:00	20:29	150	16.5	5.90	567.61	1.75	1.79	21.20	176.83
17:13:00	25:29	150	16.5	5.89	539.15	1.22	1.90	21.40	180.95
17:18:00	30:29	150	16.5	5.86	493.73	1.51	2.16	20.60	187.39
17:23:00	35:29	150	16.62	5.84	491.62	1.60	2.33	20.70	190.81
17:28:00	40:29	150	16.63	5.82	481.90	1.71	2.49	20.70	196.01
17:33:00	45:29	150	16.71	5.82	485.07	2.04	2.62	20.10	198.29
17:38:00	50:29	150	16.5	5.77	449.31	1.86	2.76	19.70	202.98
17:43:00	55:29	150	16.5	5.77	452.42	1.29	2.82	20.30	205.50
17:44:00	56:47	150	16.5	5.76	449.26	1.29	2.85	20.30	206.85
17:49:00	01:47	150	16.5	5.74	431.99	1.85	2.96	20.20	211.04

Groundwater Sampling Form

17:54:00	06:47	150	16.51	5.74	430.88	0.95	3.07	20.10	212.17

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: _____ Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/16/2023 3:07:31 PM +00:00

Project Number	30143622	**Well ID**	GWC-1R			**Date**	8/16/2023
Project Location	Gypsum Landfill		**Weather(°F)**	78 °F, Sunny, winds at 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)	19.68	**Total Depth (ft-bmp)**	36.41	**Water Column(ft)**	16.73	**Gallons in Well**	2.72
MP Elevation	773.27	**Pump Intake (ft-bmp)**	31	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:10	**Well Volumes Purged**	0.58	**Sample ID**	GWC-1R	**Sampled by**	Jake Swanson
Purge Start	09:27	**Gallons Purged**	1.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:57						

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)
9:27:00	00:00	200	19.68	5.29	1176.60	0.05	6.97	21.80	215.61
9:32:00	05:00	200	23.33	5.17	1172.12	0.11	7.03	19.30	223.45
9:37:00	10:00	200	23.47	5.09	1246.42	0.15	7.05	19.00	231.41
9:42:00	15:00	200	23.51	5.05	1285.66	0.61	7.07	19.20	245.28
9:47:00	20:00	200	23.51	5.04	1348.47	0.49	7.10	19.20	256.37
9:52:00	25:00	200	23.49	5.04	1379.48	1.18	7.05	19.60	264.06
9:57:00	30:00	200	23.49	5.08	1387.97	0.02	7.07	19.50	267.56

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/16/2023 4:47:05 PM +00:00

Project Number	30143622	**Well ID**	GWC-3R			**Date**	8/16/2023
Project Location	Gypsum Landfill		**Weather(°F)**	78 °F, Sunny, winds at 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)	27.67	**Total Depth (ft-bmp)**	38.35	**Water Column(ft)**	10.68	**Gallons in Well**	1.74
MP Elevation	775.25	**Pump Intake (ft-bmp)**	33	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:00	**Well Volumes Purged**	0.61	**Sample ID**	GWC-3R	**Sampled by**	Jake Swanson
Purge Start	11:32	**Gallons Purged**	1.06	**Replicate/ Code No.**	YAT-GLF-FB-1	**Color**	Clear
Purge End	11:52						

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)
11:32:00	00:00	200	27.67	4.96	225.20	3.52	7.49	21.80	277.39
11:37:00	05:00	200	27.98	4.71	218.13	4.02	7.48	21.70	291.37
11:42:00	10:00	200	28	4.66	202.88	4.76	7.50	21.40	298.61
11:47:00	15:00	200	28	4.64	203.27	3.99	7.44	21.50	301.73
11:52:00	20:00	200	28.02	4.64	212.98	2.69	7.39	21.40	298.93

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: YAT-GLF-FB-1 @ 1220

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/16/2023 9:34:54 PM +00:00

Project Number	30143622	**Well ID**	GWC-2R			**Date**	8/16/2023
Project Location	Gypsum Landfill		**Weather(°F)**	80 °F, Sunny, winds at 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)	27.28	**Total Depth (ft-bmp)**	44	**Water Column(ft)**	16.72	**Gallons in Well**	2.72
MP Elevation	769.76	**Pump Intake (ft-bmp)**	39	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:20	**Well Volumes Purged**	0.19	**Sample ID**	GWC-2R	**Sampled by**	Jake Swanson
Purge Start	12:48	**Gallons Purged**	0.53	**Replicate/ Code No.**	YAT-GLF-EB-1	**Color**	Clear
Purge End	13:08						

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)
12:48:00	00:00	100	27.28	5.32	543.98	1.79	5.18	24.00	239.45
12:53:00	05:00	100	27.41	5.03	553.68	1.42	5.11	22.30	267.88
12:58:00	10:00	100	27.41	4.89	560.40	1.87	5.13	21.40	280.66
13:03:00	15:00	100	27.42	4.89	565.05	1.71	5.13	21.20	288.17
13:08:00	20:00	100	27.42	4.89	573.06	1.69	5.14	21.30	290.23

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: YAT-GLF-EB-1 @ 1340

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

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:	Mark Chest
Date:	8/14/2023
Time:	10:52:00

			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:	Mark Chest
Date:	8/14/2023
Time:	11:12:00

			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:	Mark Chest
Date:	8/14/2023
Time:	11:21:00

			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:	Mark Chest
Date:	8/14/2023
Time:	10:59:00

			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:	Mark Chest
Date:	8/14/2023
Time:	11:27:00

			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:	Mark Chest
Date:	8/14/2023
Time:	10:46:00

			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:				

Upgradient Wells

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AP-3, AMA R6, AP-1, AP-2, Gypsum
Date:	8/14/2023
Sampler:	Mark Chest, Jake Swanson, Kim Lapszunski, Jessica Ware
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
GWA-2	8/14/2023	10:33	36.83	52.13	--
YGWA-14S	8/14/2023	10:23	18.53	34.96	--
YGWA-17S	8/14/2023	12:15	14.38	39.85	--
YGWA-18I	8/14/2023	12:01	24.90	79.97	--
YGWA-18S	8/14/2023	12:05	21.97	39.97	--
YGWA-1D	8/14/2023	09:36	49.55	128.85	--
YGWA-1I	8/14/2023	09:56	37.23	53.60	--
YGWA-20S	8/14/2023	10:23	11.54	29.52	--
YGWA-21I	8/14/2023	10:33	31.80	79.90	--
YGWA-2I	8/14/2023	10:01	44.76	63.75	--
YGWA-30I	8/14/2023	10:37	42.42	59.48	--
YGWA-39	8/14/2023	15:32	17.61	68.59	--
YGWA-3D	8/14/2023	10:10	31.49	134.18	--
YGWA-3I	8/14/2023	10:08	53.07	59.05	--
YGWA-40	8/14/2023	15:38	23.70	48.23	--
YGWA-47	8/14/2023	12:15	33.81	59.19	--
YGWA-4I	8/14/2023	11:01	24.27	48.81	--
YGWA-5D	8/14/2023	10:47	20.89	129.13	--
YGWA-5I	8/14/2023	10:48	20.58	58.94	--

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 2:05:48 PM +00:00

Project Number	30052922	**Well ID**	YGWA-47			**Date**	8/15/2023
Project Location	AP-1		**Weather(°F)**	77.0 degrees F and Clear. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	49.4	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	33.82	**Total Depth (ft-bmp)**	59.19	**Water Column(ft)**	25.37	**Gallons in Well**	4.12
MP Elevation	758.22	**Pump Intake (ft-bmp)**	54	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:43	**Well Volumes Purged**	0.29	**Sample ID**	YGWA-47	**Sampled by**	Mark Chest
Purge Start	09:20	**Gallons Purged**	1.19	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:40						

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)
9:20:00	00:00	225	33.82	5.53	217.42	0.25	4.61	18.40	226.72
9:25:00	05:00	225	34.75	5.60	218.91	0.02	3.15	19.00	246.92
9:30:00	10:00	225	34.75	5.65	219.03	0.03	3.12	19.00	255.57
9:35:00	15:00	225	34.74	5.65	219.51	0.03	3.06	19.10	262.66
9:40:00	20:00	225	34.74	5.69	220.80	0.02	3.05	19.00	265.45

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	2	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: No comment

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: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: _____ Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 4:50:18 PM +00:00

Project Number	30143622	**Well ID**	GWA-2			**Date**	8/15/2023
Project Location	Gypsum Landfill		**Weather(°F)**	Sunny and clear 78 F °F, Sunny, winds at 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)	36.81	**Total Depth (ft-bmp)**	52.13	**Water Column(ft)**	15.32	**Gallons in Well**	2.49
MP Elevation	805.62	**Pump Intake (ft-bmp)**	47	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:20	**Well Volumes Purged**	0.65	**Sample ID**	GWA-2	**Sampled by**	Jake Swanson
Purge Start	09:43	**Gallons Purged**	1.62	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:14						

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)
9:43:00	00:00	200	36.81	6.21	332.29	3.06	5.85	22.90	140.26
9:48:00	05:00	200	37.3	5.93	396.02	2.84	1.50	20.60	91.42
9:53:00	10:00	200	37.49	5.71	383.77	0.58	0.80	20.50	126.79
9:58:00	15:00	200	37.58	5.50	347.62	0.32	0.71	20.30	153.04
10:04:00	20:38	200	37.68	5.37	331.72	1.23	0.60	20.60	170.66
10:09:00	25:38	200	37.75	5.32	323.72	0.86	0.53	20.50	177.62
10:14:00	30:38	200	37.84	5.30	321.06	0.59	0.48	20.60	179.52

Constituent Sampled	Container	Number	Preservative
ChlorideSulfate	250 mL Plastic	1	None
MercuryMetals	250 mL Plastic	1	HNO3
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 6:40:01 PM +00:00

Project Number	30143608	**Well ID**	YGWA-1I			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	86.2 degrees F and Partly Cloudy. The wind is blowing NW at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	43.3	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	37.24	**Total Depth (ft-bmp)**	53.6	**Water Column(ft)**	16.36	**Gallons in Well**	2.66
MP Elevation	836.6	**Pump Intake (ft-bmp)**	49	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	13:45	**Well Volumes Purged**	0.30	**Sample ID**	YAT-YGWA-1I	**Sampled by**	David Prouty
Purge Start	13:15	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:40						

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)
13:15:00	00:00	100	38.8	6.39	103.30		3.64	22.30	26.75
13:20:00	05:00	100	39.87	6.13	77.01		1.05	17.60	75.79
13:25:00	10:00	100	41.8	5.92	57.87		3.47	17.50	126.79
13:30:00	15:00	100	41.88	5.79	54.67	0.02	4.11	18.30	151.90
13:35:00	20:00	100	41.95	5.85	53.54	0.02	4.28	18.40	156.18
13:40:00	25:00	100	42.1	5.88	54.81	0.02	4.30	19.00	159.63

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 6:43:15 PM +00:00

Project Number	30143608	**Well ID**	YGWA-1D			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	78.8 degrees F and Clear. The wind is blowing W/SW at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	78.05	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	49.57	**Total Depth (ft-bmp)**	128.85	**Water Column(ft)**	79.28	**Gallons in Well**	12.88
MP Elevation	837.25	**Pump Intake (ft-bmp)**	108	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	11:20	**Well Volumes Purged**	0.07	**Sample ID**	YAT-YGWA-1D	**Sampled by**	David Prouty
Purge Start	10:49	**Gallons Purged**	0.92	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:19						

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)
10:49:00	00:00	100	49.69	7.15	168.64	0.55	0.85	19.70	-133.88
10:54:00	05:00	100	49.7	7.11	164.60	0.02	0.65	18.30	-140.91
10:59:00	10:00	100	49.71	7.07	159.08	0.02	0.43	17.40	-148.39
11:04:00	15:00	100	49.72	7.04	157.29	0.02	0.75	19.20	-123.76
11:09:00	20:00	100	49.72	7.02	155.02	0.02	0.76	19.10	-113.30
11:14:00	25:00	100	49.72	7.01	153.39	0.03	0.78	18.90	-99.34
11:19:00	30:00	100	49.72	6.98	153.07	0.02	0.85	18.90	-86.58

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 8:12:44 PM +00:00

Project Number	30143608	**Well ID**	YGWA-2I			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	86.7 degrees F and Thunderstorms and Rain. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	53.45	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	44.78	**Total Depth (ft-bmp)**	63.75	**Water Column(ft)**	18.97	**Gallons in Well**	3.08
MP Elevation	866.25	**Pump Intake (ft-bmp)**	60	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	15:45	**Well Volumes Purged**	0.19	**Sample ID**	YAT-YGWA-2I	**Sampled by**	David Prouty
Purge Start	15:14	**Gallons Purged**	0.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:41						

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)
15:14:00	00:00	100	44.78	6.94	225.19		6.10	19.50	96.70
15:15:00	00:22	100	44.78	6.93	228.51		5.35	19.50	45.58
15:15:00	00:45	100	44.78	6.90	235.78		4.59	18.70	3.86
15:16:00	01:23	100	45.73	6.94	240.21	0.89	3.57	18.60	-32.08
15:21:00	06:23	80	46.65	7.08	250.07	0.02	2.06	20.00	-62.29
15:26:00	11:23	80	47.15	7.08	250.80	0.02	1.60	20.50	-62.10
15:31:00	16:23	80	47.36	7.02	249.40	0.02	1.09	20.40	-50.95
15:36:00	21:23	80	47.36	6.98	243.49	0.02	0.98	20.30	-36.80
15:41:00	26:23	80	47.36	6.96	240.30	0.02	1.06	21.40	-32.57

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 9:45:37 PM +00:00

Project Number	30143608	**Well ID**	YGWA-3D			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	75.2 degrees F and Thunderstorms. The wind is blowing W at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	83.88	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.5	**Total Depth (ft-bmp)**	134.18	**Water Column(ft)**	102.68	**Gallons in Well**	16.68
MP Elevation	796.78	**Pump Intake (ft-bmp)**	113	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	17:10	**Well Volumes Purged**		**Sample ID**	YAT-YGWA-3D	**Sampled by**	David Prouty
Purge Start	16:45	**Gallons Purged**		**Replicate/ Code No.**		**Color**	Clear
Purge End	17:06						

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)
16:45:00	00:00	100	31.5	7.36	246.20		8.18	25.90	101.77
16:45:00	00:33	100	31.55	7.28	247.50		8.12	25.30	102.28
16:50:00	05:33	100	31.55	7.38	243.30	0.02	0.40	17.80	-76.64
16:51:00	06:42	100	31.63	7.51	243.76	0.02	0.37	17.70	-93.21
16:55:00	10:09	100	31.66	7.63	243.32	0.02	0.27	17.80	-114.05
17:00:00	15:09	100	31.7	7.67	243.72	0.02	0.26	17.70	-119.95
17:05:00	20:09	100	31.71	7.69	243.95	0.02	0.28	17.60	-121.97

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 9:47:29 PM +00:00

Project Number	30143623	**Well ID**	YGWA-14S			**Date**	8/15/2023
Project Location	AP-2		**Weather(°F)**	74.5 degrees F and Partly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	24.66	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	18.53	**Total Depth (ft-bmp)**	34.96	**Water Column(ft)**	16.43	**Gallons in Well**	2.67
MP Elevation	748.76	**Pump Intake (ft-bmp)**	30	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:30	**Well Volumes Purged**	0.74	**Sample ID**	YAT-YGWA-14S	**Sampled by**	Kim Lapszynski
Purge Start	16:37	**Gallons Purged**	1.98	**Replicate/ Code No.**		**Color**	Clear
Purge End	17:28						

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)
16:37:00	00:00	150	18.53	6.03	15.42	1.64	7.97	26.00	180.27
16:42:00	05:00	150	18.85	5.23	29.99	0.02	8.58	20.50	209.12
16:47:00	10:00	150	18.92	5.25	40.73	0.10	8.43	20.10	223.47
16:52:00	15:00	150	18.95	5.22	57.88	0.17	8.35	19.90	236.69
16:57:00	20:00	150	18.96	5.29	64.57	0.02	8.16	19.80	237.99
17:02:00	25:00	150	18.96	5.31	67.12	0.02	8.14	19.80	249.87
17:07:00	30:00	150	18.97	5.32	68.99	0.02	8.03	19.70	262.12
17:12:00	35:00	150	18.98	5.26	71.36	0.02	7.63	19.70	272.94
17:17:00	40:00	150	18.98	5.03	74.69	0.02	6.28	19.70	278.76
17:22:00	45:00	150	18.98	5.04	74.65	0.02	6.25	19.70	277.58
17:27:00	50:00	150	18.99	5.03	74.70	0.02	6.23	19.60	278.23

Constituent Sampled	Container	Number	Preservative
App III Metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Groundwater Sampling Form

Updated : 8/16/2023 3:17:06 PM +00:00

Project Number	30143608	**Well ID**	YGWA-3I			**Date**	8/16/2023
Project Location	AP-2		**Weather(°F)**	It is Clear. The wind is blowing N at 5.8 mph. 72			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	48.85	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	53.13	**Total Depth (ft-bmp)**	59.05	**Water Column(ft)**	5.92	**Gallons in Well**	0.96
MP Elevation	796.55	**Pump Intake (ft-bmp)**	54	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	10:50	**Well Volumes Purged**	0.91	**Sample ID**	YAT-YGWA-3I	**Sampled by**	David Prouty
Purge Start	10:05	**Gallons Purged**	0.87	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:45						

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)
10:05:00	00:00	100	53.7	7.34	232.33	0.02	7.33	18.60	216.33
10:10:00	05:00	80	54.2	7.30	290.92	0.02	2.31	18.10	214.83
10:15:00	10:00	80	53.8	7.33	279.46	0.05	1.50	18.50	158.07
10:20:00	15:00	80	53.65	7.35	264.04	0.02	1.33	19.50	144.12
10:25:00	20:00	80	53.65	7.37	240.62	0.02	0.81	19.40	-2.47
10:30:00	25:00	80	53.65	7.39	227.18	0.02	0.62	19.40	-31.47
10:35:00	30:00	80	53.64	7.39	216.94	0.02	0.57	19.30	-55.49
10:40:00	35:00	80	53.64	7.38	214.29	0.02	0.60	19.30	-61.05
10:45:00	40:00	80	53.64	7.39	211.10	0.02	0.61	19.20	-67.19

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/16/2023 4:56:03 PM +00:00

Project Number	30143608	**Well ID**	YGWA-30I			**Date**	8/16/2023
Project Location	AP-2		**Weather(°F)**	78.8 degrees F and Clear. The wind is blowing NW at 5.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	49.18	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	42.45	**Total Depth (ft-bmp)**	59.48	**Water Column(ft)**	17.03	**Gallons in Well**	2.77
MP Elevation	762.58	**Pump Intake (ft-bmp)**	54.5	**Purge Method**	Low-Flow	**Sample Method**	Grab
Sample Time	12:20	**Well Volumes Purged**	0.20	**Sample ID**	YAT-YGWA-30I	**Sampled by**	David Prouty
Purge Start	11:56	**Gallons Purged**	0.55	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:17						

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)
11:56:00	00:00	100	42.45	5.53	41.77	0.02	7.00	18.90	243.62
12:01:00	05:00	100	42.45	5.54	41.80	0.02	7.05	19.00	249.49
12:07:00	10:53	100	42.45	5.53	41.73	0.74	7.05	19.20	254.67
12:12:00	15:53	100	42.45	5.53	41.65	0.27	7.06	19.00	258.78
12:17:00	20:53	100	42.45	5.55	41.65	0.23	7.07	19.10	260.93

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III Metals	250 mL Plastic	1	HNO3
App IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/17/2023 9:41:13 AM -04:00

Project Number	30143623	**Well ID**	YGWA-21I			**Date**	08/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	77.0 degrees F and Clear. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.78	**Total Depth (ft-bmp)**	79.9	**Water Column(ft)**	48.12	**Gallons in Well**	7.82
MP Elevation	783.7	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:35	**Well Volumes Purged**	0.09	**Sample ID**	YGWA-21I	**Sampled by**	Jessica Ware
Purge Start	10:06	**Gallons Purged**	0.69	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:32						

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)
10:06:00	00:00	200	31.78	7.22	173.14	1.16	7.85	26.3	184.83
10:11:00	05:00	100	33.15	6.77	182.86	2.15	1.51	22.2	-24.05
10:16:00	10:00	100	33.63	6.81	188.75	1.30	1.02	24.1	-73.15
10:21:00	15:00	100	34	6.85	187.55	1.15	0.77	23.9	-105.42
10:26:00	20:00	100	34.11	6.84	186.75	0.86	0.76	25.4	-98.83
10:31:00	25:00	100	34.19	6.84	184.65	0.02	0.79	25.8	-97.47

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metals,Mercury	250 mL Plastic	1	HNO3

Comments: None

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

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 4:43:26 PM +00:00

Project Number	30143623	**Well ID**	YGWA-4I			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	83.1 degrees F and Mostly Cloudy. The wind is blowing NW at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	38.51	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	24.27	**Total Depth (ft-bmp)**	48.81	**Water Column(ft)**	24.54	**Gallons in Well**	3.99
MP Elevation	784.21	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:25	**Well Volumes Purged**	0.30	**Sample ID**	YAT-YGWA-4I	**Sampled by**	Kim Lapszynski
Purge Start	11:51	**Gallons Purged**	1.19	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:21						

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)
11:51:00	00:00	150	24.27	6.60	159.44	0.02	5.72	20.60	126.80
11:56:00	05:00	150	25.54	6.01	168.76	0.02	1.94	18.70	159.52
12:01:00	10:00	150	25.82	6.00	169.94	0.02	1.41	18.30	166.27
12:06:00	15:00	150	26.07	6.02	167.15	0.02	1.67	18.00	170.11
12:11:00	20:00	150	26.12	6.05	163.14	0.02	2.33	18.10	172.95
12:16:00	25:00	150	26.23	6.03	161.34	0.02	2.30	18.00	174.57
12:21:00	30:00	150	26.27	5.99	157.86	0.02	2.37	18.00	175.97

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
Fl, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: Throughout purging, consistently bumped tested turbidity standards and all within range.

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/15/2023 6:55:07 PM +00:00

Project Number	30143623	**Well ID**	YGWA-18S			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	88.2 degrees F and Mostly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	29.97	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	21.95	**Total Depth (ft-bmp)**	39.97	**Water Column(ft)**	18.02	**Gallons in Well**	2.93
MP Elevation	790.57	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:35	**Well Volumes Purged**	0.36	**Sample ID**	YGWA-18S	**Sampled by**	Kim Lapszynski
Purge Start	14:07	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:28						

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)
14:07:00	00:00	200	21.95	6.60	65.27	1.78	7.27	24.70	188.86
14:12:00	05:00	200	23.08	5.18	62.97	0.02	3.88	19.00	183.25
14:17:00	10:00	200	23.41	5.19	64.09	0.02	3.36	18.70	183.33
14:22:00	15:00	200	23.48	5.20	64.04	0.12	3.25	18.50	184.52
14:27:00	20:00	200	23.53	5.20	64.20	0.02	3.28	18.60	184.94

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/15/2023 7:59:42 PM +00:00

Project Number	30143623	**Well ID**	YGWA-18I			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	86.7 degrees F and Thunderstorms and Rain. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.67	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	24.87	**Total Depth (ft-bmp)**	79.97	**Water Column(ft)**	55.10	**Gallons in Well**	8.95
MP Elevation	790.57	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:40	**Well Volumes Purged**	0.09	**Sample ID**	YGWA-18I	**Sampled by**	Kim Lapszynski
Purge Start	15:17	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:37						

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)
15:17:00	00:00	150	24.87	6.08	125.32	1.91	8.10	22.10	185.83
15:22:00	05:00	150	25.09	5.84	126.70	3.32	3.86	18.30	187.04
15:27:00	10:00	150	25.13	5.82	127.26	4.73	3.89	18.40	187.19
15:32:00	15:00	150	25.13	5.82	126.60	3.97	3.90	18.10	187.78
15:37:00	20:00	150	25.13	5.82	126.65	3.92	3.92	18.20	188.15

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None.

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/16/2023 9:28:25 PM +00:00

Project Number	30143623	**Well ID**	YGWA-5I			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	77.0 degrees F and Clear. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	48.64	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.59	**Total Depth (ft-bmp)**	58.94	**Water Column(ft)**	38.35	**Gallons in Well**	6.23
MP Elevation	784.54	**Pump Intake (ft-bmp)**	53	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:20	**Well Volumes Purged**	0.10	**Sample ID**	YAT-YGWA-5I	**Sampled by**	Kim Lapszynski
Purge Start	09:58	**Gallons Purged**	0.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:16						

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)
9:58:00	00:00	150	20.59	6.24	99.40	1.92	6.69	21.80	200.12
10:03:00	05:00	150	20.9	5.60	98.10	0.27	5.31	18.40	197.83
10:08:00	10:00	150	20.97	5.57	96.97	0.14	5.11	18.00	194.09
10:13:00	15:00	150	20.97	5.58	96.86	0.02	5.13	18.00	193.98

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	250 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/17/2023 1:39:20 PM +00:00

Project Number	30143623	**Well ID**	YGWA-40			**Date**	8/15/2023
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	75.2 degrees F and Thunderstorms. The wind is blowing W at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	37.73	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	23.72	**Total Depth (ft-bmp)**	48.23	**Water Column(ft)**	24.51	**Gallons in Well**	3.98
MP Elevation	815.73	**Pump Intake (ft-bmp)**	42	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:20	**Well Volumes Purged**	0.39	**Sample ID**	YAT-YGWA-40	**Sampled by**	Jessica Ware
Purge Start	16:49	**Gallons Purged**	1.53	**Replicate/ Code No.**		**Color**	Clear
Purge End	17:59						

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)
16:49:00	00:00	200	23.72	4.75	129.29	0.02	0.71	19.00	131.14
16:54:00	05:00	150	24.47	4.71	126.66	0.65	0.19	19.00	163.54
16:59:00	10:00	150	24.46	4.77	125.97	0.02	0.13	19.00	179.51
17:04:00	15:00	150	24.47	4.85	126.09	0.02	0.10	18.80	187.78
17:09:00	20:00	150	24.47	4.91	126.01	0.02	0.10	18.80	193.46
17:14:00	25:00	150	24.48	4.96	126.01	0.02	0.08	18.80	197.16
17:19:00	30:00	150	24.48	5.00	125.51	0.02	0.08	18.70	199.02

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/17/2023 1:39:41 PM +00:00

Project Number	30143623	**Well ID**	YGWA-39			**Date**	8/15/2023
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Thunderstorms and Rain. The wind is blowing W at 5.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	58.09	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	17.68	**Total Depth (ft-bmp)**	68.59	**Water Column(ft)**	50.91	**Gallons in Well**	8.27
MP Elevation	818.19	**Pump Intake (ft-bmp)**	63	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:11	**Well Volumes Purged**	0.17	**Sample ID**	YAT-YGWA-39	**Sampled by**	Jessica Ware
Purge Start	15:46	**Gallons Purged**	1.37	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:07						

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)
15:46:00	00:00	200	17.68	6.34	309.57	1.50	5.32	25.20	130.29
15:51:00	05:00	200	17.77	5.83	414.64	1.19	0.84	20.80	96.27
15:56:00	10:00	200	17.98	5.78	420.91	0.27	0.25	19.90	91.80
16:01:00	15:00	200	18.03	5.78	423.68	0.13	0.13	19.60	88.26
16:06:00	20:00	200	18	5.78	421.12	0.02	0.11	19.60	87.17

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____
Well Locked at Arrival: _____
Well Locked at Departure: _____
Key Number To Well: _____

Groundwater Sampling Form

Updated : 8/17/2023 1:40:24 PM +00:00

Project Number	30143623	**Well ID**	YGWA-17S			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	86.7 degrees F and Thunderstorms and Rain. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	29.65	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	14.46	**Total Depth (ft-bmp)**	39.85	**Water Column(ft)**	25.39	**Gallons in Well**	4.13
MP Elevation	783.05	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:50	**Well Volumes Purged**	0.35	**Sample ID**	YGWA-17S	**Sampled by**	Jessica Ware
Purge Start	13:56	**Gallons Purged**	1.43	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:48						

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)
13:56:00	00:00	100	14.46	4.80	113.86	3.98	5.22	25.90	211.14
14:01:00	05:00	100	14.57	4.63	108.12	0.70	2.38	22.30	208.11
14:06:00	10:00	100	14.58	4.74	106.92	0.15	1.90	21.40	200.46
14:11:00	15:00	100	14.58	4.97	106.96	0.02	1.77	21.30	183.80
14:16:00	20:00	100	14.58	5.11	107.57	0.11	1.75	21.10	176.01
14:17:00	21:03	100	14.59	5.14	107.37	0.14	1.74	21.00	173.33
14:22:00	26:03	100	14.57	5.25	107.36	0.38	1.67	20.70	168.24
14:27:00	31:03	100	14.57	5.32	107.22	0.44	1.63	20.70	163.52
14:32:00	36:03	100	14.58	5.39	107.23	0.50	1.61	20.50	161.90
14:37:00	41:03	100	14.6	5.45	107.11	0.52	1.58	20.30	159.31
14:42:00	46:03	100	14.58	5.50	107.55	0.50	1.57	20.20	158.97
14:47:00	51:03	100	14.58	5.54	106.77	0.55	1.56	20.10	156.21

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250 mL Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/17/2023 1:40:42 PM +00:00

Project Number	30143623	**Well ID**	YGWA-20S			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	83.1 degrees F and Mostly Cloudy. The wind is blowing NW at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	19.22	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.5	**Total Depth (ft-bmp)**	29.52	**Water Column(ft)**	18.02	**Gallons in Well**	2.93
MP Elevation	767.12	**Pump Intake (ft-bmp)**	24.5	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:25	**Well Volumes Purged**	0.61	**Sample ID**	YGWA-20S	**Sampled by**	Jessica Ware
Purge Start	11:36	**Gallons Purged**	1.78	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:22						

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)
11:36:00	00:00	200	11.5	6.95	106.05	4.92	5.04	24.60	-1.00
11:41:00	05:00	150	12.02	6.21	55.12	8.80	7.06	19.80	61.55
11:46:00	10:00	125	12.1	6.31	54.89	5.86	7.13	19.20	79.47
11:51:00	15:00	125	12.12	6.51	54.54	2.37	7.13	19.20	86.02
11:56:00	20:00	125	12.13	6.68	54.41	1.78	7.12	18.90	91.18
12:01:00	25:00	125	12.12	6.78	54.33	1.52	7.12	18.90	94.38
12:06:00	30:00	125	12.14	6.86	54.32	1.42	7.06	19.50	97.38
12:11:00	35:00	125	12.15	6.92	54.24	1.35	7.10	19.10	97.76
12:16:00	40:00	125	12.13	6.97	54.09	1.33	7.10	19.10	100.78
12:21:00	45:00	125	12.12	7.00	53.89	1.21	7.01	19.40	104.40

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
App III metals	250mL HDPE Plastic	1	HNO3
App IV metalsMercury	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 8/23/2023 5:04:37 PM +00:00

Project Number	30143623	**Well ID**	YGWA-5D			**Date**	8/15/2023
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	81.5 degrees F and Partly Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	78.83	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.8	**Total Depth (ft-bmp)**	129.13	**Water Column(ft)**	108.33	**Gallons in Well**	17.60
MP Elevation	784.53	**Pump Intake (ft-bmp)**	124	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:13	**Well Volumes Purged**	0.06	**Sample ID**	YAT-YGWA-5D	**Sampled by**	Kim Lapszynski
Purge Start	10:49	**Gallons Purged**	1.06	**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)
10:49:00	00:00	200	20.8	6.65	227.72	4.02	6.10	20.50	197.18
10:54:00	05:00	200	21.57	7.32	249.74	0.02	0.14	18.40	-138.90
10:59:00	10:00	200	21.59	7.38	246.03	0.02	0.07	18.30	-141.65
11:04:00	15:00	200	21.58	7.35	240.13	0.02	0.04	18.30	-148.25
11:09:00	20:00	200	21.58	7.34	238.56	0.02	0.03	18.20	-157.18

Constituent Sampled	Container	Number	Preservative
App III metals	250 mL Plastic	1	HNO3
App IV Metals/Mercury	250 mL Plastic	1	HNO3
F, SO4, Cl	250 mL Plastic	1	None
RAD 226/228	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	Other

Comments: None

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: _____

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: _____

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-1D
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	09:36:00

			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:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-40
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	15:38:00

			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:				
	Area around well needs to be cleared.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-1I
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	09:56:00

			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:	AP-2
Permit Number:	
Well ID:	YGWA-2I
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:01:00

			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:	AP-2
Permit Number:	
Well ID:	YGWA-3I
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:08:00

			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:	AP-2
Permit Number:	
Well ID:	YGWA-3D
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:10:00

			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:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-20S
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	10:23:00

			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 area and path to well needs to be cleared of vegetation.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-14S
Person Gauging:	Jake Swanson
Date:	8/14/2023
Time:	10:23:00

			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:				
	Grass needs to be cut				
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:	GWA-2
Person Gauging:	Mark Chest
Date:	8/14/2023
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:				
	Needs new label				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-21I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
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:				
	Well area needs to be cleared of vegetation.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-2
Permit Number:	
Well ID:	YGWA-30I
Person Gauging:	Jake Swanson
Date:	8/14/2023
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:				
	Grass needs to be cut				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5D
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	10:47:00

			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:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	10:48:00

			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:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-4I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	11:01:00

			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 area needs to be cleared.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18I
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	12:01:00

			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:				
	Need to clear area by well				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18S
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	12:05:00

			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:				
	Need to clear area by well.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-17S
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	12:15:00

			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:				
	Need to clear area by well.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	AP-1
Permit Number:	
Well ID:	YGWA-47
Person Gauging:	Mark Chest
Date:	8/14/2023
Time:	12:15:00

			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:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-39
Person Gauging:	Kim Lapszynski
Date:	8/14/2023
Time:	15:32:00

			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:				
	Area around well needs to be cleared.				
8	Date by when corrective actions are needed:				

Appendix C

Statistical Analysis Results

Appendix III Statistically Significant Increase Summary (August 2023)

Appendix III Parameter	Monitoring Well
Boron	GWC-4R
Calcium	GWC-1R, GWC-2R, GWC-5R
Chloride	GWC-4R
Sulfate	GWC-1R, GWC-2R, GWC-5R
Total Dissolved Solids	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

GROUNDWATER STATS CONSULTING

February 28, 2024

Southern Company Services
Attn: Ms. Lauren Hartley
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant Yates CCR Landfill Gypsum Stack
August 2023 Statistical Analysis

Dear Ms. Hartley,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2023 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 (CCR) 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, upgradient well GWA-1, which has not been sampled since 2004, provides historical information about upgradient groundwater quality for the majority of Georgia EPD constituents. GWA-1 is included on the time series graphs and box plots as reference data, but no formal statistics for this well are included in this report.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician of 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. Summaries of all well/constituent pairs containing 100% non-detects for Appendix I and II parameters, and downgradient wells containing 100% non-detects for Appendix IV parameters follow this letter.

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.

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 interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. In order to account for varying reporting limits upgradient of the facility and maintain interwell upper tolerance limits that are conservative (i.e., lower) from a regulatory perspective, the most recent reporting limit of 0.0005 mg/L was substituted for beryllium. For intrawell prediction limits, the most recent reporting limit for a given well/constituent will be substituted for any non-detect values. Regarding the cases of cobalt and zinc, due to varying detection limits in individual wells, the most recent reporting limits of 0.005 mg/L and 0.01 mg/L, were respectfully substituted across all wells for all calculations and reports. During this event, elevated reporting limits occurred for boron and lithium due to higher dilution factors at some wells; therefore, current reporting limits of 0.04 mg/L and 0.03 mg/L were substituted across all wells for each respective constituent.

During 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 either 100% non-detect or does not have any trace values close to the reporting limit in all downgradient 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, 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 for parametric limits. 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 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.

Summary of Original Background Screenings – State and Federal

Georgia EPD Appendix I & II Constituents – Conducted in August 2019

Outlier Screening

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 concentrations. A list of all flagged outliers is presented in the Outlier Summary.

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.

Seasonality

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.

Trend Testing

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test, which tests for statistically significant increasing or decreasing trends, was used to evaluate data at all upgradient wells and downgradient wells with detections.

In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different from current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

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 were 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 are re-evaluated during subsequent background updates.

CCR Appendix III Constituents – Conducted in April 2019

Outlier Screening

Data from each well/constituent pair were evaluated for outliers using the Tukey box plot method. A summary of those findings was submitted with the report. 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.

Seasonality

No seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were required.

Trend Testing

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 period for parameters evaluated using intrawell methods at all wells or for parameters evaluated using interwell methods in upgradient wells, historical measurements may require deselection in order to maintain conservative (i.e., lower) limits.

Summary of Background Updates – State and Federal

Georgia EPD Appendix I & II and CCR Appendix III – March 2022

Outlier Analysis

Prior to updating background data, visual screening and Tukey's outlier test was used to evaluate data for suspected outliers in upgradient and downgradient wells through August 2021 for constituents tested using intrawell prediction limits and in pooled upgradient well data for constituents tested using interwell prediction and tolerance limits.

All of the more recent compliance measurements appeared stable with no spurious measurements compared to the previously screened historical data sets; therefore, no new outliers were flagged except for the most recent high reported measurements of cobalt in upgradient well GWA-2. These values were flagged in order to maintain conservative (i.e., lower) statistical limits. A summary of all flagged outliers follows this letter (Figure C).

Mann-Whitney Comparison of Medians

For constituents tested using intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through October 2018 for state constituents and through February 2019 for federal constituents to new compliance samples at each well through August 2021. When the medians of the two groups are not statistically significantly different at the 99% confidence level, background data sets are updated to include the newer compliance data.

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, background data sets are not updated unless further research provides reasonable justification that the changes in concentrations reflect a shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

All records with statistically significant Mann-Whitney results for upgradient and downgradient wells were updated. Similar shifts were noted in downgradient water quality conditions compared to those observed upgradient of the facility, such as in the case of the statistically significant increasing medians identified for zinc in upgradient well GWA-2R and downgradient well GWC-5R. Previously truncated records for barium at downgradient wells GWC-4R and GWC-5R were also updated with more recent data through 8/18/2021.

The statistically significant decreases identified in medians were either due to more recent reported trace values compared to previously reported non-detects, or variation in the records with lower compliance medians. Additionally, the compliance medians for well/constituent pairs containing variation in the record were lower than historical medians but similar to historical concentrations. Since the statistically significant decreases in medians between historical and compliance data sets signify lower concentrations and, generally, more conservative (i.e., lower) statistical limits, these cases were updated with more recent data.

In the case of pH at wells GWC-2R and GWC-5R, while more recent reported measurements were slightly lower than those reported historically, the measurements are similar to those reported in upgradient wells across all units (as may be seen on the time series graphs). Therefore, these records were also updated. Summaries of the Mann-Whitney test results for the state and federal parameters were included with the background update.

Trend Tests

For constituents requiring interwell prediction limits (boron, calcium, chloride, sulfate, and TDS), the Sen's Slope/Mann Kendall trend test, which tests for statistically significant increasing or decreasing trends, was used to evaluate data through August 2022 at all upgradient wells.

Several statistically significant increasing and decreasing trends were noted. However, since these are upgradient wells, the trends are likely the result of spatial variation, and the patterns observed in these wells could reappear later in downgradient wells. Therefore, none of the records were adjusted.

Statistical Analysis of August 2023 Samples

Georgia EPD Appendix I & II Constituents – August 2023

Intrawell Prediction Limits

Intrawell limits constructed from 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 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 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 spatial 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 2021, except for the cases mentioned above and listed in the background date range table (Figure D). Additionally, no statistical analyses were included for well/constituent pairs containing 100% non-detects.

Note that during this sample event, the reporting limit of 0.0005 mg/L for beryllium was substituted across all wells and resulted in slight changes to prediction limits. No significant changes occurred.

An update was made to the Sanitas™ statistical software in October 2022 that determines the percentage of non-detects within a given background record rather than all records evaluated for a given constituent. Simple substitution of ½ the reporting limit is applied when the percentage of non-detects is <15% in accordance with the USEPA Unified Guidance (2009). No significant changes resulted from this implementation.

Compliance data from the August 2023 sample event are compared to the intrawell background limits. A statistical exceedance was identified in the following well:

- Arsenic: GWC-5R
- Cobalt: GWA-2 (upgradient)
- Selenium: GWC-1R

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.

Trend Test Evaluation – Appendix I & II

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 at the 99% confidence level. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of variability in groundwater unrelated to practices at the site. A summary and graphical presentation of the trend test results follows this letter (Figure G). Significant trends were identified for the following Appendix I & II well/constituent pairs:

Increasing:
- Selenium: YGWA-17S (upgradient)

Decreasing:
- None

Note that a statistically significant increasing trend was identified for selenium at upgradient well YGWA-17. The slope, however, is zero at this well and represent the median slope of all the possible pairwise slopes of the data evaluated.

CCR Appendix III Constituents – August 2023

Intrawell Prediction Limits

For fluoride and pH, intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical data through August 2021 (Figure E). The August 2023 sample from each well is compared to the background limit to determine whether there are exceedances over background. An exceedance was identified for the following well/constituent pair:

- pH: GWA-2 (upgradient)

Interwell Prediction Limits

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 reassessed for potential outliers during this analysis. No additional outliers were flagged for Appendix III parameters using interwell prediction limits. 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 all of the Yates units through August 2023 (Figure F). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent.

The August 2023 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, and GWC-5R
- Chloride: GWC-4R
- Sulfate: GWC-1R, GWC-2R, and GWC-5R
- TDS: GWC-1R, GWC-2R, GWC-4R, GWC-5R, and GWC-6R

Trend Test Evaluation – Appendix III

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 at the 99% confidence level. Trend tests were also performed for upgradient wells across all Yates units (Figure G). When trends are noted upgradient of the facility, it is an indication that groundwater concentrations are changing over time independent from the facility. Statistically significant trends were identified among the following well/constituent pairs:

Trends – Interwell Prediction Limit Exceedances

Increasing

- Boron: YGWA-39 (upgradient)
- Calcium: GWA-2, YGWA-1D, YGWA-5I, YGWA-17S, YGWA-21I, YGWA-39 (all upgradient) and GWC-2R
- Chloride: GWA-2, YGWA-17S, YGWA-18I, YGWA-20S, and YGWA-40 (all upgradient)
- Sulfate: GWA-2, YGWA-1D, YGWA-2I YGWA-3D, YGWA-3I, YGWA-5I (all upgradient) and GWC-2R
- TDS: YGWA-21I, YGWA-39 (both upgradient), and GWC-2R

Decreasing

- Boron: YGWA-40 (upgradient)
- Calcium: YGWA-1I, YGWA-5D, YGWA-18S, and YGWA-47 (all upgradient)
- Chloride: YGWA-3D, YGWA-5D, and YGWA-47 (all upgradient)
- Sulfate: YGWA-5D, YGWA-18I, YGWA-39, YGWA-40, and YGWA-47 (all upgradient)
- TDS: YGWA-47 (upgradient)

Statistical Analysis of CCR Appendix IV Parameters – August 2023

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.

The reported measurements of cobalt from August 2020 through August 2022 in upgradient well GWA-2 were previously flagged as outliers as these measurements were two orders of magnitude higher than remaining measurements at this well. This step results in statistical limits that are conservative (i.e., lower) from a regulatory perspective.

If further studies indicate these measurements represent variation in groundwater quality, the values will be re-evaluated for construction of interwell prediction limits. No additional values were flagged as outliers and a summary of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

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 H). 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 (i.e., false positive rate) is too small to display in the results table.

Groundwater Protection Standards

The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a). As described in 40 CFR §257.95(h) (1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified levels have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR Rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). On February 22, 2022, Georgia EPD incorporated the CCR-rule specified limits for these constituents (391-3-4-.10(6)(a)) which are utilized in this analysis. Following Georgia EPD Rule requirements and the Federal CCR requirements, GWPS were established for statistical comparison of Appendix IV constituents for the August 2023 sample event (Figure I).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for the Appendix IV constituents in each downgradient well using all historical data since 2016 (Figure J). As mentioned above, confidence intervals were not required for downgradient well/constituent pairs containing 100% non-detects since 2016.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals, either parametric or nonparametric, depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the appropriate order statistics, depending on the sample size, as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The achievable confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. A summary of the confidence intervals and complete graphical results follows this letter. No exceedances were identified for the confidence intervals.

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test at the 95% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable. Although the trend tests for Assessment monitoring pairs were previously evaluated using 99% confidence, the 95% confidence level more rapidly identifies statistically significant trends. Additionally, the 95% confidence is recommended in cases with limited sample sizes and, particularly, for new assessment wells. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site for the same constituents. When trends are present in upgradient wells, it is an indication of variability in groundwater quality unrelated to practices at the site. Since no exceedances were identified, no trend tests were required.

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 T. Collins
Project Manager

Kristina L. Rayner
Senior Statistician

Date Ranges

Date: 10/19/2023 9:05 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Barium (mg/L)

GWC-4R background:3/28/2011-8/18/2021

GWC-5R background:8/14/2013-8/18/2021

100% Non-Detects: Appendix I & II

Analysis Run 10/19/2023 9:04 AM 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)
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-6R

Thallium (mg/L)
GWC-1R, GWC-3R, GWC-4R, GWC-6R

100% Non-Detects: Appendix IV Downgradient

Analysis Run 10/19/2023 12:06 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

Antimony (mg/L)
GWC-1R, GWC-3R, GWC-6R

Beryllium (mg/L)
GWC-6R

Cadmium (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

Appendix I & II Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 10/24/2023, 8:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GWC-5R**	**0.005**	**n/a**	**8/15/2023**	**0.0053**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**
Cobalt (mg/L)	**GWA-2**	**0.006801**	**n/a**	**8/15/2023**	**0.031**	**Yes**	**32**	**0.00327**	**0.001613**	**34.38**	**Kaplan-Meier**	**No**	**0.0005852**	**Param Intra 1 of 2**
Selenium (mg/L)	**GWC-1R**	**0.019**	**n/a**	**8/16/2023**	**0.02**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**

Appendix I & II Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 10/24/2023, 8:06 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	8/15/2023	0.003ND	No	36	n/a	n/a	91.67	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-2R	0.003	n/a	8/16/2023	0.003ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-4R	0.003	n/a	8/15/2023	0.003ND	No	32	n/a	n/a	90.63	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-5R	0.003	n/a	8/15/2023	0.003ND	No	27	n/a	n/a	92.59	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-2	0.005	n/a	8/15/2023	0.005ND	No	36	n/a	n/a	94.44	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-1R	0.005	n/a	8/16/2023	0.005ND	No	27	n/a	n/a	77.78	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-2R	0.005	n/a	8/16/2023	0.005ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-3R	0.005	n/a	8/16/2023	0.005ND	No	27	n/a	n/a	81.48	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-4R	0.005	n/a	8/15/2023	0.005ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	**GWC-5R**	**0.005**	**n/a**	**8/15/2023**	**0.0053**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**
Arsenic (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.005ND	No	33	n/a	n/a	72.73	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-2	0.07655	n/a	8/15/2023	0.03	No	36	0.04995	0.01231	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-1R	0.09209	n/a	8/16/2023	0.042	No	27	0.04909	0.01922	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-2R	0.13	n/a	8/16/2023	0.026	No	32	n/a	n/a	0	n/a	n/a	0.001803	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-3R	0.08517	n/a	8/16/2023	0.0096	No	27	0.3004	0.06239	0	None	x^(1/3)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-4R	0.06816	n/a	8/15/2023	0.022	No	28	0.3039	0.04699	0	None	x^(1/3)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-5R	0.058	n/a	8/15/2023	0.01	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-6R	0.09329	n/a	8/15/2023	0.028	No	33	0.04743	0.02102	0	None	No	0.0005852	Param Intra 1 of 2
Beryllium (mg/L)	GWC-1R	0.0005	n/a	8/16/2023	0.00033J	No	27	n/a	n/a	48.15	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWC-2R	0.0005	n/a	8/16/2023	0.00021J	No	32	n/a	n/a	71.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-3R	0.001019	n/a	8/16/2023	0.0006	No	27	0.02024	0.00522	25.93	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Beryllium (mg/L)	GWC-4R	0.0005	n/a	8/15/2023	0.0005ND	No	32	n/a	n/a	90.63	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-5R	0.0037	n/a	8/15/2023	0.0033	No	27	n/a	n/a	25.93	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Cadmium (mg/L)	GWA-2	0.0005	n/a	8/15/2023	0.0005ND	No	36	n/a	n/a	100	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-1R	0.0025	n/a	8/16/2023	0.00019J	No	27	n/a	n/a	81.48	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-2R	0.0005	n/a	8/16/2023	0.00012J	No	32	n/a	n/a	81.25	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-3R	0.0005	n/a	8/16/2023	0.00013J	No	27	n/a	n/a	62.96	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-4R	0.0005	n/a	8/15/2023	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-5R	0.00114	n/a	8/15/2023	0.0011	No	27	4.6e-10	4.5e-10	29.63	Kaplan-Meier	x^3	0.0005852	Param Intra 1 of 2
Chromium (mg/L)	GWA-2	0.0084	n/a	8/15/2023	0.005ND	No	36	n/a	n/a	77.78	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-1R	0.01	n/a	8/16/2023	0.0016J	No	27	n/a	n/a	44.44	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWC-2R	0.005	n/a	8/16/2023	0.005ND	No	32	n/a	n/a	84.38	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-3R	0.005	n/a	8/16/2023	0.005ND	No	27	n/a	n/a	29.63	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWC-4R	0.0062	n/a	8/15/2023	0.005ND	No	32	n/a	n/a	81.25	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-5R	0.01	n/a	8/15/2023	0.0018J	No	27	n/a	n/a	18.52	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWC-6R	0.01	n/a	8/15/2023	0.0021J	No	33	n/a	n/a	33.33	n/a	n/a	0.001701	NP Intra (normality) 1 of 2
Cobalt (mg/L)	**GWA-2**	**0.006801**	**n/a**	**8/15/2023**	**0.031**	**Yes**	**32**	**0.00327**	**0.001613**	**34.38**	**Kaplan-Meier**	**No**	**0.0005852**	**Param Intra 1 of 2**
Cobalt (mg/L)	GWC-1R	0.015	n/a	8/16/2023	0.00063J	No	27	n/a	n/a	37.04	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Cobalt (mg/L)	GWC-2R	0.04612	n/a	8/16/2023	0.011	No	32	0.02126	0.01136	3.125	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-3R	0.011	n/a	8/16/2023	0.0032J	No	27	n/a	n/a	74.07	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-4R	0.006272	n/a	8/15/2023	0.002J	No	32	0.002253	0.001836	28.13	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-5R	0.005	n/a	8/15/2023	0.0012J	No	27	n/a	n/a	81.48	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.005ND	No	33	n/a	n/a	96.97	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-2	0.0074	n/a	8/15/2023	0.0011J	No	29	n/a	n/a	44.83	n/a	n/a	0.002172	NP Intra (normality) 1 of 2
Copper (mg/L)	GWC-1R	0.005	n/a	8/16/2023	0.005ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-2R	0.005	n/a	8/16/2023	0.005ND	No	25	n/a	n/a	96	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-3R	0.016	n/a	8/16/2023	0.005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-4R	0.005	n/a	8/15/2023	0.005ND	No	25	n/a	n/a	84	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-5R	0.005	n/a	8/15/2023	0.0012J	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.0017J	No	26	n/a	n/a	50	n/a	n/a	0.002667	NP Intra (normality) 1 of 2
Lead (mg/L)	GWA-2	0.001	n/a	8/15/2023	0.001ND	No	36	n/a	n/a	97.22	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-1R	0.001	n/a	8/16/2023	0.001ND	No	27	n/a	n/a	92.59	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-2R	0.001	n/a	8/16/2023	0.001ND	No	32	n/a	n/a	78.13	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-3R	0.001	n/a	8/16/2023	0.001ND	No	27	n/a	n/a	74.07	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-4R	0.001	n/a	8/15/2023	0.001ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-5R	0.001	n/a	8/15/2023	0.001ND	No	27	n/a	n/a	77.78	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2

Appendix I & II Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 10/24/2023, 8:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	GWA-2	0.0002	n/a	8/15/2023	0.0002ND	No	36	n/a	n/a	94.44	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-1R	0.0002	n/a	8/16/2023	0.0002ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-2R	0.0002	n/a	8/16/2023	0.0002ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-3R	0.00043	n/a	8/16/2023	0.0002ND	No	27	n/a	n/a	88.89	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-4R	0.0002	n/a	8/15/2023	0.0002ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-5R	0.0002	n/a	8/15/2023	0.0002ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-6R	0.0002	n/a	8/15/2023	0.0002ND	No	33	n/a	n/a	93.94	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-2	0.03314	n/a	8/15/2023	0.0098	No	29	-5.033	0.7342	10.34	None	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-1R	0.008772	n/a	8/16/2023	0.0026J	No	20	-6.236	0.6381	30	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-2R	0.0096	n/a	8/16/2023	0.005ND	No	25	n/a	n/a	44	n/a	n/a	0.002832	NP Intra (normality) 1 of 2
Nickel (mg/L)	GWC-3R	0.0054	n/a	8/16/2023	0.005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-4R	0.005	n/a	8/15/2023	0.00096J	No	25	n/a	n/a	60	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-5R	0.005199	n/a	8/15/2023	0.001J	No	20	0.0448	0.01162	20	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.005ND	No	26	n/a	n/a	65.38	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-1R**	**0.019**	**n/a**	**8/16/2023**	**0.02**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**
Selenium (mg/L)	GWC-2R	0.01	n/a	8/16/2023	0.0033J	No	32	n/a	n/a	50	n/a	n/a	0.001803	NP Intra (normality) 1 of 2
Selenium (mg/L)	GWC-3R	0.017	n/a	8/16/2023	0.0052	No	27	n/a	n/a	40.74	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Selenium (mg/L)	GWC-4R	0.01445	n/a	8/15/2023	0.0021J	No	32	0.07177	0.02213	25	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-5R	0.0414	n/a	8/15/2023	0.024	No	27	0.02145	0.008917	3.704	None	No	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-6R	0.0051	n/a	8/15/2023	0.005ND	No	33	n/a	n/a	51.52	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-2	0.001	n/a	8/15/2023	0.001ND	No	35	n/a	n/a	88.57	n/a	n/a	0.001497	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-2R	0.001	n/a	8/16/2023	0.001ND	No	30	n/a	n/a	96.67	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-5R	0.001	n/a	8/15/2023	0.00029J	No	26	n/a	n/a	96.15	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-2	0.01	n/a	8/15/2023	0.01ND	No	31	n/a	n/a	83.87	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-1R	0.01	n/a	8/16/2023	0.01ND	No	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-2R	0.01	n/a	8/16/2023	0.01ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-3R	0.01	n/a	8/16/2023	0.01ND	No	22	n/a	n/a	90.91	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-4R	0.01	n/a	8/15/2023	0.01ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-5R	0.01	n/a	8/15/2023	0.01ND	No	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-6R	0.01	n/a	8/15/2023	0.01ND	No	28	n/a	n/a	78.57	n/a	n/a	0.002337	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-2	0.033	n/a	8/15/2023	0.008J	No	30	n/a	n/a	10	n/a	n/a	0.002008	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-1R	0.01	n/a	8/16/2023	0.01ND	No	22	n/a	n/a	31.82	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-2R	0.01022	n/a	8/16/2023	0.01ND	No	27	-5.718	0.507	18.52	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-3R	0.01375	n/a	8/16/2023	0.01ND	No	21	0.006395	0.003152	9.524	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-4R	0.01	n/a	8/15/2023	0.01ND	No	26	n/a	n/a	69.23	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-5R	0.02878	n/a	8/15/2023	0.022	No	23	0.01173	0.007426	0	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-6R	0.01	n/a	8/15/2023	0.01ND	No	28	n/a	n/a	42.86	n/a	n/a	0.002337	NP Intra (normality) 1 of 2

Appendix III Intrawell Prediction Limits - Significant Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:50 AM

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**	**6.968**	**5.399**	**8/15/2023**	**5.3**	**Yes**	**30**	**6.184**	**0.3941**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:50 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	0.187	n/a	8/15/2023	0.065J	No	17	0.09947	0.04015	5.882	None	No	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-1R	0.1	n/a	8/16/2023	0.1ND	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-2R	0.58	n/a	8/16/2023	0.1ND	No	17	n/a	n/a	70.59	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-3R	0.4247	n/a	8/16/2023	0.087J	No	17	-2.596	0.7975	41.18	Kaplan-Meier	ln(x)	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-4R	0.15	n/a	8/15/2023	0.1ND	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-5R	0.37	n/a	8/15/2023	0.056J	No	17	n/a	n/a	52.94	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-6R	0.28	n/a	8/15/2023	0.1ND	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (S.U.)	**GWA-2**	**6.968**	**5.399**	**8/15/2023**	**5.3**	**Yes**	**30**	**6.184**	**0.3941**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	GWC-1R	6.8	4.49	8/16/2023	5.08	No	18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-2R	6.8	4.35	8/16/2023	4.89	No	25	n/a	n/a	0	n/a	n/a	0.005664	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-3R	5.572	4.528	8/16/2023	4.64	No	18	25.78	2.447	0	None	x^2	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-4R	6.16	5.07	8/15/2023	5.74	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-5R	5.568	4.599	8/15/2023	4.66	No	19	5.084	0.2272	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-6R	6.79	5.2	8/15/2023	5.4	No	28	n/a	n/a	0	n/a	n/a	0.004674	NP Intra (normality) 1 of 2

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:54 AM

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	8/15/2023	1.9	Yes	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GWC-1R	37	n/a	8/16/2023	156	Yes	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2R	37	n/a	8/16/2023	44	Yes	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5R	37	n/a	8/15/2023	145	Yes	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4R	12	n/a	8/15/2023	72.7	Yes	388	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	8/16/2023	722	Yes	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2R	160	n/a	8/16/2023	239	Yes	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5R	160	n/a	8/15/2023	802	Yes	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	GWC-1R	228.9	n/a	8/16/2023	1270	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-2R	228.9	n/a	8/16/2023	450	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-4R	228.9	n/a	8/15/2023	395	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-5R	228.9	n/a	8/15/2023	1520	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-6R	228.9	n/a	8/15/2023	254	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:54 AM

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	8/16/2023	0.019J	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	GWC-2R	0.16	n/a	8/16/2023	0.12	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	GWC-3R	0.16	n/a	8/16/2023	0.04ND	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GWC-4R**	**0.16**	**n/a**	**8/15/2023**	**1.9**	**Yes**	**388**	**n/a**	**n/a**	**51.03**	**n/a**	**n/a**	**0.0000492**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GWC-5R	0.16	n/a	8/15/2023	0.038J	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	GWC-6R	0.16	n/a	8/15/2023	0.04ND	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GWC-1R**	**37**	**n/a**	**8/16/2023**	**156**	**Yes**	**388**	**n/a**	**n/a**	**0.7732**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-2R**	**37**	**n/a**	**8/16/2023**	**44**	**Yes**	**388**	**n/a**	**n/a**	**0.7732**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GWC-3R	37	n/a	8/16/2023	20.5	No	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4R	37	n/a	8/15/2023	34.6	No	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-5R**	**37**	**n/a**	**8/15/2023**	**145**	**Yes**	**388**	**n/a**	**n/a**	**0.7732**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GWC-6R	37	n/a	8/15/2023	28	No	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1R	12	n/a	8/16/2023	5.3	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2R	12	n/a	8/16/2023	7	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-3R	12	n/a	8/16/2023	3.4	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GWC-4R**	**12**	**n/a**	**8/15/2023**	**72.7**	**Yes**	**388**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-5R	12	n/a	8/15/2023	1.9	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6R	12	n/a	8/15/2023	10.4	No	388	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**	**8/16/2023**	**722**	**Yes**	**388**	**n/a**	**n/a**	**5.928**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-2R**	**160**	**n/a**	**8/16/2023**	**239**	**Yes**	**388**	**n/a**	**n/a**	**5.928**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GWC-3R	160	n/a	8/16/2023	84.1	No	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4R	160	n/a	8/15/2023	78.6	No	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-5R**	**160**	**n/a**	**8/15/2023**	**802**	**Yes**	**388**	**n/a**	**n/a**	**5.928**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GWC-6R	160	n/a	8/15/2023	80.1	No	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	**GWC-1R**	**228.9**	**n/a**	**8/16/2023**	**1270**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-2R**	**228.9**	**n/a**	**8/16/2023**	**450**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	GWC-3R	228.9	n/a	8/16/2023	140	No	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	**GWC-4R**	**228.9**	**n/a**	**8/15/2023**	**395**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-5R**	**228.9**	**n/a**	**8/15/2023**	**1520**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-6R**	**228.9**	**n/a**	**8/15/2023**	**254**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	YGWA-39 (bg)	0.02058	92	68	Yes	18	5.556	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.01353	-106	-68	Yes	18	0	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	2.437	87	74	Yes	19	5.263	n/a	0.01	NP
Calcium (mg/L)	GWC-2R	5.97	113	74	Yes	19	5.263	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.134	143	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.0757	-147	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.4931	94	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.08927	-112	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	0.6806	92	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-39 (bg)	2.124	86	68	Yes	18	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-1.099	-122	-68	Yes	18	5.556	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-1.349	-113	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.06491	106	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.2897	101	74	Yes	19	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.6794	162	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-18I (bg)	0.08671	96	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.1049	130	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.03797	-98	-87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.3111	91	68	Yes	18	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.3827	-108	-68	Yes	18	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.6409	-159	-87	Yes	21	0	n/a	0.01	NP
Selenium (mg/L)	YGWA-17S (bg)	0	112	98	Yes	23	73.91	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	12.89	88	74	Yes	19	0	n/a	0.01	NP
Sulfate (mg/L)	GWC-2R	29.48	101	74	Yes	19	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.1191	-112	-87	Yes	21	19.05	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	0.8971	154	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	1.209	91	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-2.62	-107	-68	Yes	18	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.2566	105	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	1.155	119	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-7.156	-120	-68	Yes	18	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-13.93	-138	-68	Yes	18	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-2.402	-162	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.08787	138	87	Yes	21	0	n/a	0.01	NP
TDS (mg/L)	GWC-2R	57.54	107	74	Yes	19	0	n/a	0.01	NP
TDS (mg/L)	YGWA-21I (bg)	9.895	91	87	Yes	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-39 (bg)	27.52	85	68	Yes	18	0	n/a	0.01	NP
TDS (mg/L)	YGWA-47 (bg)	-12.84	-95	-68	Yes	18	0	n/a	0.01	NP

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Arsenic (mg/L)	GWA-2 (bg)	0	-100	-223	No	40	90	n/a	0.01	NP
Arsenic (mg/L)	GWC-5R	-0.000143	-106	-152	No	31	41.94	n/a	0.01	NP
Arsenic (mg/L)	YGWA-14S (bg)	0	-17	-105	No	24	95.83	n/a	0.01	NP
Arsenic (mg/L)	YGWA-17S (bg)	0	-21	-98	No	23	91.3	n/a	0.01	NP
Arsenic (mg/L)	YGWA-18I (bg)	0	-14	-105	No	24	87.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-18S (bg)	0	-14	-105	No	24	87.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-1D (bg)	0.0001308	40	105	No	24	33.33	n/a	0.01	NP
Arsenic (mg/L)	YGWA-1I (bg)	0	-21	-105	No	24	91.67	n/a	0.01	NP
Arsenic (mg/L)	YGWA-20S (bg)	0	-17	-105	No	24	95.83	n/a	0.01	NP
Arsenic (mg/L)	YGWA-21I (bg)	-0.0002072	-68	-105	No	24	37.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-2I (bg)	0.0001028	29	105	No	24	25	n/a	0.01	NP
Arsenic (mg/L)	YGWA-30I (bg)	0	-23	-105	No	24	91.67	n/a	0.01	NP
Arsenic (mg/L)	YGWA-39 (bg)	0	-12	-81	No	20	60	n/a	0.01	NP
Arsenic (mg/L)	YGWA-3D (bg)	0	-57	-105	No	24	75	n/a	0.01	NP
Arsenic (mg/L)	YGWA-3I (bg)	0	-25	-105	No	24	75	n/a	0.01	NP
Arsenic (mg/L)	YGWA-40 (bg)	0	-15	-81	No	20	90	n/a	0.01	NP
Arsenic (mg/L)	YGWA-47 (bg)	0	3	74	No	19	84.21	n/a	0.01	NP
Arsenic (mg/L)	YGWA-4I (bg)	0	-11	-105	No	24	91.67	n/a	0.01	NP
Arsenic (mg/L)	YGWA-5D (bg)	0	23	105	No	24	37.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-5I (bg)	0	-23	-105	No	24	91.67	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	35	74	No	19	68.42	n/a	0.01	NP
Boron (mg/L)	GWC-4R	0.237	41	74	No	19	0	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.0004045	-54	-87	No	21	9.524	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	0.0004386	55	87	No	21	14.29	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-14	-87	No	21	80.95	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	0.0006414	54	87	No	21	28.57	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0.001652	58	87	No	21	42.86	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-13	-87	No	21	71.43	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-5	-87	No	21	90.48	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	0	-28	-87	No	21	57.14	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	2	87	No	21	80.95	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-13	-87	No	21	85.71	n/a	0.01	NP
Boron (mg/L)	**YGWA-39 (bg)**	**0.02058**	**92**	**68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-3D (bg)	0	16	87	No	21	61.9	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-13	-87	No	21	90.48	n/a	0.01	NP
Boron (mg/L)	**YGWA-40 (bg)**	**-0.01353**	**-106**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-47 (bg)	-0.0005874	-51	-68	No	18	5.556	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	13	87	No	21	71.43	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006284	65	87	No	21	19.05	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-11	-87	No	21	66.67	n/a	0.01	NP
Calcium (mg/L)	**GWA-2 (bg)**	**2.437**	**87**	**74**	**Yes**	**19**	**5.263**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-1R	18.25	67	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	**GWC-2R**	**5.97**	**113**	**74**	**Yes**	**19**	**5.263**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-5R	4.311	54	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	0	18	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.134**	**143**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.05034	39	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.0757**	**-147**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1D (bg)**	**0.4931**	**94**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.08927**	**-112**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.02165	43	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**0.6806**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0	1	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0.02343	63	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-39 (bg)**	**2.124**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	YGWA-3D (bg)	0.2668	48	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.5543	85	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.3452	-49	-68	No	18	5.556	n/a	0.01	NP
Calcium (mg/L)	**YGWA-47 (bg)**	**-1.099**	**-122**	**-68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-4I (bg)	0.02012	12	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-1.349**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-5I (bg)**	**0.06491**	**106**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GWA-2 (bg)**	**0.2897**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GWC-4R	4.316	31	74	No	19	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.102	55	87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.6794**	**162**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-18I (bg)**	**0.08671**	**96**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18S (bg)	0.1048	63	87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	0	-24	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	0	-25	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.1049**	**130**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.07755	-57	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.01766	-41	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	-0.01564	-40	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.699	68	68	No	18	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.03797**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-3I (bg)	-0.02296	-79	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-40 (bg)**	**0.3111**	**91**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.3827**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-4I (bg)	0.05782	58	87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.6409**	**-159**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	6	87	No	21	0	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	223	No	40	100	n/a	0.01	NP
Selenium (mg/L)	GWC-1R	0.0001112	87	152	No	31	41.94	n/a	0.01	NP
Selenium (mg/L)	YGWA-14S (bg)	0	39	92	No	22	68.18	n/a	0.01	NP
Selenium (mg/L)	**YGWA-17S (bg)**	**0**	**112**	**98**	**Yes**	**23**	**73.91**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-18I (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-18S (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-1D (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-1I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-20S (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-21I (bg)	0	43	105	No	24	91.67	n/a	0.01	NP
Selenium (mg/L)	YGWA-2I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-30I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-39 (bg)	0	5	81	No	20	95	n/a	0.01	NP
Selenium (mg/L)	YGWA-3D (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-3I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-40 (bg)	0	-14	-81	No	20	45	n/a	0.01	NP
Selenium (mg/L)	YGWA-47 (bg)	0	23	53	No	15	86.67	n/a	0.01	NP
Selenium (mg/L)	YGWA-4I (bg)	0	9	105	No	24	91.67	n/a	0.01	NP
Selenium (mg/L)	YGWA-5D (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-5I (bg)	0	21	105	No	24	95.83	n/a	0.01	NP
Sulfate (mg/L)	**GWA-2 (bg)**	**12.89**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-1R	79.49	61	74	No	19	0	n/a	0.01	NP
Sulfate (mg/L)	**GWC-2R**	**29.48**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-5R	-8.504	-17	-74	No	19	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-14S (bg)	-0.04669	-29	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0	5	87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-18I (bg)**	**-0.1191**	**-112**	**-87**	**Yes**	**21**	**19.05**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-18S (bg)	-0.112	-71	-87	No	21	9.524	n/a	0.01	NP

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Sulfate (mg/L)	**YGWA-1D (bg)**	**0.8971**	**154**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.06392	-13	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	54	87	No	21	71.43	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.1972	-61	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-2I (bg)**	**1.209**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-30I (bg)	-0.03548	-33	-87	No	21	9.524	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-2.62**	**-107**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.2566**	**105**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-3I (bg)**	**1.155**	**119**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-7.156**	**-120**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-13.93**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.0251	16	87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-2.402**	**-162**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.08787**	**138**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GWA-2 (bg)	14.49	72	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	GWC-1R	137.4	61	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	**GWC-2R**	**57.54**	**107**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GWC-4R	30.49	50	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	GWC-5R	20.39	18	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	GWC-6R	-96.36	-55	-74	No	19	0	n/a	0.01	NP
TDS (mg/L)	YGWA-14S (bg)	0.8282	30	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-17S (bg)	2.283	46	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-18I (bg)	-1.363	-33	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-18S (bg)	1.344	26	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-1D (bg)	2.147	46	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-1I (bg)	-0.3083	-7	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-20S (bg)	2.575	48	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	**YGWA-21I (bg)**	**9.895**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-2I (bg)	-0.5892	-11	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-30I (bg)	1.322	26	87	No	21	9.524	n/a	0.01	NP
TDS (mg/L)	**YGWA-39 (bg)**	**27.52**	**85**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-3D (bg)	1.819	27	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-3I (bg)	1.056	15	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-40 (bg)	-6.016	-59	-68	No	18	0	n/a	0.01	NP
TDS (mg/L)	**YGWA-47 (bg)**	**-12.84**	**-95**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-4I (bg)	0.6864	14	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-5D (bg)	-9.186	-72	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-5I (bg)	-0.77	-20	-87	No	21	0	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:03 PM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	n/a	410	88.54	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	458	75.76	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.21	n/a	n/a	n/a	458	2.402	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0011	n/a	n/a	n/a	442	79.86	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.00063	n/a	n/a	n/a	442	94.8	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.0093	n/a	n/a	n/a	410	80.73	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	n/a	452	69.03	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	n/a	437	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	n/a	457	64.33	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.0013	n/a	n/a	n/a	412	86.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	437	26.77	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.00064	n/a	n/a	n/a	366	89.07	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	n/a	401	61.1	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	440	92.73	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	376	97.34	n/a	n/a	NaN	NP Inter(NDs)

YATES LANDFILL GYPSUM STACK GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**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		0.21	2
Beryllium, Total (mg/L)	0.004		0.0011	0.004
Cadmium, Total (mg/L)	0.005		0.00063	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1
Cobalt, Total (mg/L)	n/a	0.006	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)	n/a	0.015	0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.00064	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.014	0.1
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*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

Appendix IV Confidence Intervals - All Results (No Significant)

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:08 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-2R	0.003	0.003	0.006	No	36	97.22	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-4R	0.003	0.0017	0.006	No	36	86.11	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-5R	0.003	0.00054	0.006	No	31	93.55	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-1R	0.005	0.0047	0.01	No	31	70.97	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-2R	0.005	0.005	0.01	No	36	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-3R	0.005	0.0028	0.01	No	31	80.65	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-4R	0.005	0.0013	0.01	No	36	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-5R	0.005	0.0012	0.01	No	31	41.94	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-6R	0.005	0.0023	0.01	No	37	75.68	None	No	0.01	NP (NDs)
Barium (mg/L)	GWC-1R	0.05782	0.0417	2	No	31	0	None	No	0.01	Param.
Barium (mg/L)	GWC-2R	0.0632	0.04593	2	No	36	0	None	x^(1/3)	0.01	Param.
Barium (mg/L)	GWC-3R	0.03224	0.01781	2	No	31	0	None	x^(1/3)	0.01	Param.
Barium (mg/L)	GWC-4R	0.03721	0.02503	2	No	36	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-5R	0.036	0.014	2	No	31	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-6R	0.05375	0.03724	2	No	37	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-1R	0.0005	0.00013	0.004	No	31	41.94	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-2R	0.0005	0.00023	0.004	No	36	63.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-3R	0.0005377	0.0003416	0.004	No	31	22.58	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GWC-4R	0.0005	0.00013	0.004	No	36	83.33	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-5R	0.0023	0.0005	0.004	No	31	22.58	None	No	0.01	NP (normality)
Cadmium (mg/L)	GWC-1R	0.0025	0.00026	0.005	No	31	70.97	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-2R	0.0005	0.00016	0.005	No	36	77.78	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-3R	0.0005	0.00021	0.005	No	31	58.06	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-4R	0.0005	0.0005	0.005	No	36	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-5R	0.0009026	0.0006444	0.005	No	31	25.81	Kaplan-Meier	x^2	0.01	Param.
Chromium (mg/L)	GWC-1R	0.01	0.0012	0.1	No	31	38.71	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2R	0.005	0.0017	0.1	No	36	86.11	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-3R	0.0023	0.0011	0.1	No	31	32.26	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-4R	0.005	0.0013	0.1	No	36	80.56	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-5R	0.0028	0.0019	0.1	No	31	16.13	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-6R	0.0028	0.0014	0.1	No	37	29.73	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1R	0.005	0.0008	0.035	No	31	32.26	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-2R	0.02426	0.01442	0.035	No	36	2.778	None	No	0.01	Param.
Cobalt (mg/L)	GWC-3R	0.0074	0.0041	0.035	No	31	64.52	None	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-4R	0.002908	0.001456	0.035	No	36	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	GWC-5R	0.005	0.0012	0.035	No	31	70.97	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-6R	0.005	0.005	0.035	No	37	97.3	Kaplan-Meier	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1R	0.9913	0.5969	6.92	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2R	1.343	0.6551	6.92	No	18	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-3R	0.9406	0.2756	6.92	No	18	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-4R	0.5846	0.2648	6.92	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-5R	0.9083	0.3714	6.92	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-6R	0.9828	0.4593	6.92	No	18	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GWC-1R	0.1	0.06	4	No	21	80.95	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-2R	0.58	0.08	4	No	21	76.19	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-3R	0.134	0.06027	4	No	21	33.33	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	GWC-4R	0.11	0.08	4	No	21	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-5R	0.11	0.056	4	No	21	42.86	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-6R	0.1	0.07	4	No	21	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-1R	0.001	0.000067	0.015	No	31	93.55	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-2R	0.001	0.0001	0.015	No	36	80.56	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-3R	0.001	0.00015	0.015	No	31	77.42	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-4R	0.001	0.001	0.015	No	36	97.22	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-5R	0.001	0.00019	0.015	No	31	80.65	None	No	0.01	NP (NDs)

Appendix IV Confidence Intervals - All Results (No Significant)

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:08 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GWC-1R	0.0024	0.0013	0.04	No	19	15.79	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-2R	0.0053	0.0036	0.04	No	19	15.79	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-3R	0.03	0.0012	0.04	No	19	78.95	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-4R	0.03	0.00098	0.04	No	19	63.16	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-5R	0.03	0.0014	0.04	No	19	42.11	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-6R	0.03	0.0017	0.04	No	19	26.32	None	No	0.01	NP (normality)
Mercury (mg/L)	GWC-1R	0.0002	0.0002	0.002	No	31	96.77	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-2R	0.0002	0.0002	0.002	No	36	97.22	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-3R	0.0002	0.000064	0.002	No	31	90.32	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-4R	0.0002	0.0002	0.002	No	36	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-5R	0.0002	0.0002	0.002	No	31	96.77	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-6R	0.0002	0.0002	0.002	No	37	94.59	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1R	0.011	0.0066	0.05	No	31	41.94	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2R	0.01	0.0032	0.05	No	36	44.44	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-3R	0.01	0.0045	0.05	No	31	35.48	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-4R	0.0057	0.003575	0.05	No	36	22.22	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	GWC-5R	0.02496	0.01757	0.05	No	31	3.226	None	No	0.01	Param.
Selenium (mg/L)	GWC-6R	0.005	0.0037	0.05	No	37	56.76	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-2R	0.001	0.001	0.002	No	34	97.06	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-5R	0.001	0.00029	0.002	No	30	93.33	None	No	0.01	NP (NDs)

Table of Contents

FIGURE A.

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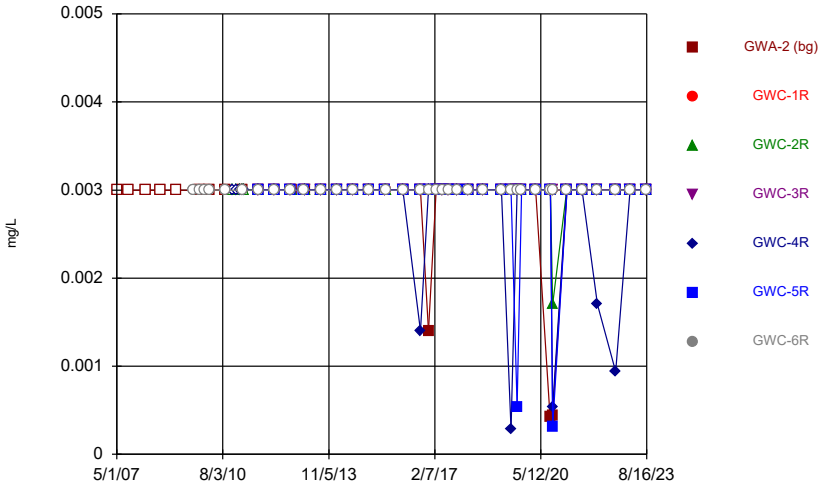
Time Series



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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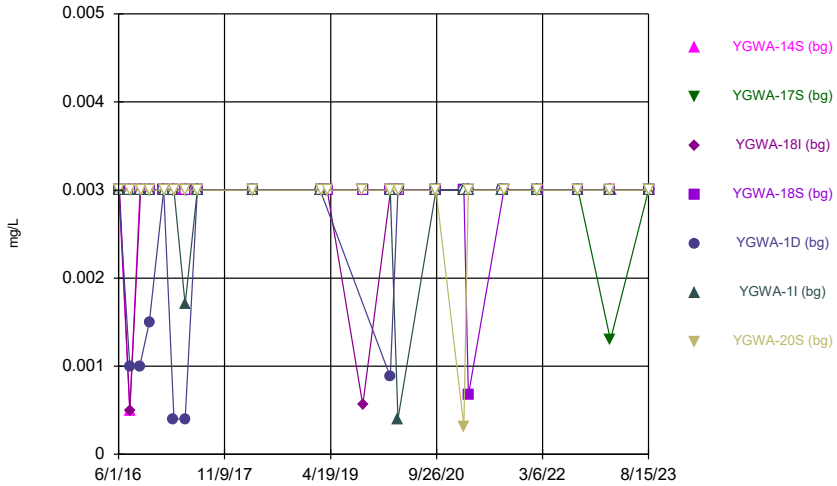

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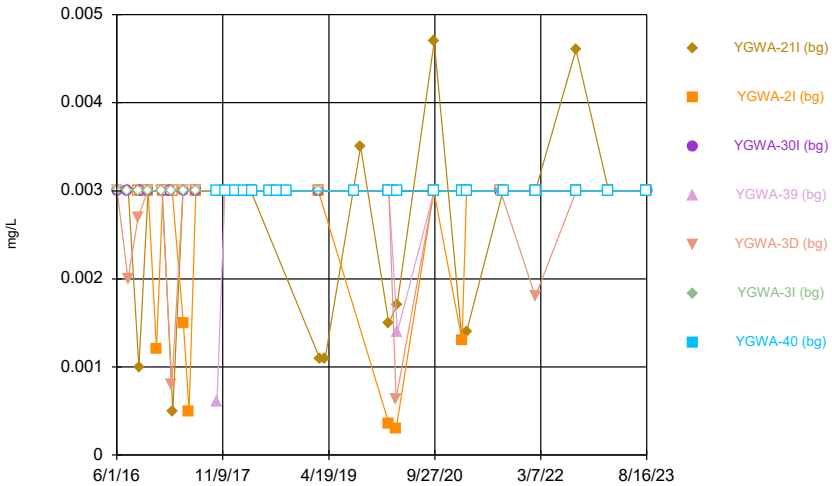

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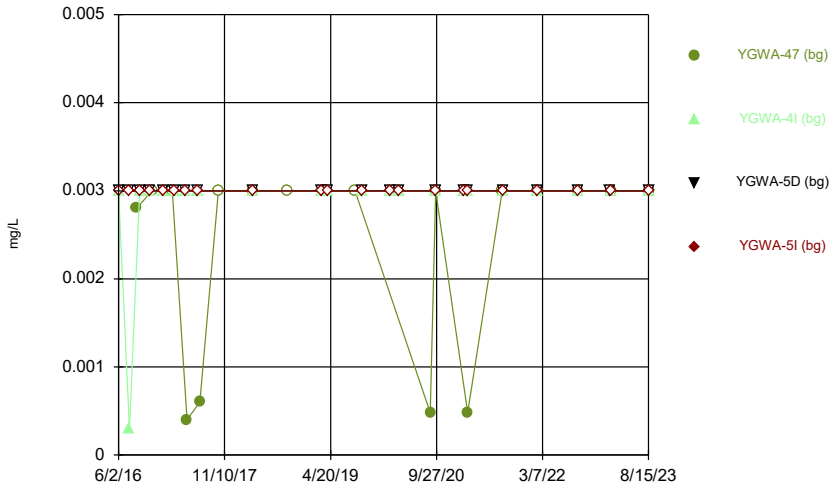

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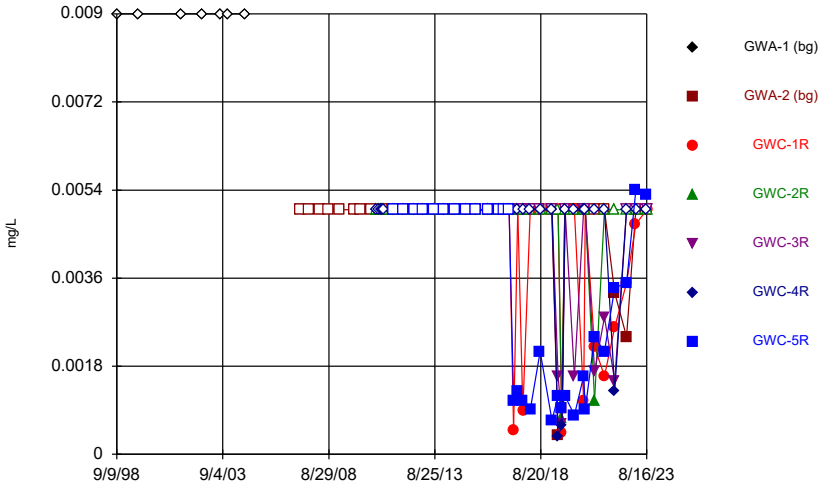

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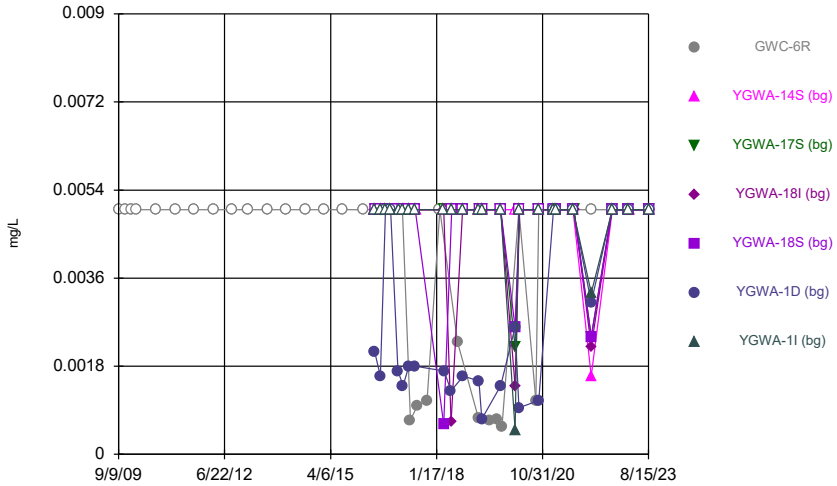

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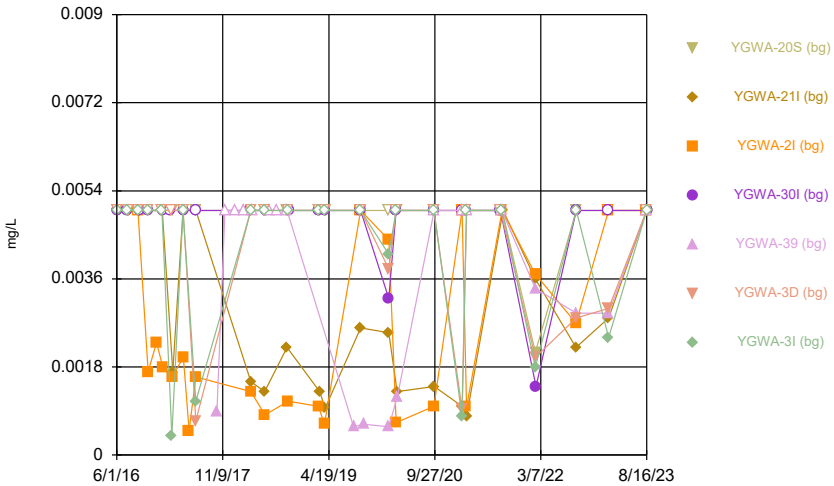

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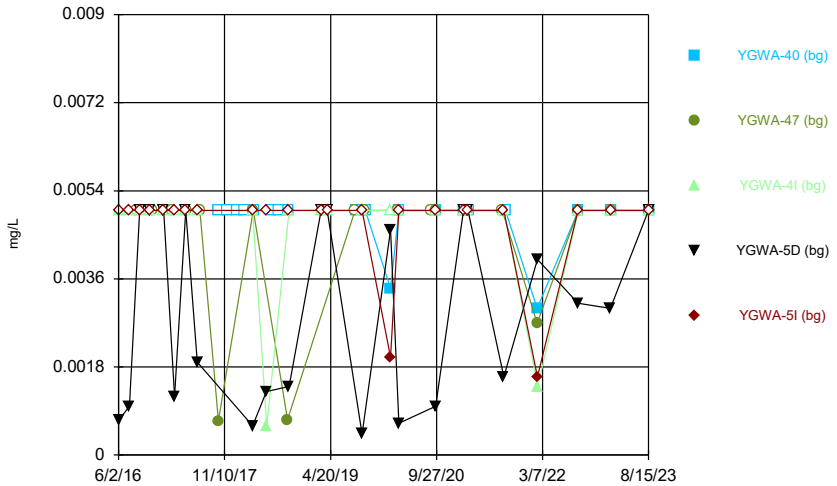

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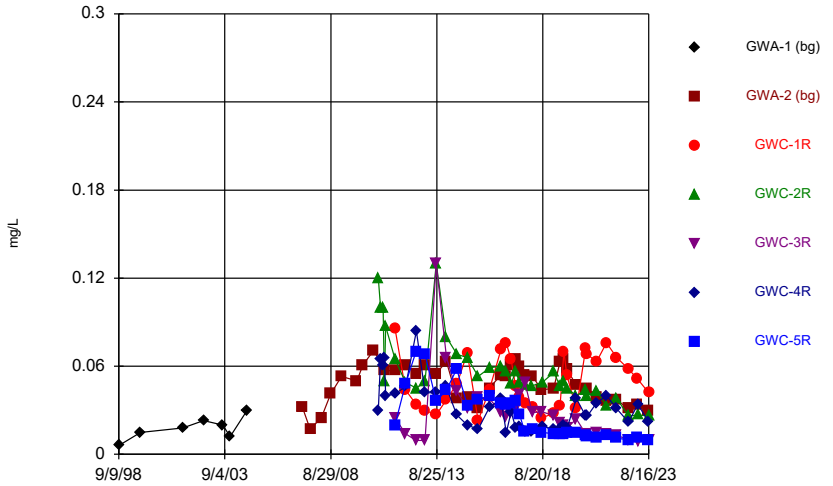

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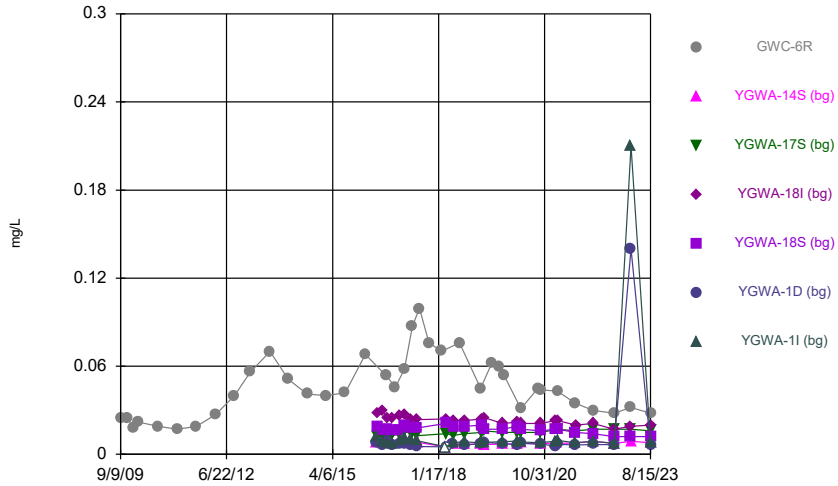

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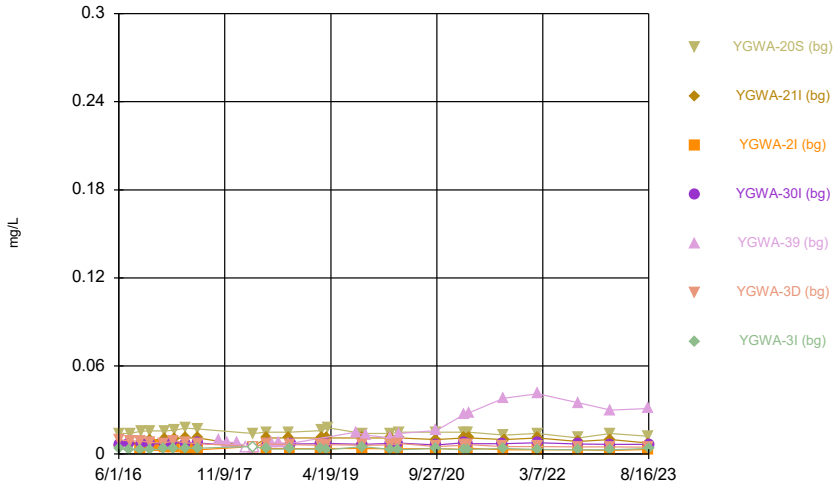

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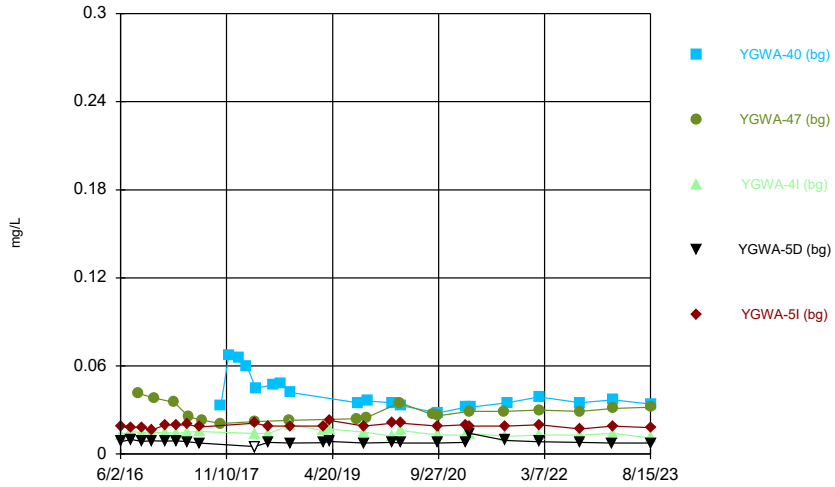

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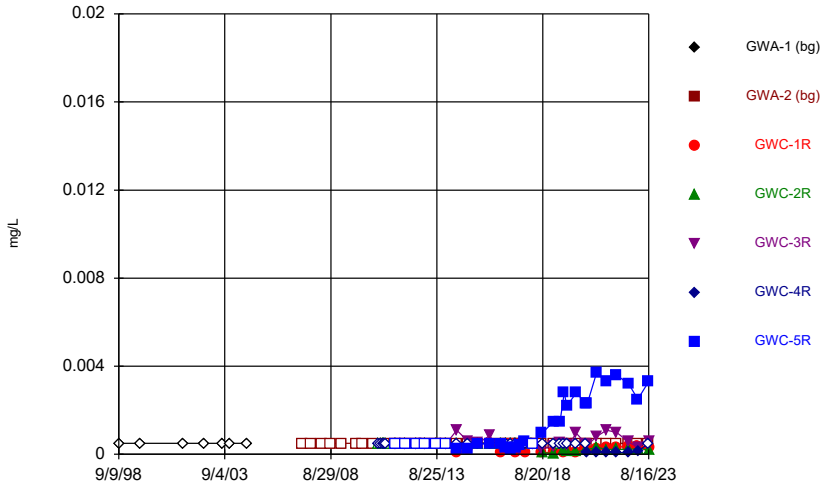

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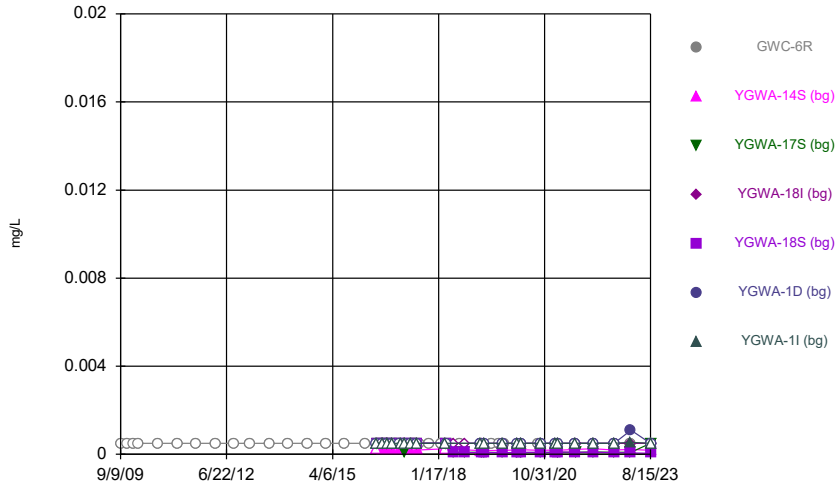

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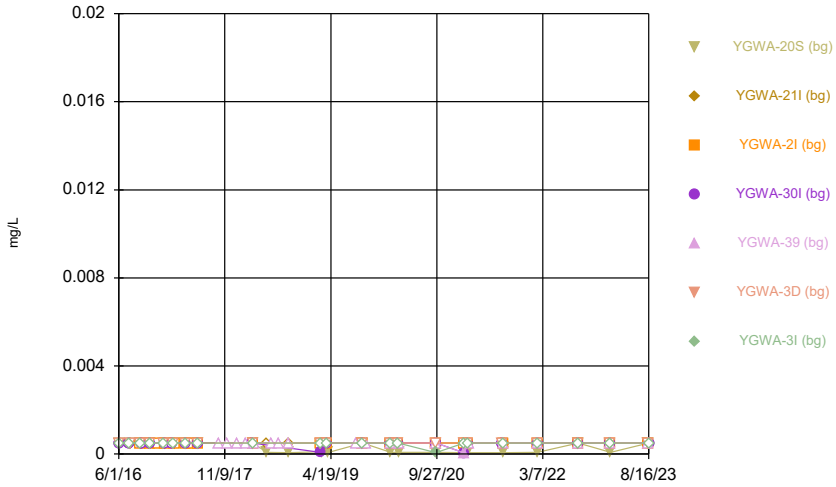

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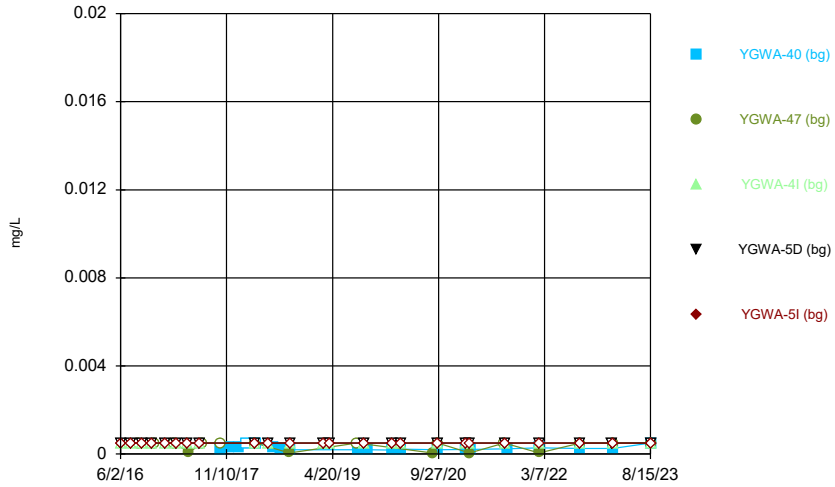

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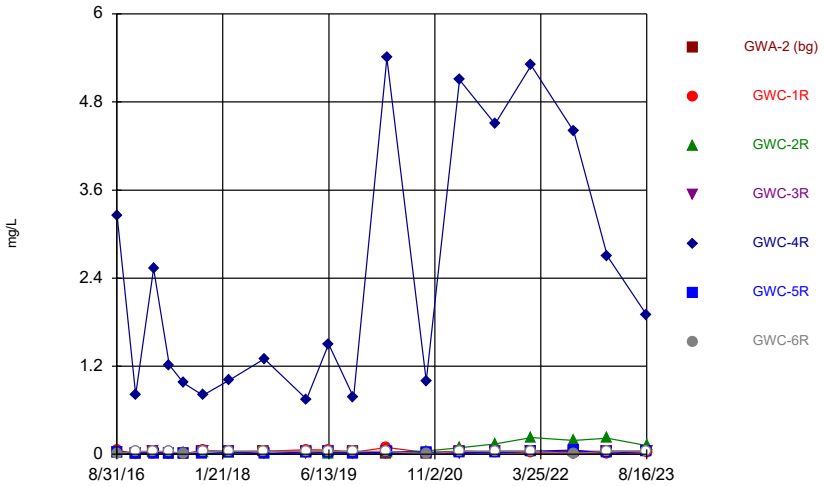

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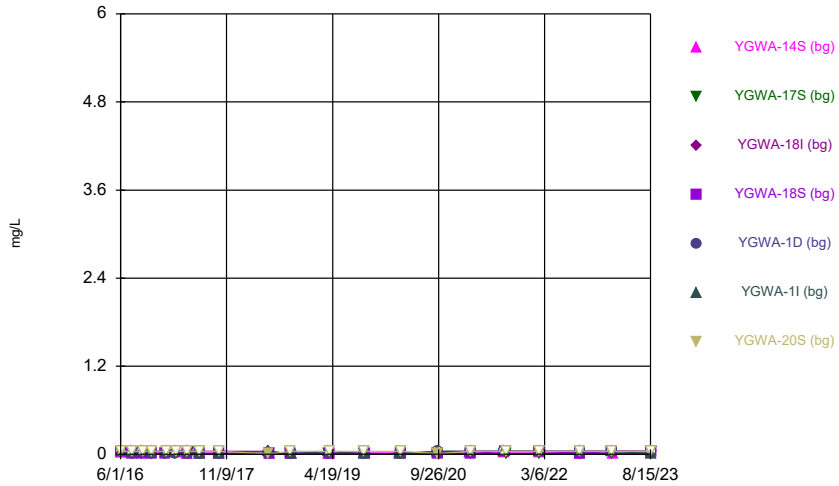

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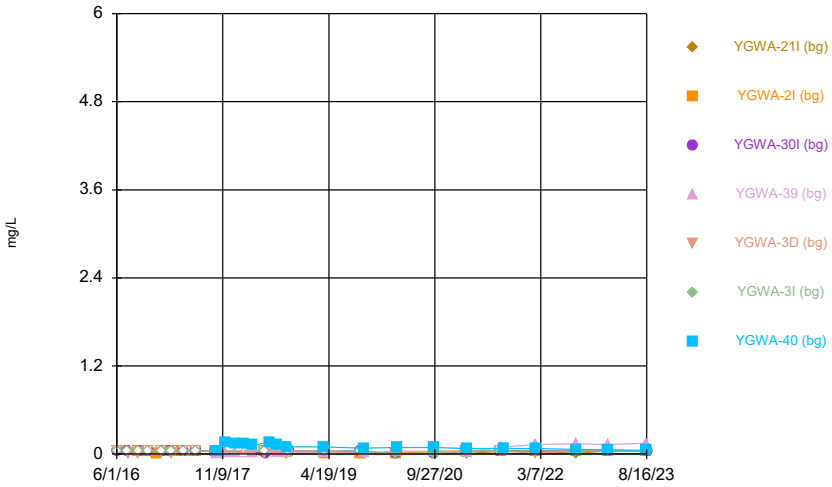

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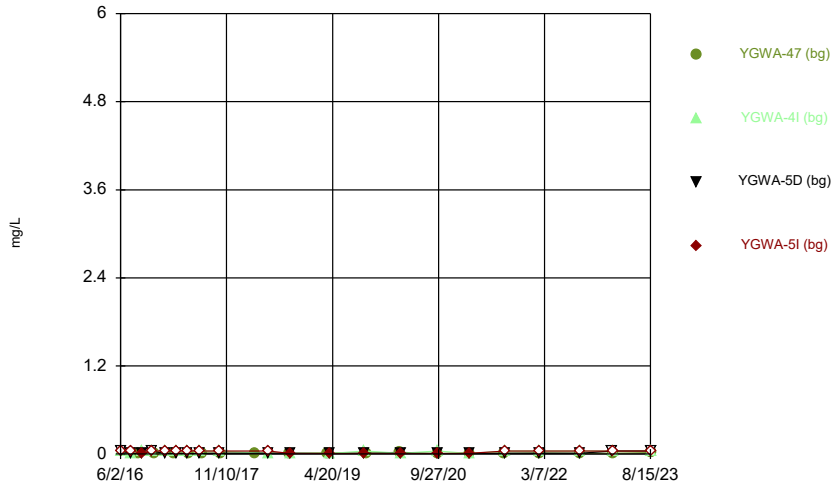

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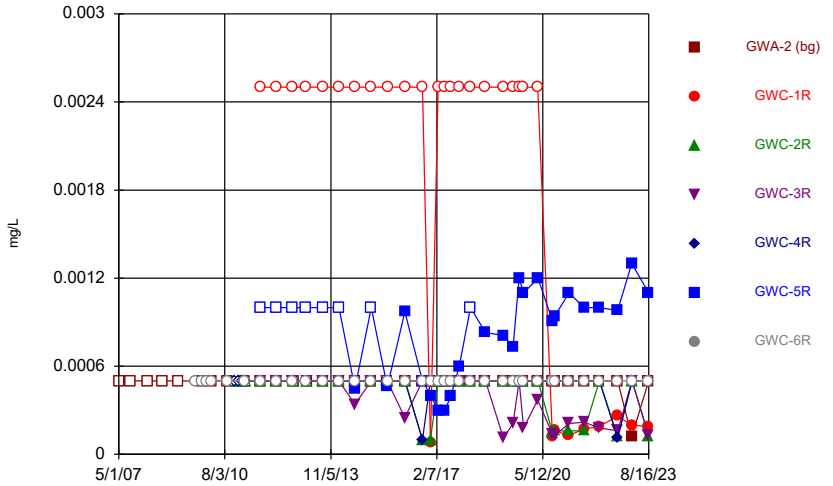

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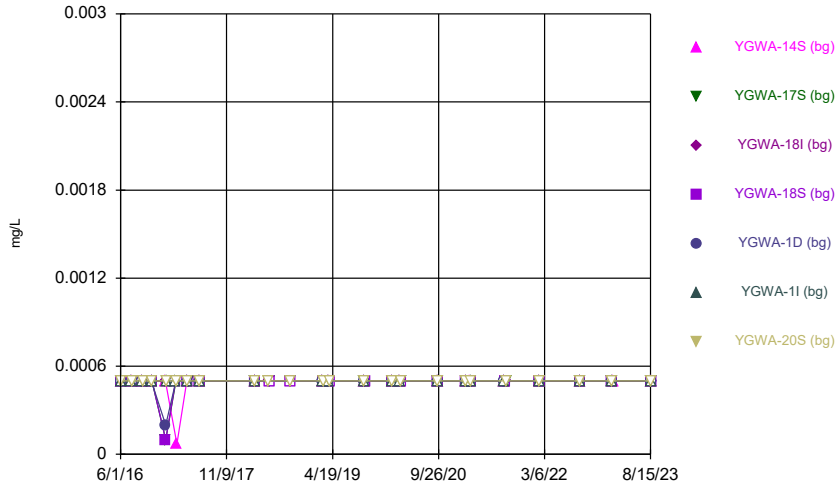

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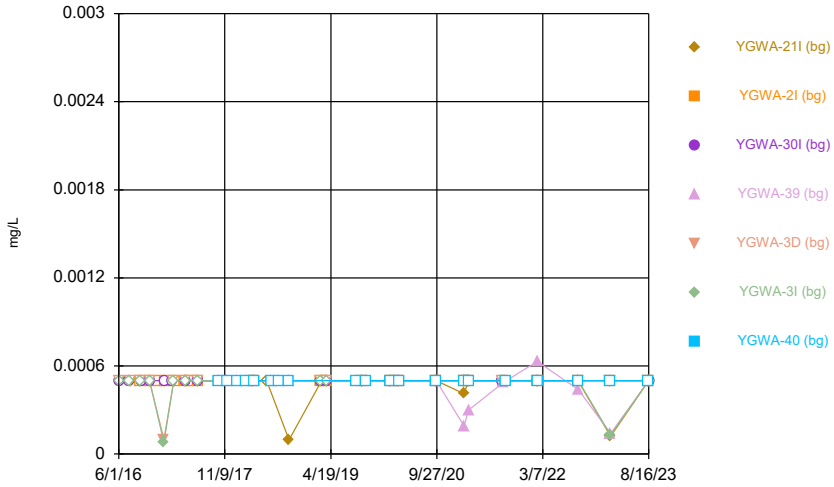

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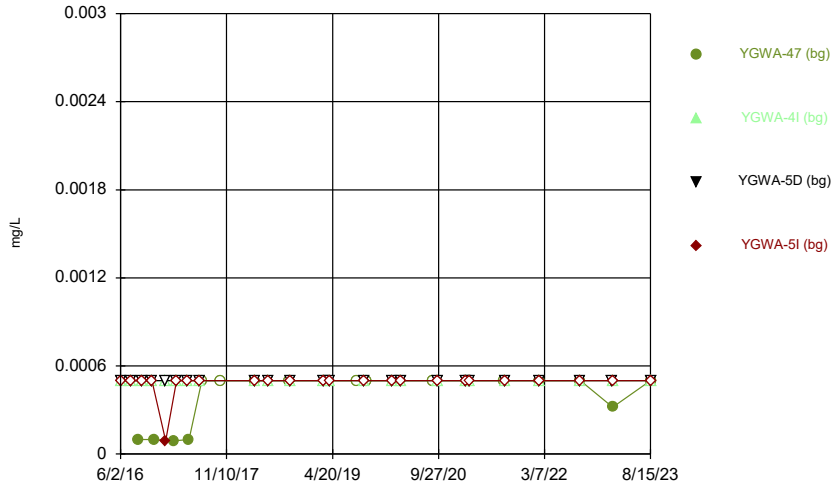

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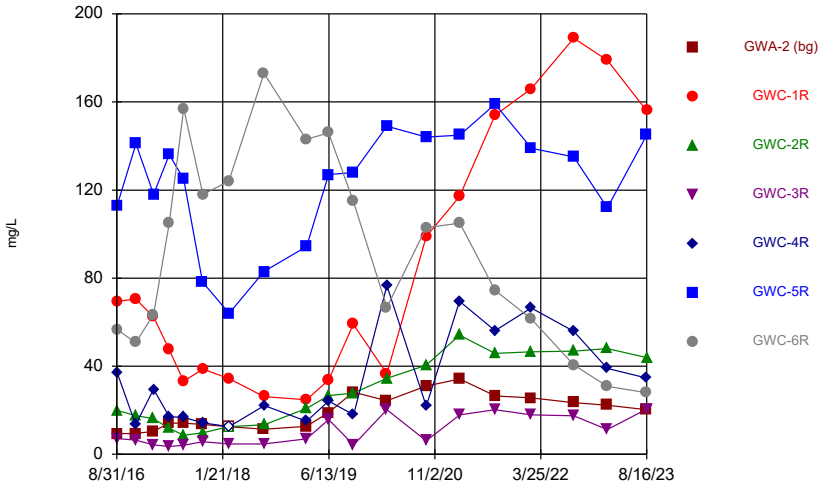

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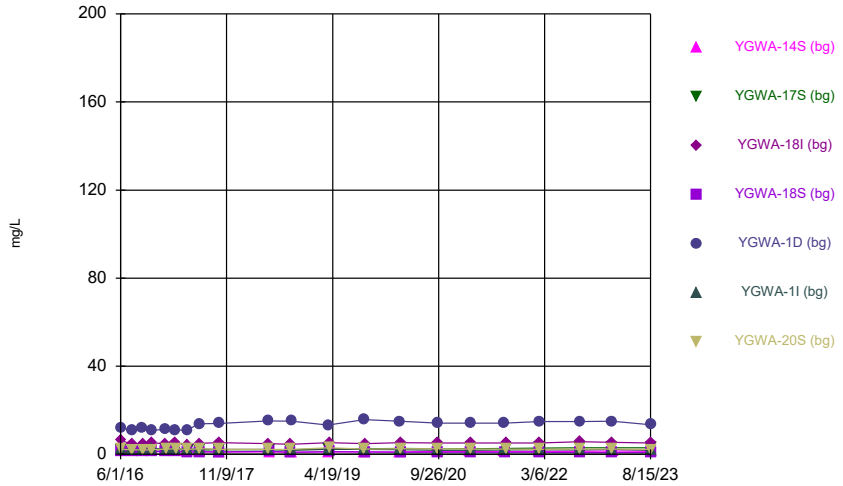

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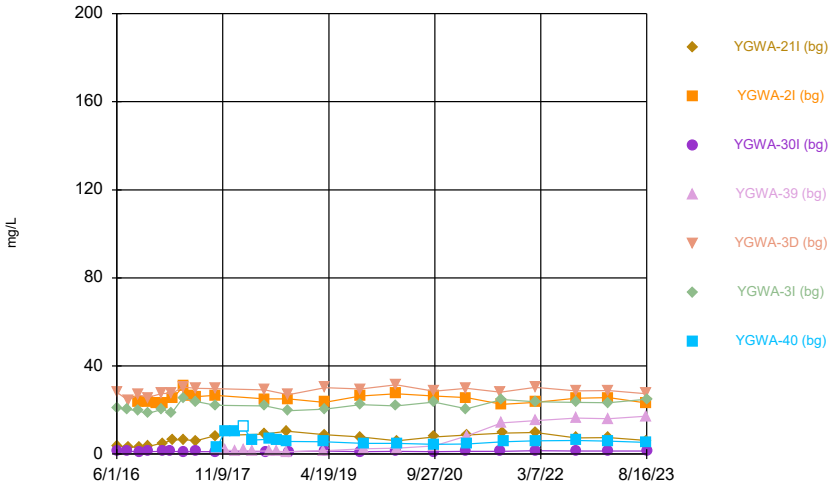

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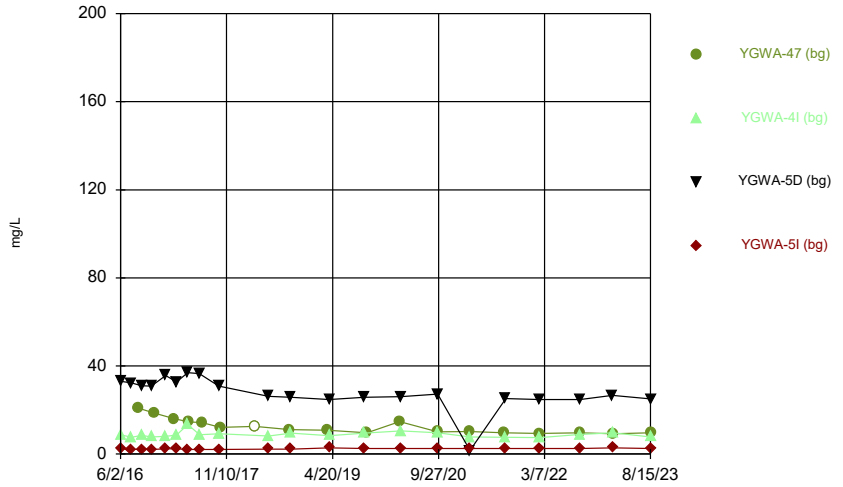

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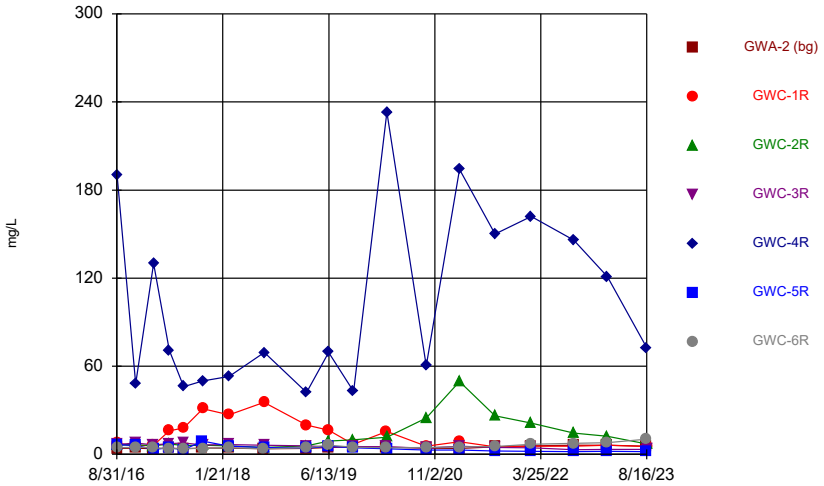

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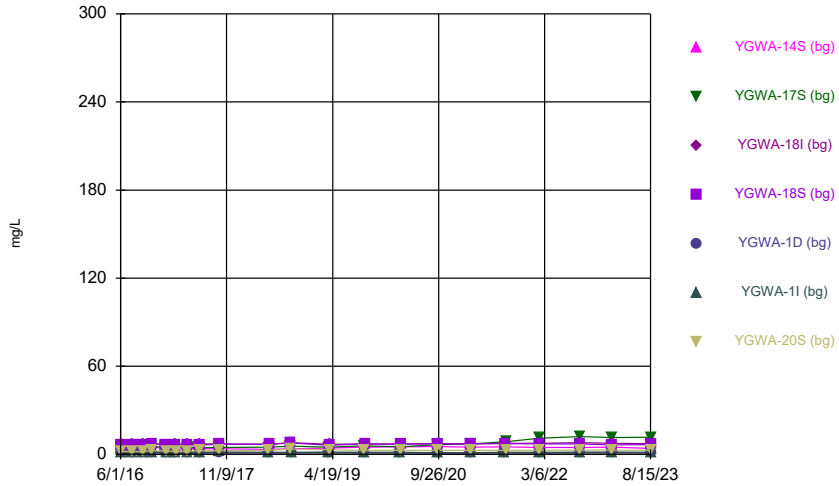

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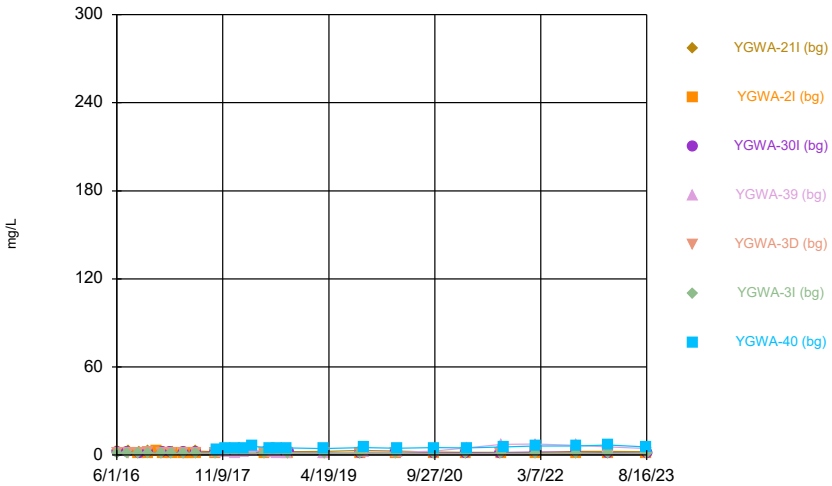

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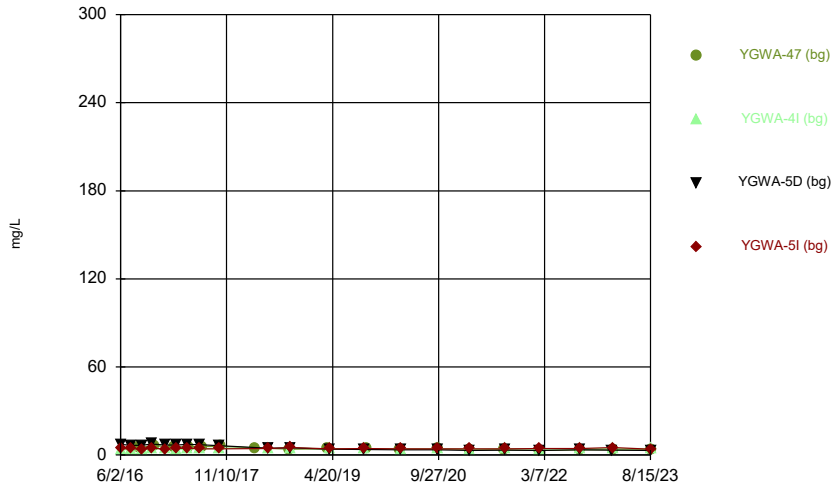

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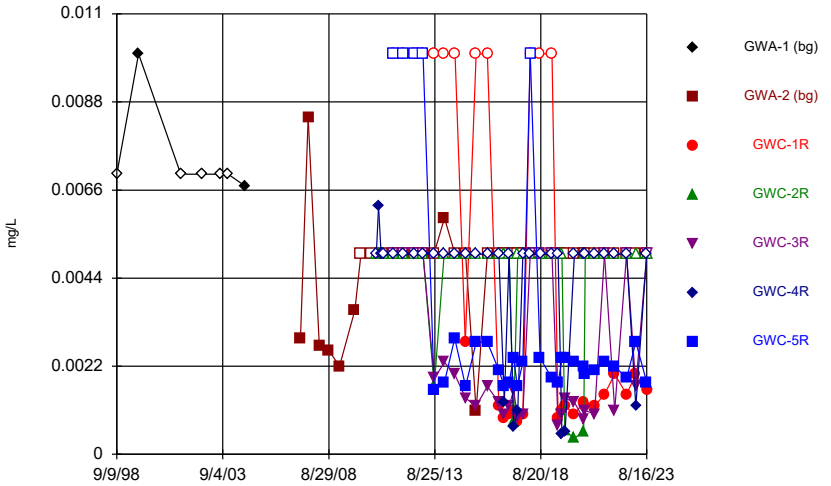

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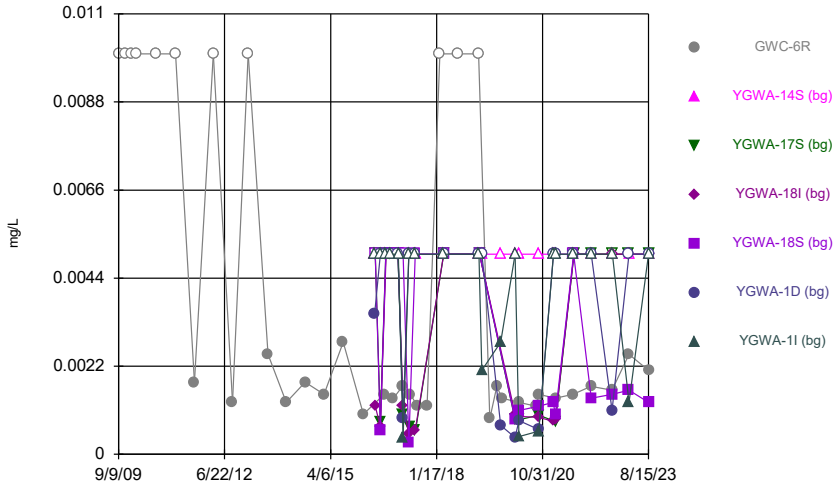

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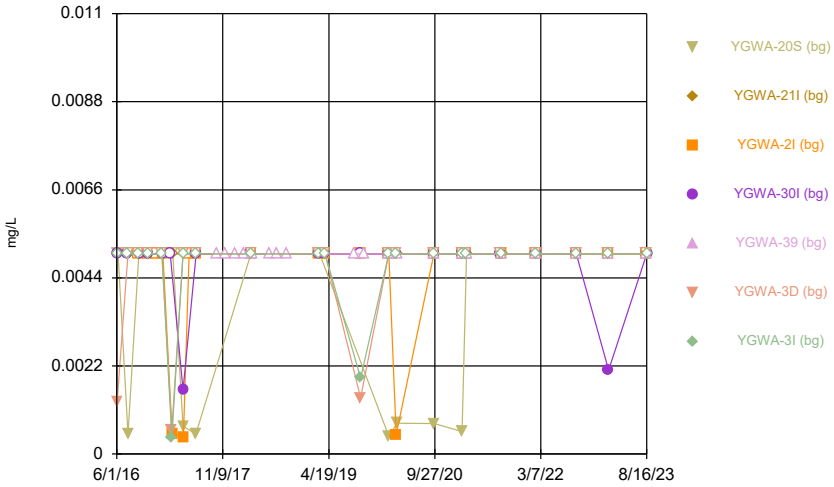

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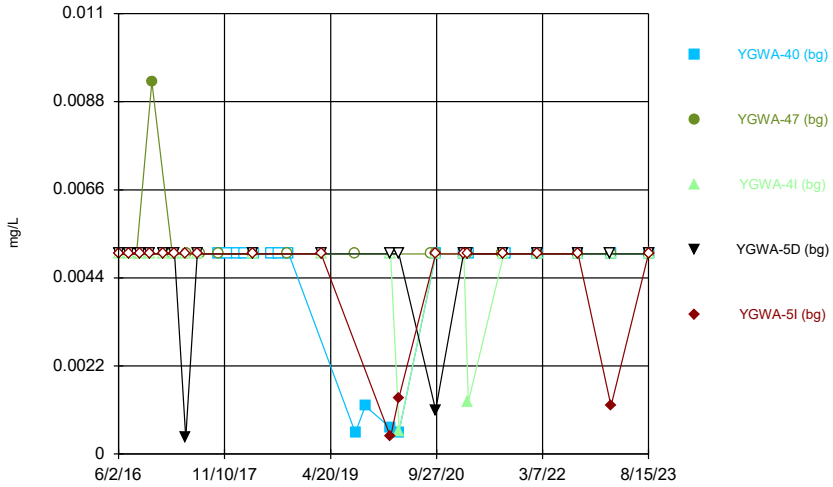

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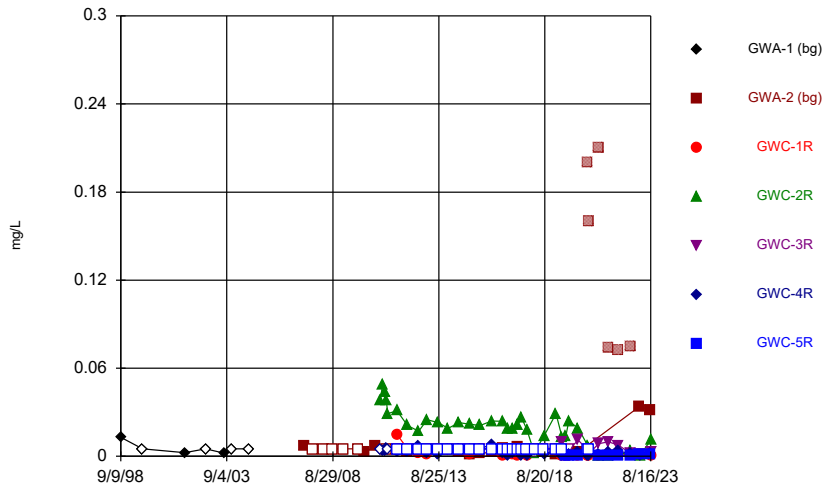

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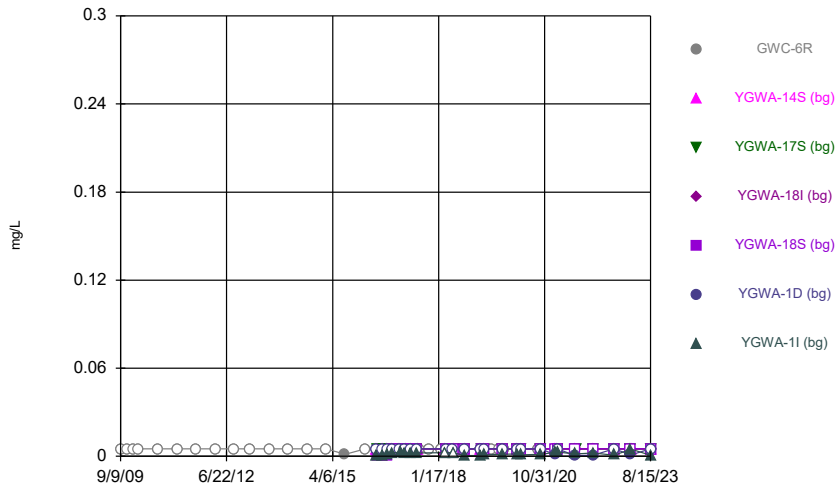

Constituent: Cobalt Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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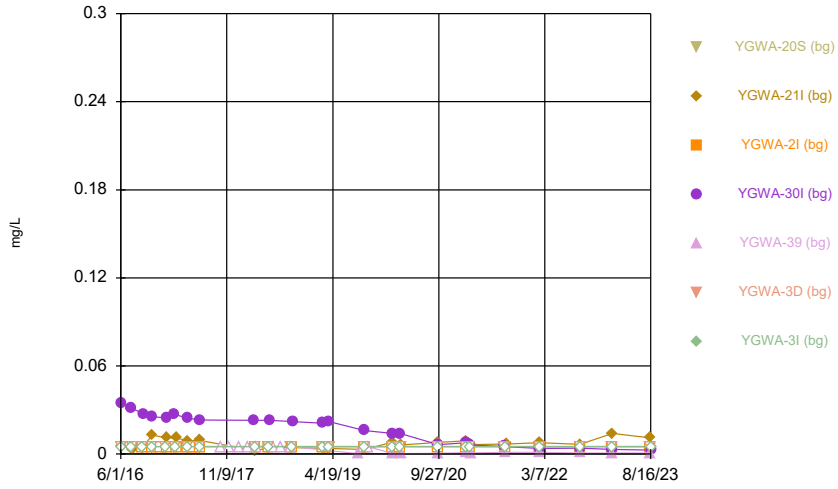
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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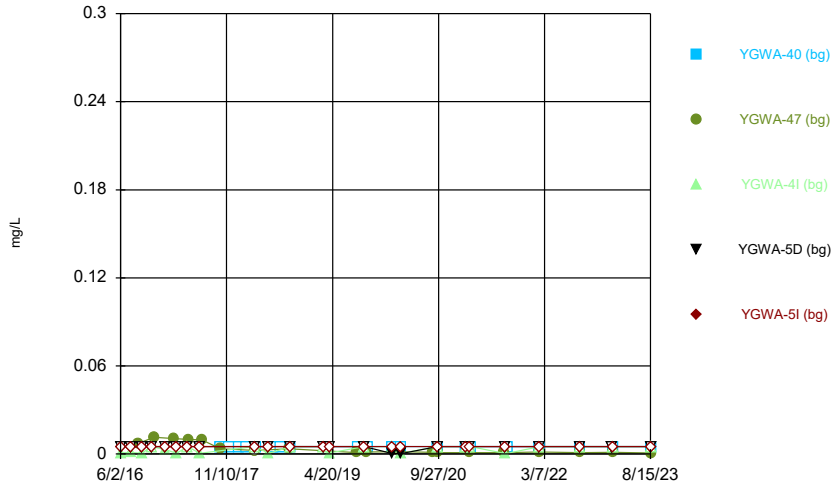
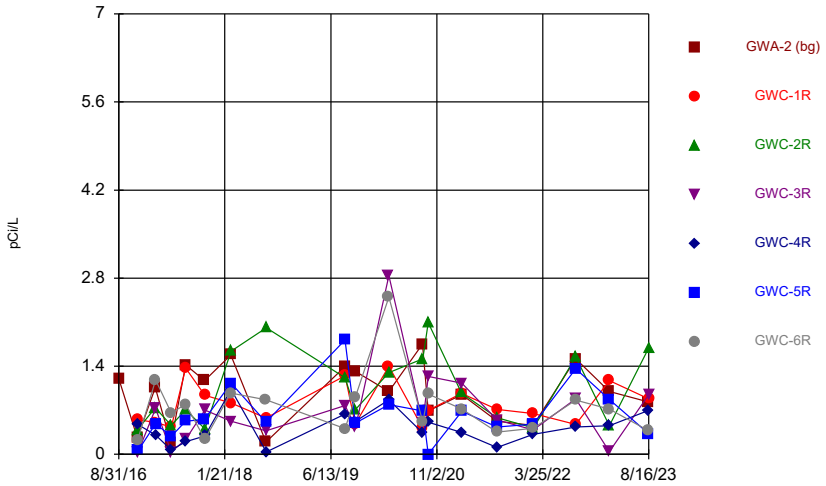
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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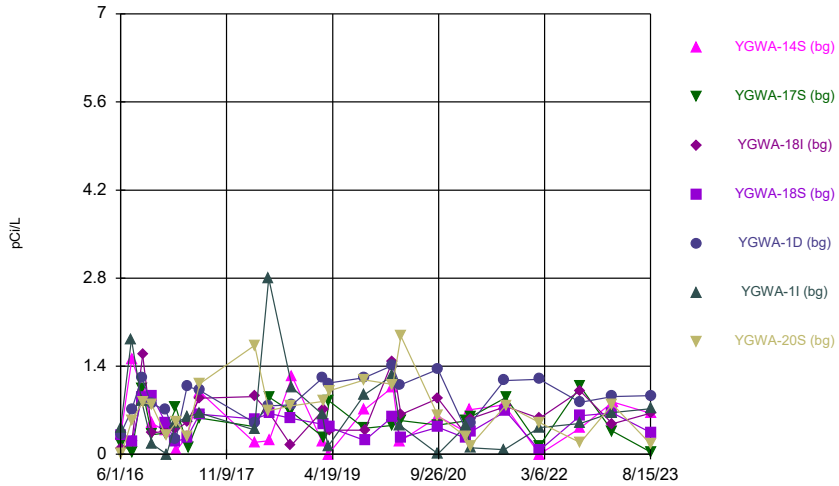
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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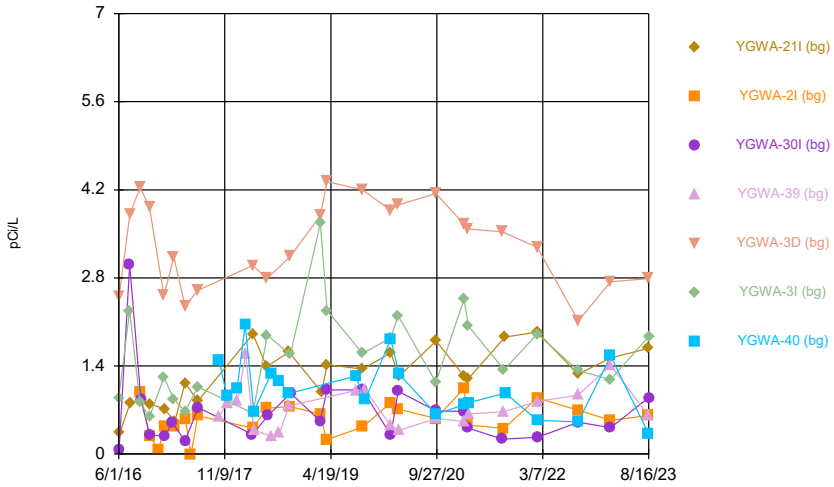
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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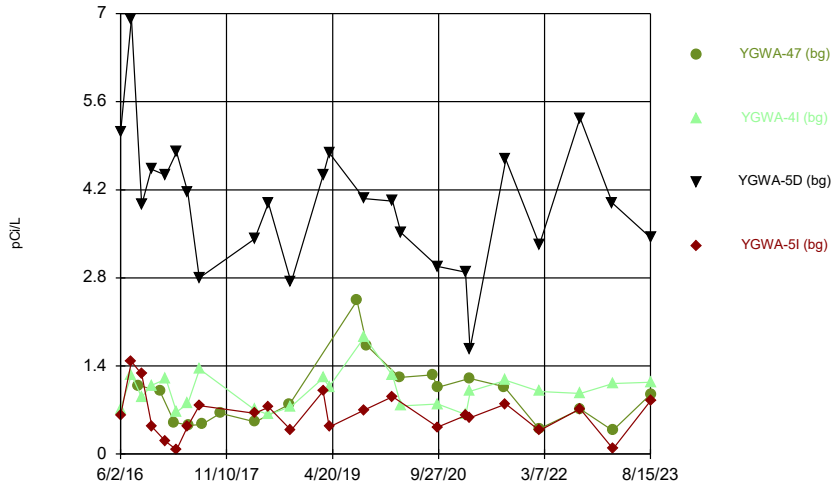
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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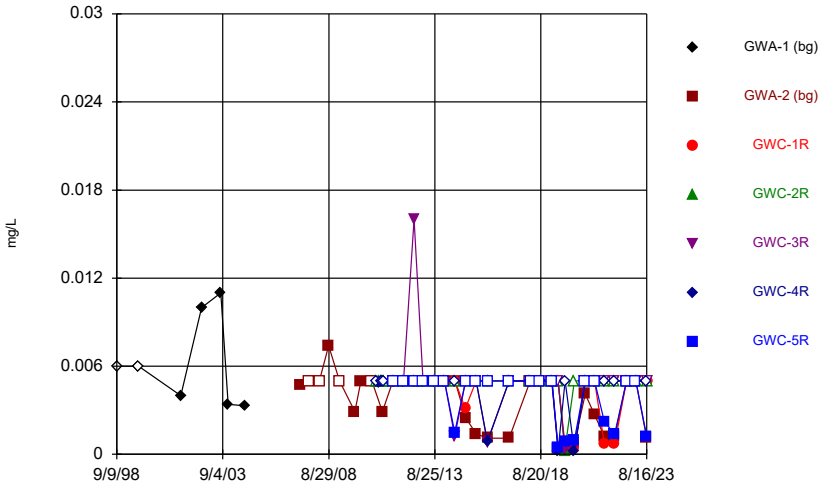
Hollow symbols indicate censored values.

Time Series



Constituent: Copper Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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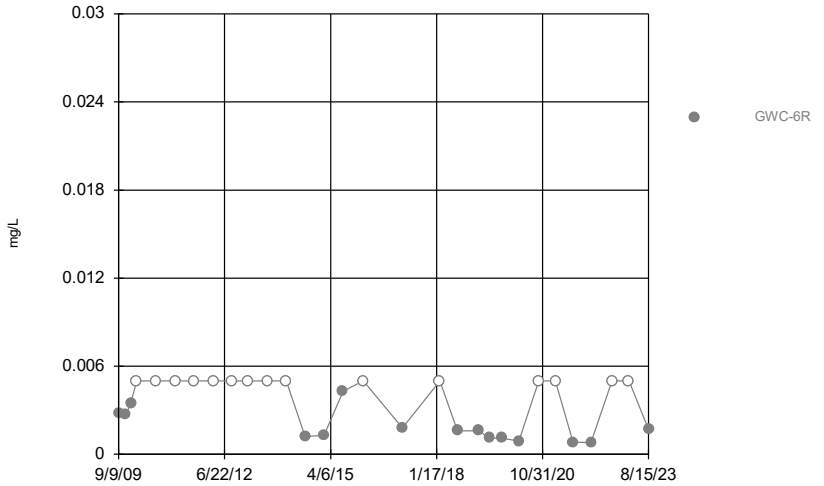
Hollow symbols indicate censored values.

Time Series



Constituent: Copper Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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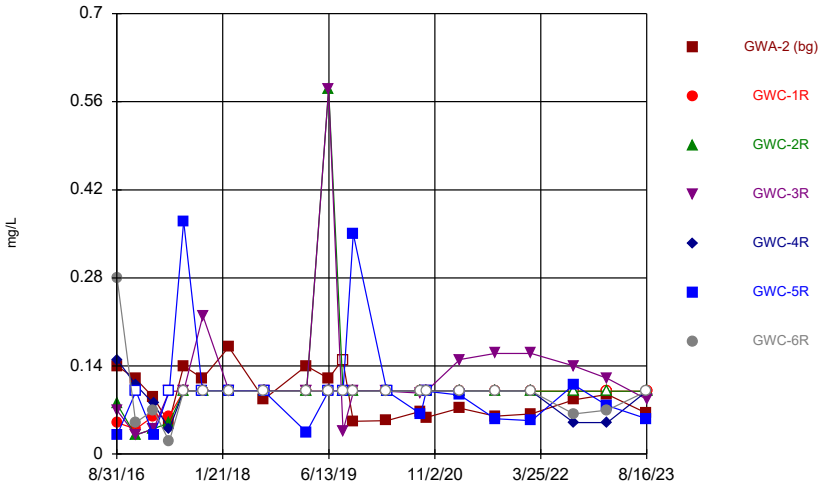
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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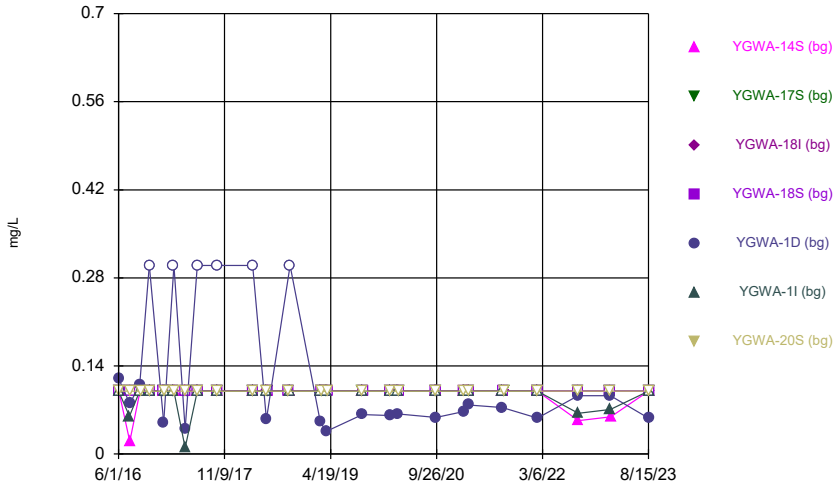
Hollow symbols indicate censored values.

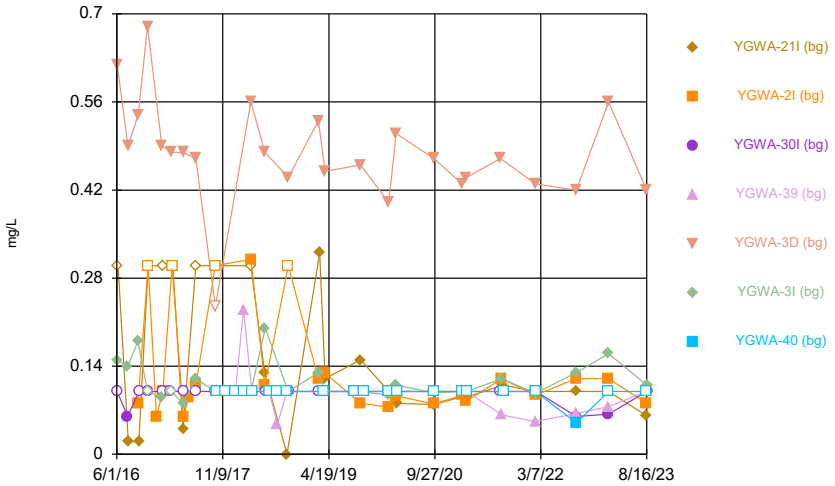
Time Series



Constituent: Fluoride Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

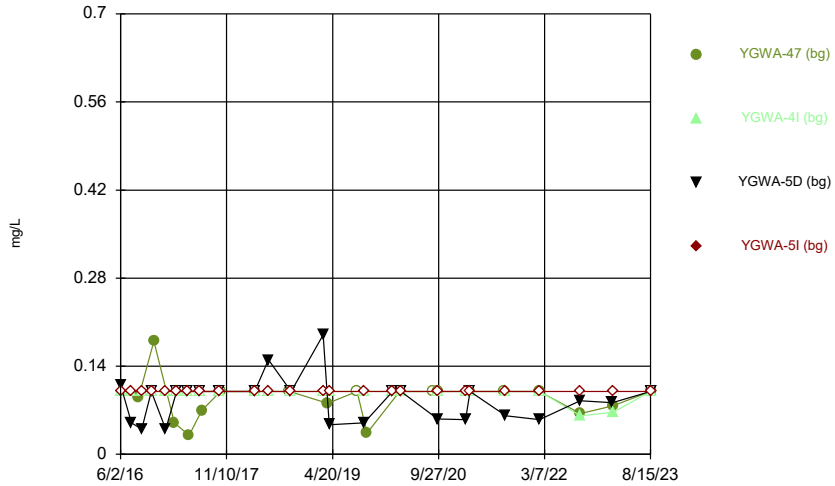
Time Series



Constituent: Fluoride Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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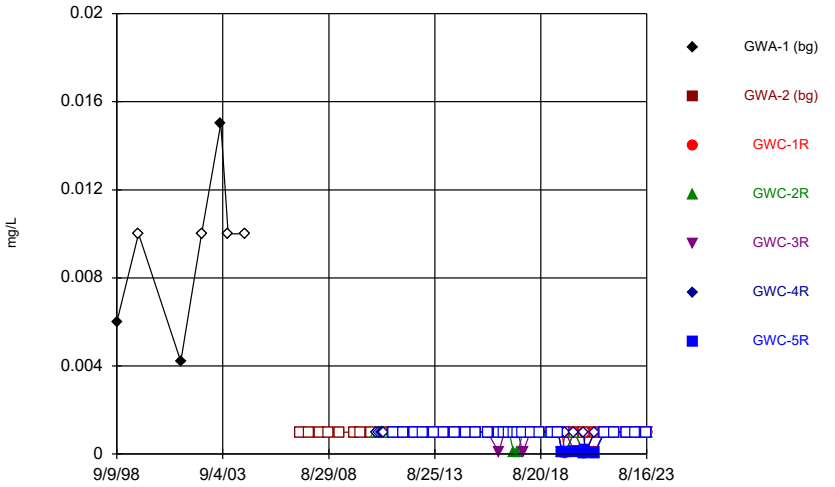
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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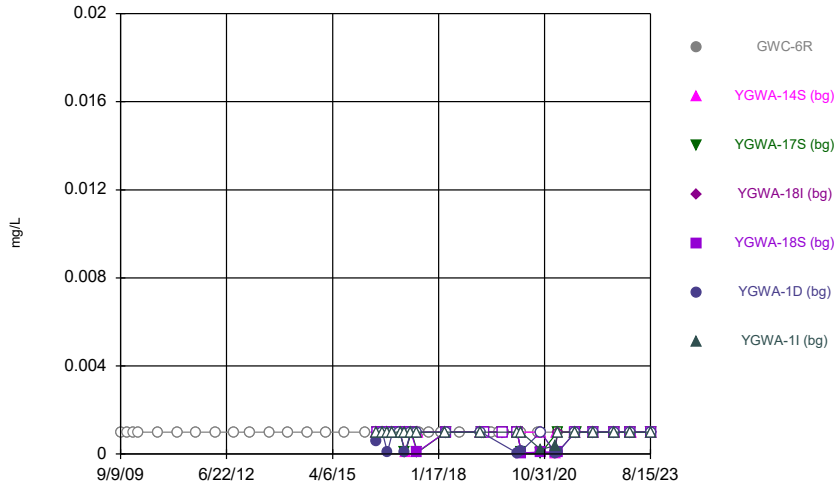
Hollow symbols indicate censored values.

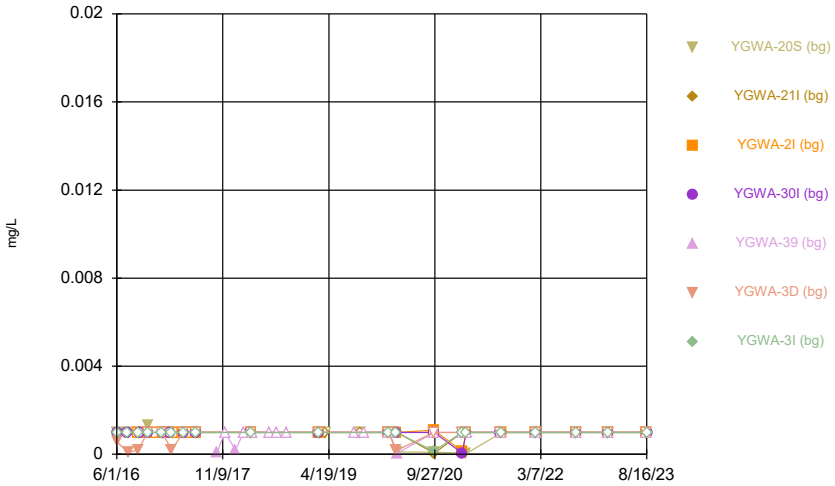
Time Series



Constituent: Lead Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

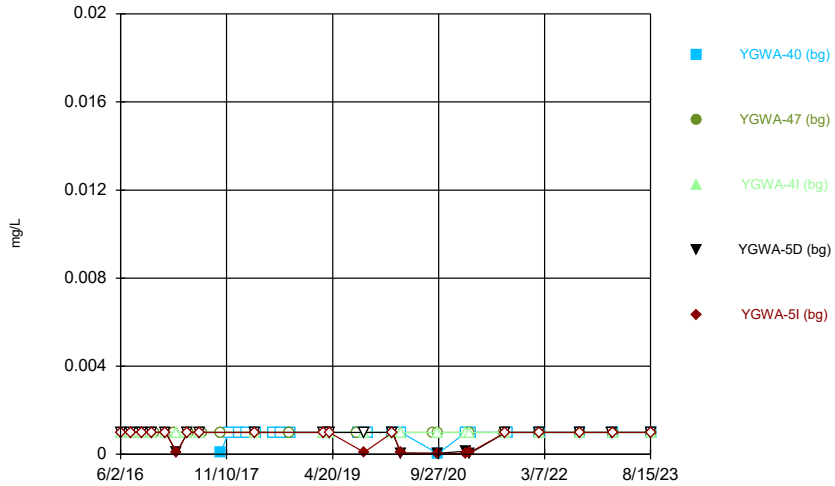
Time Series



Constituent: Lead Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

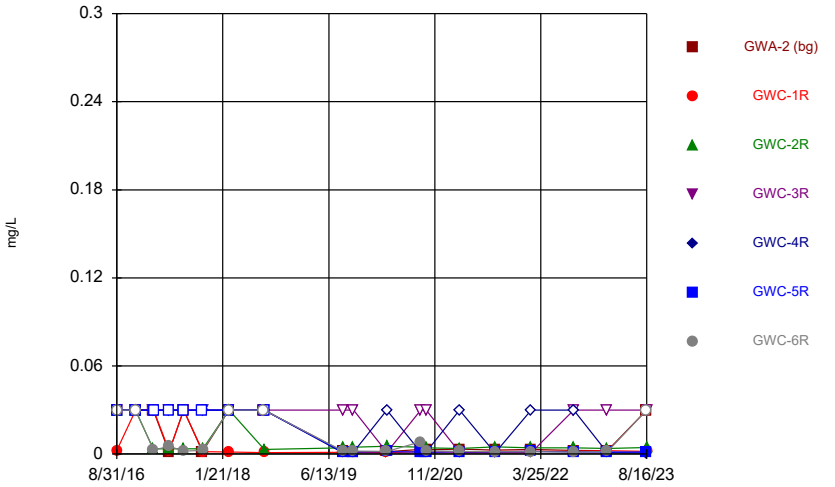
Time Series



Constituent: Lead Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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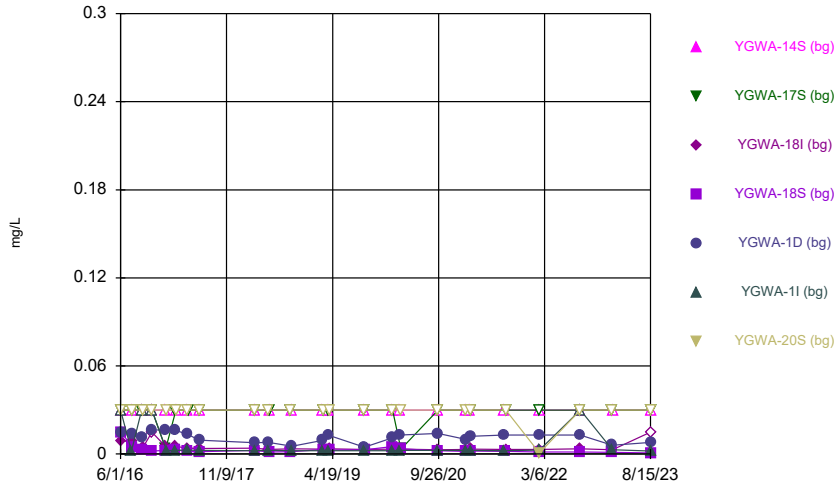
Hollow symbols indicate censored values.

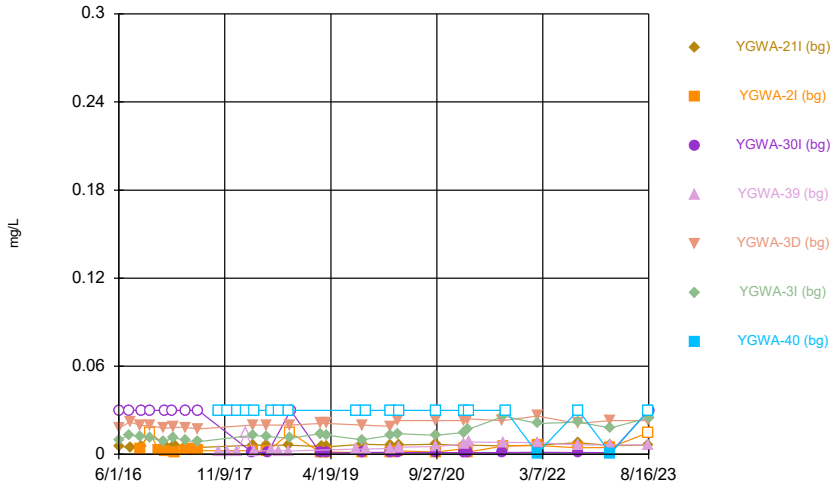
Time Series



Constituent: Lithium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

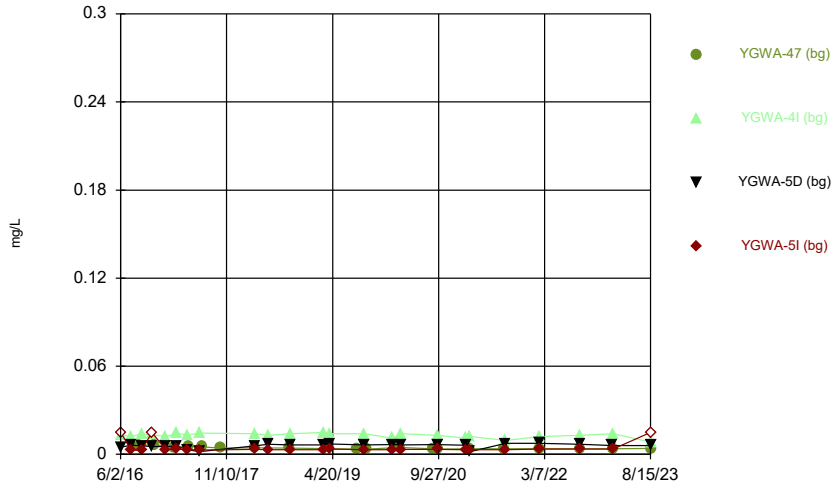
Time Series



Constituent: Lithium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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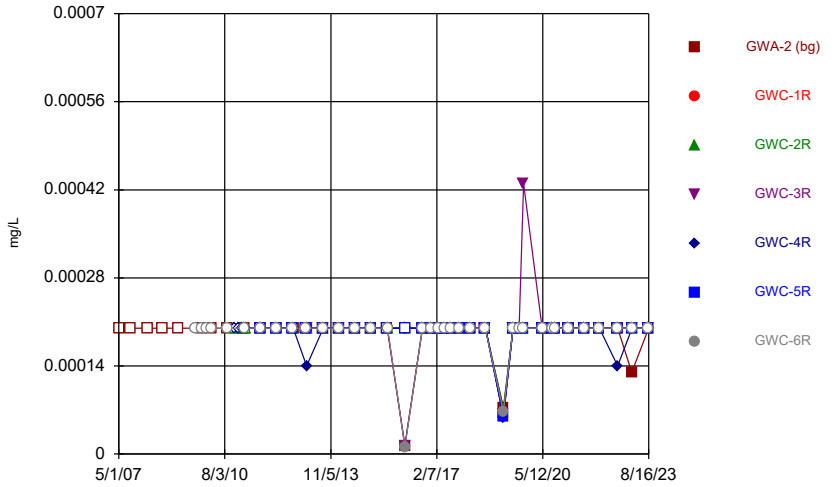
Hollow symbols indicate censored values.

Time Series



Constituent: Mercury Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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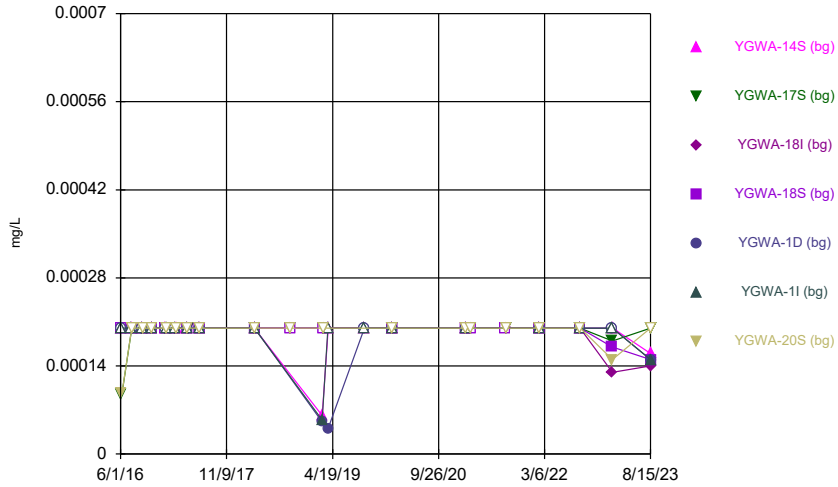
Hollow symbols indicate censored values.

Time Series



Constituent: Mercury Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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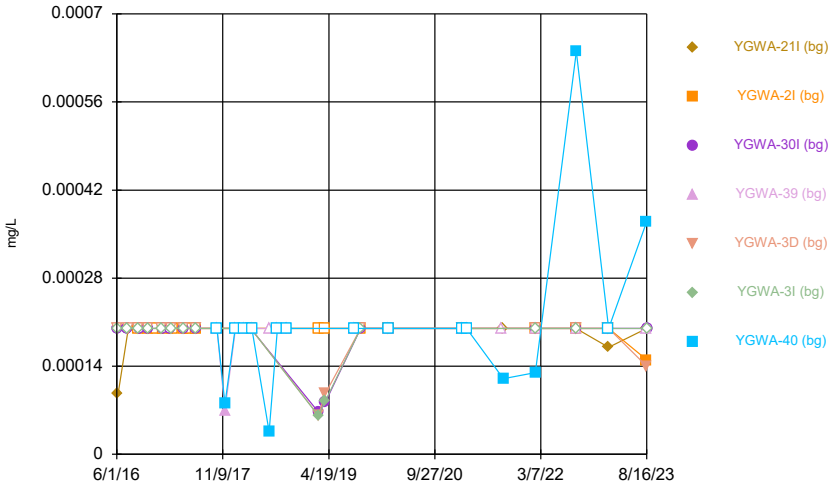
Hollow symbols indicate censored values.

Time Series



Constituent: Mercury Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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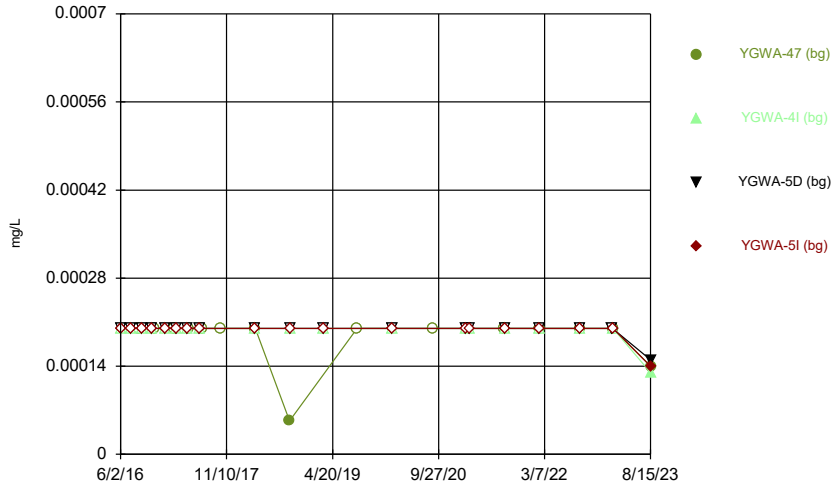
Hollow symbols indicate censored values.

Time Series



Constituent: Mercury Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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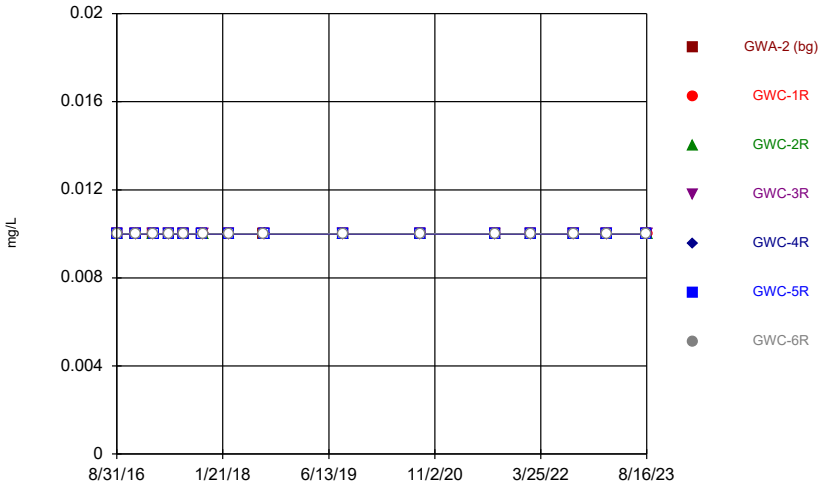
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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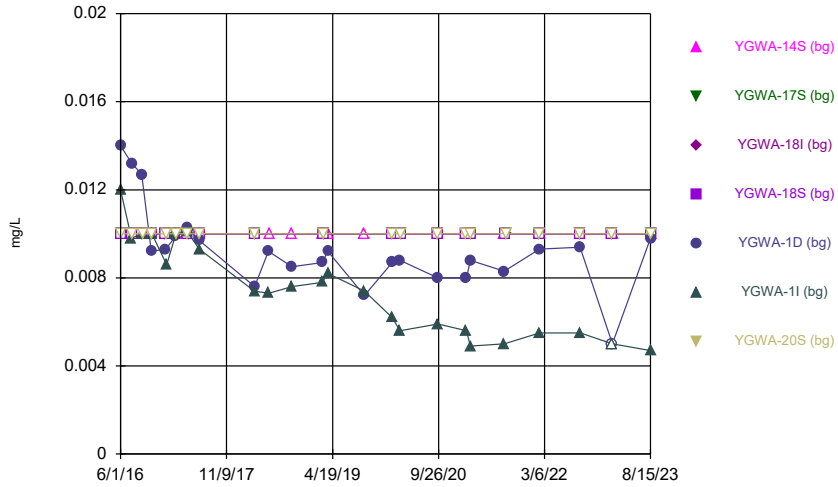
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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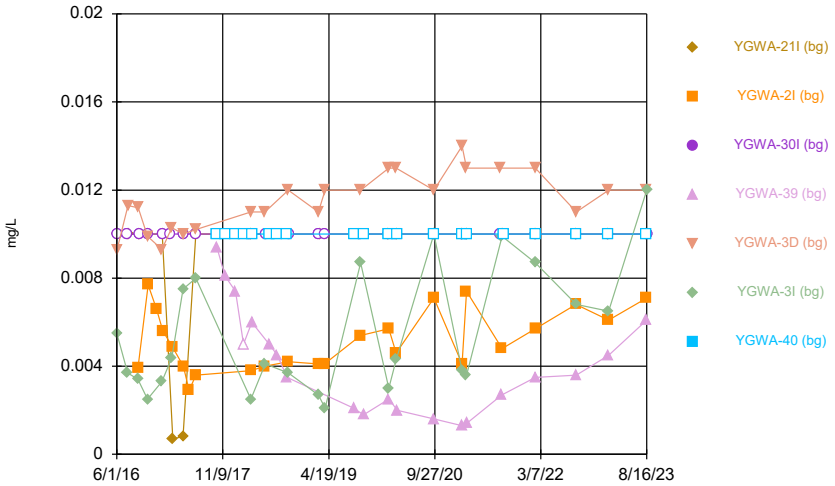
Hollow symbols indicate censored values.

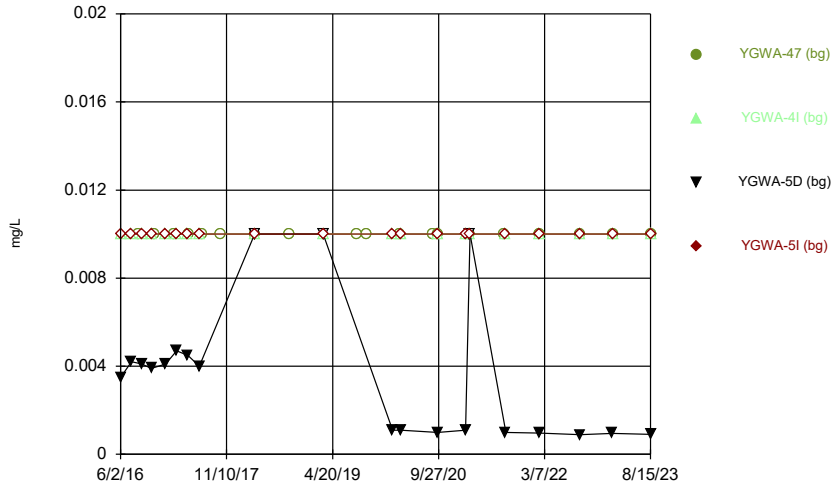
Time Series



Constituent: Molybdenum Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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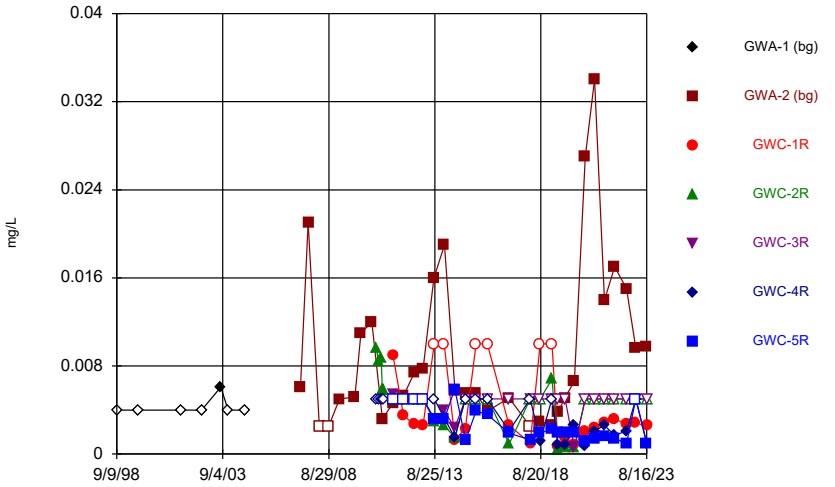
Hollow symbols indicate censored values.

Time Series



Constituent: Nickel Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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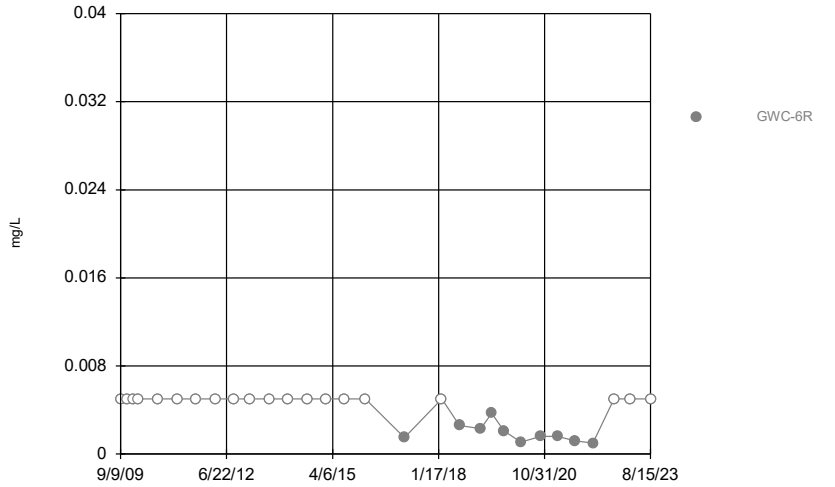
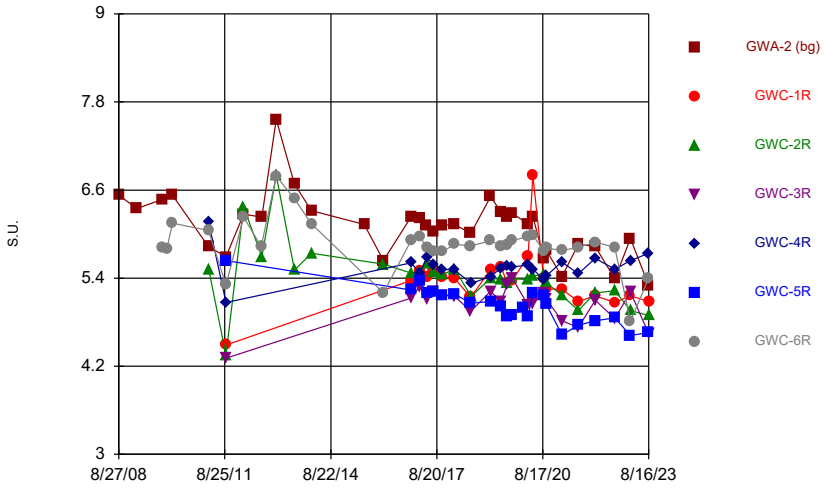
Hollow symbols indicate censored values.

Time Series



Constituent: Nickel Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series



Constituent: pH Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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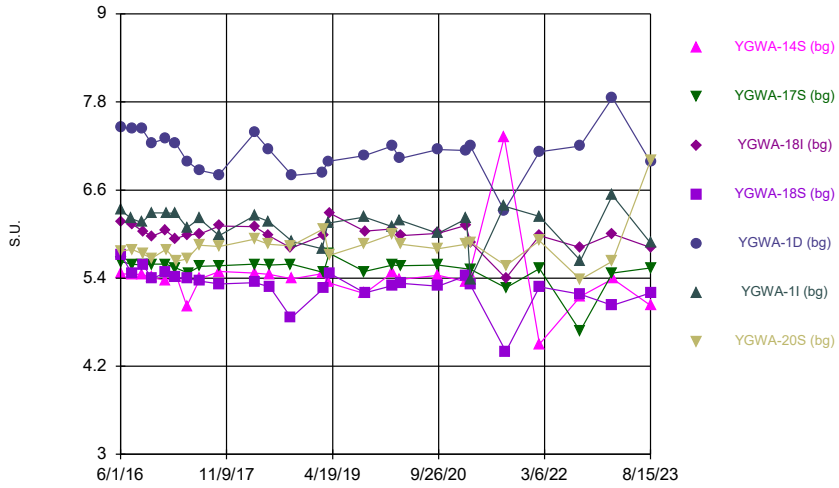
Time Series



Constituent: pH Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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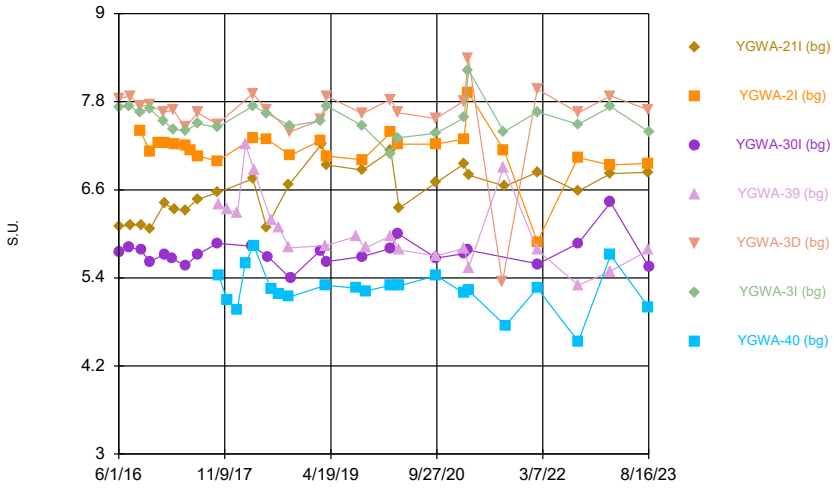
Time Series



Constituent: pH Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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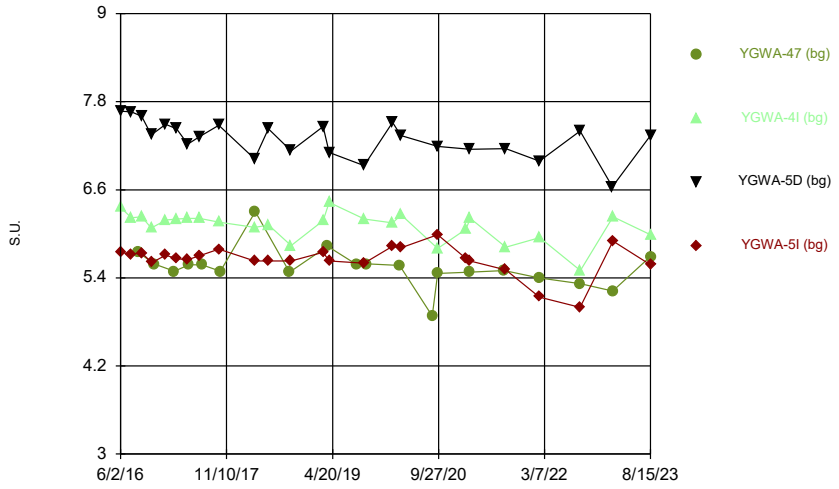
Time Series



Constituent: pH Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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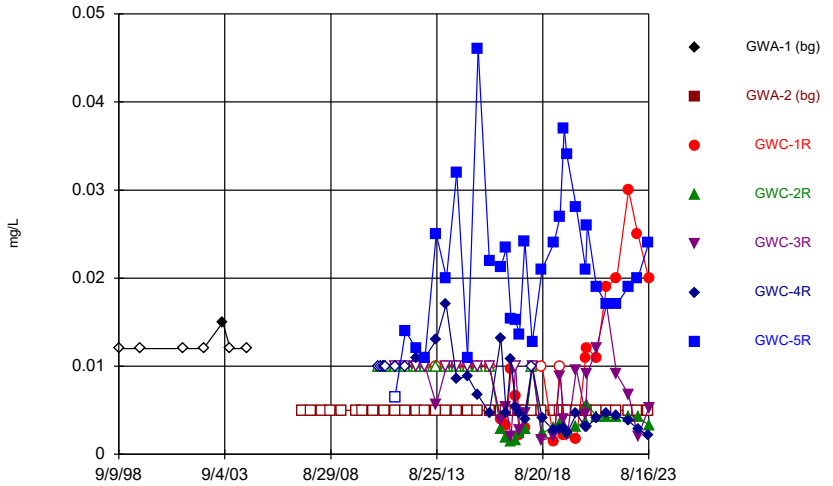
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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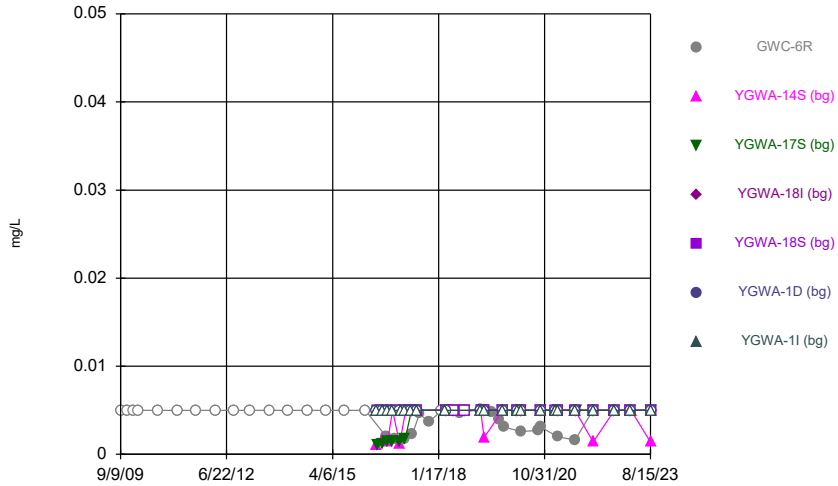
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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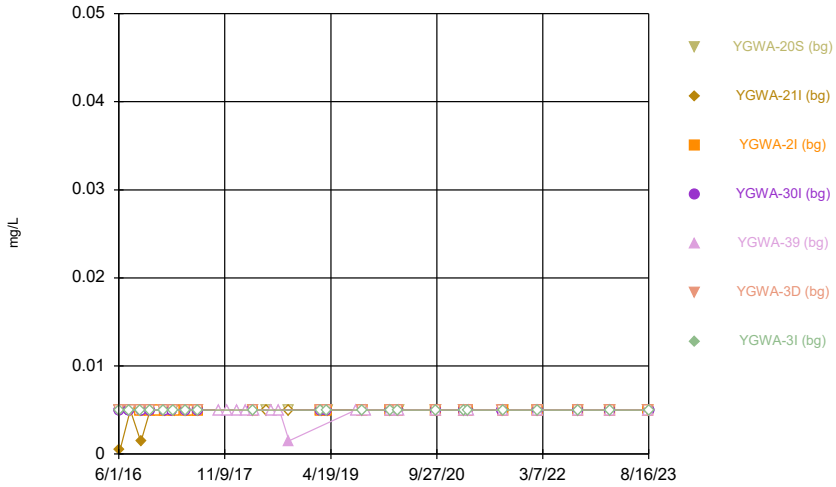
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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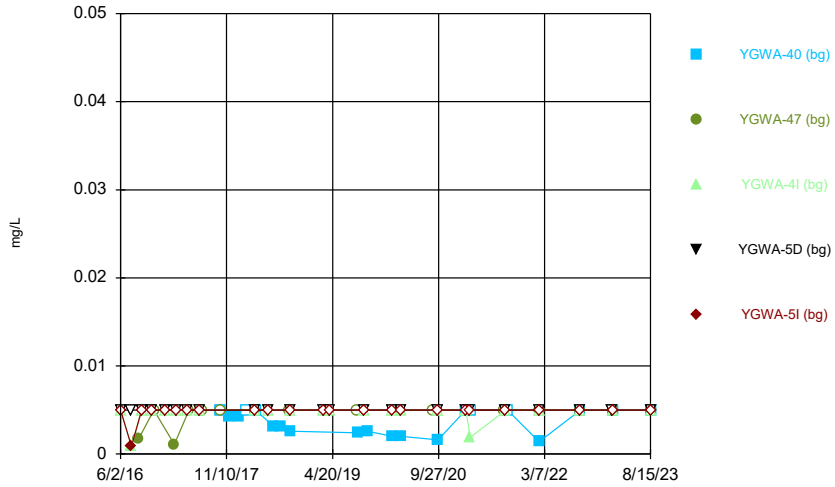
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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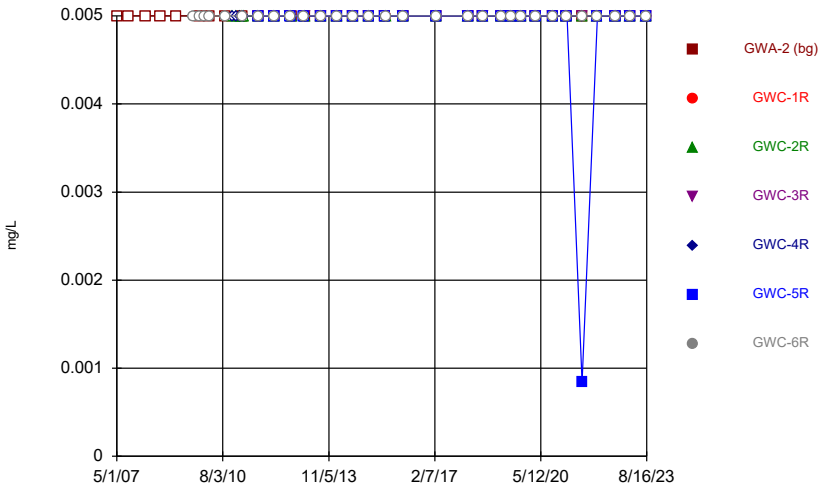
Hollow symbols indicate censored values.

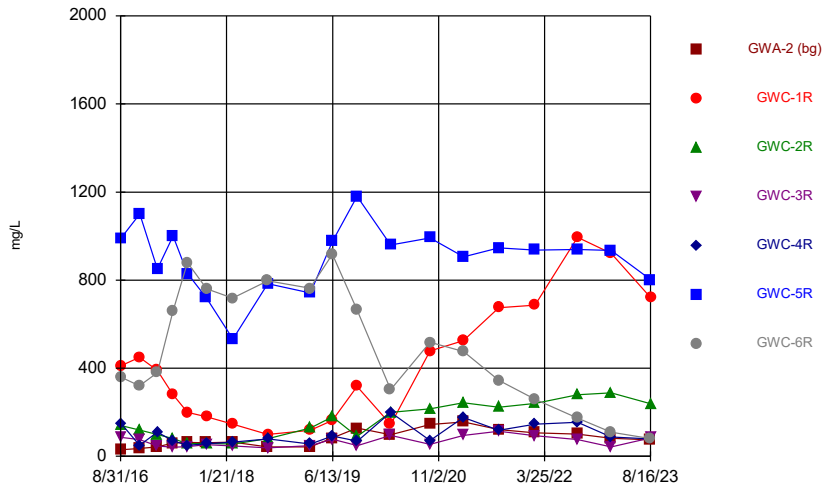
Time Series



Constituent: Silver Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Time Series



Constituent: Sulfate Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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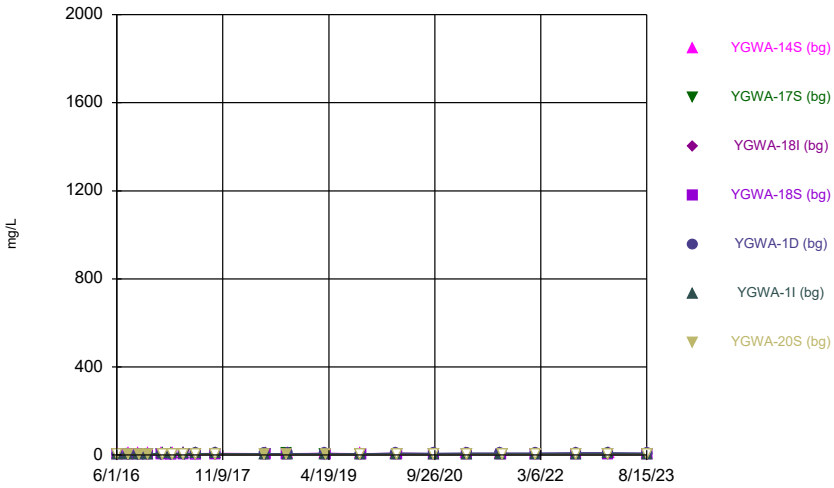
Hollow symbols indicate censored values.

Time Series



Constituent: Sulfate Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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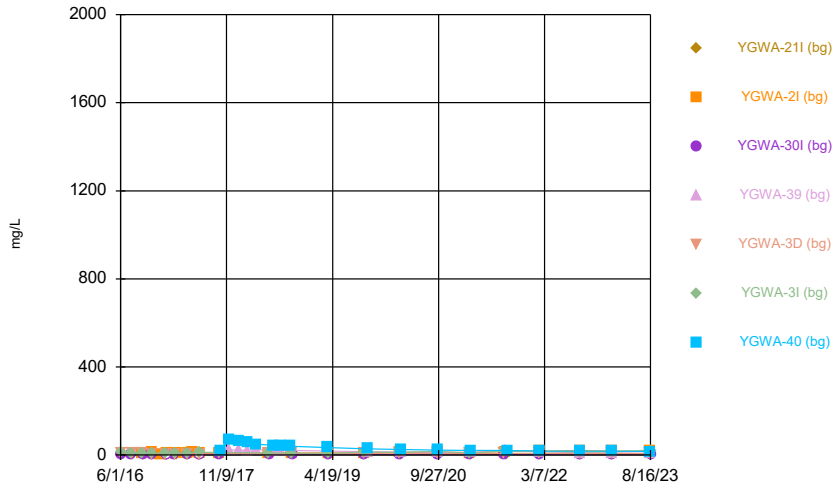
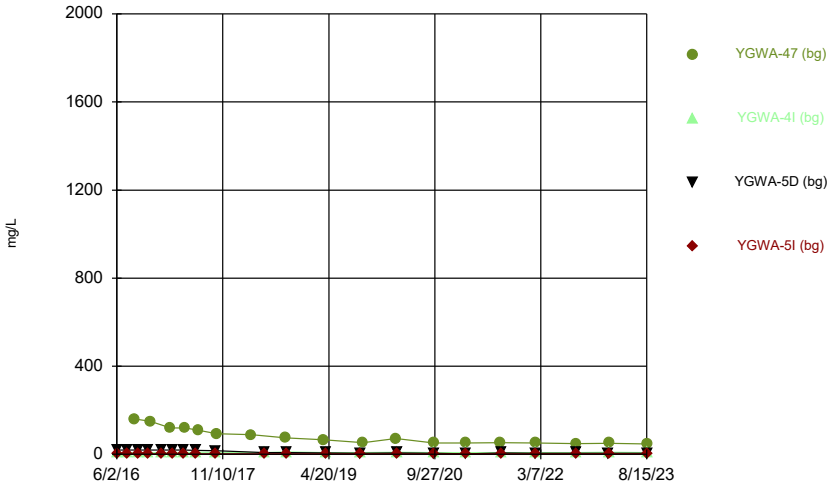
Hollow symbols indicate censored values.

Time Series



Constituent: Sulfate Analysis Run 10/19/2023 8:52 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

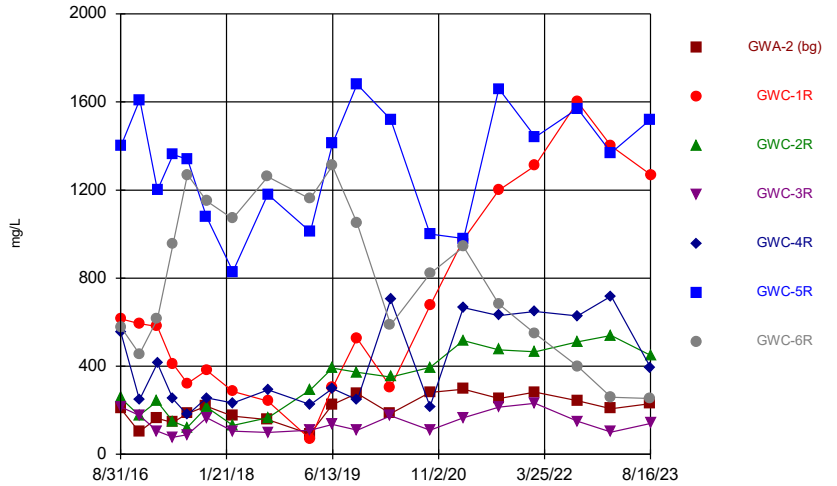
Time Series



Constituent: Sulfate Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

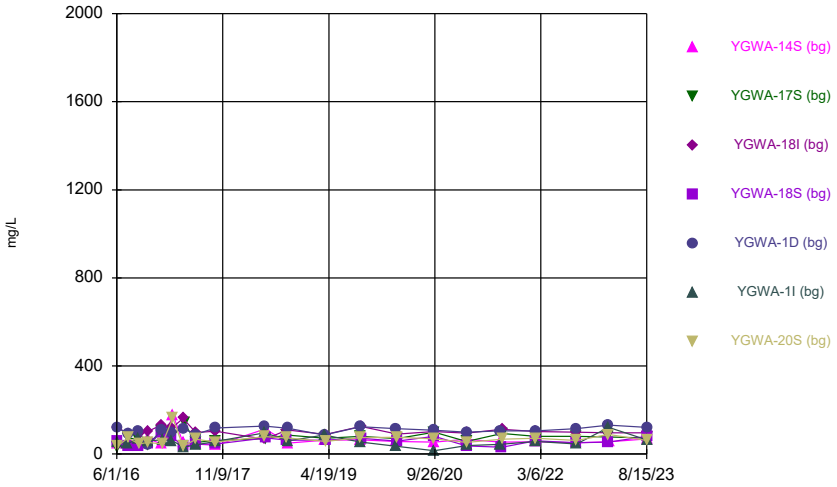
Time Series



Constituent: TDS Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series

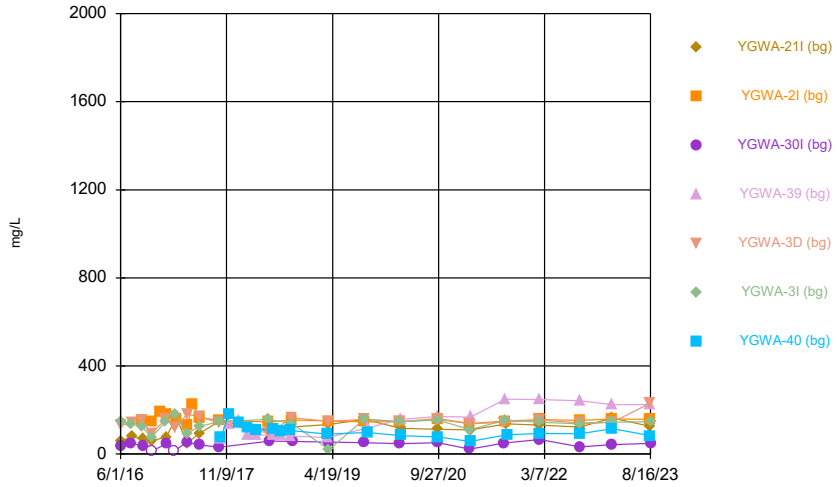


Constituent: TDS Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Hollow symbols indicate censored values.

Time Series



Constituent: TDS Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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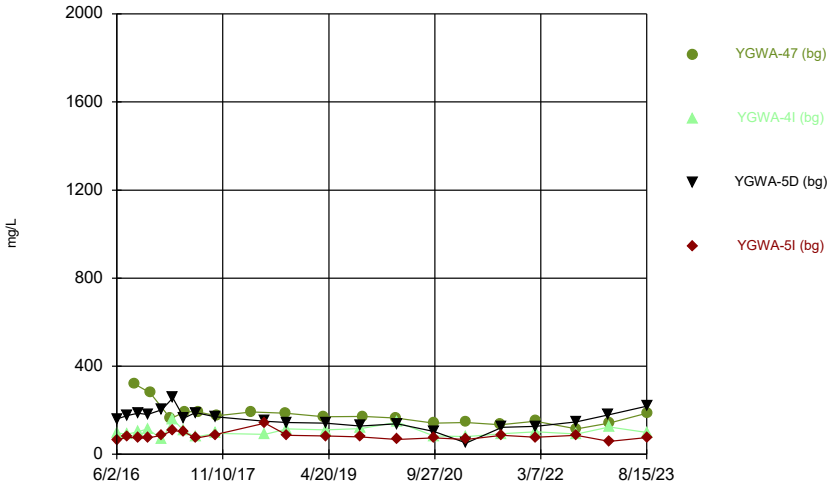
Time Series

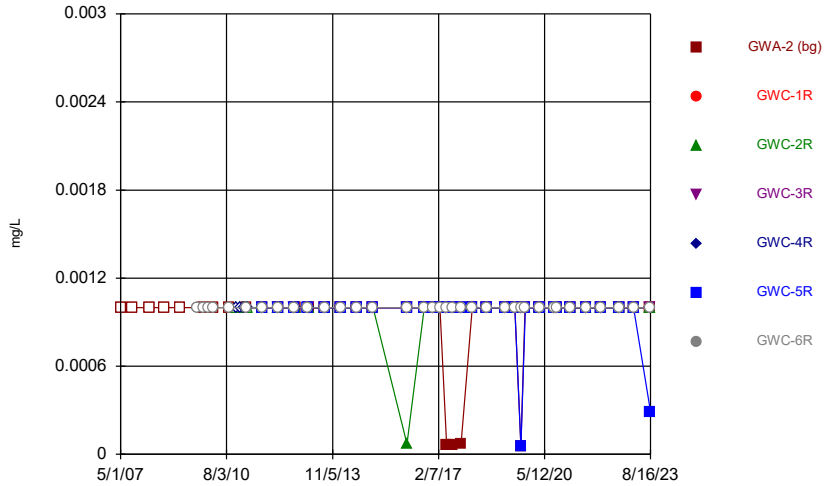


Constituent: TDS Analysis Run 10/19/2023 8:52 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series

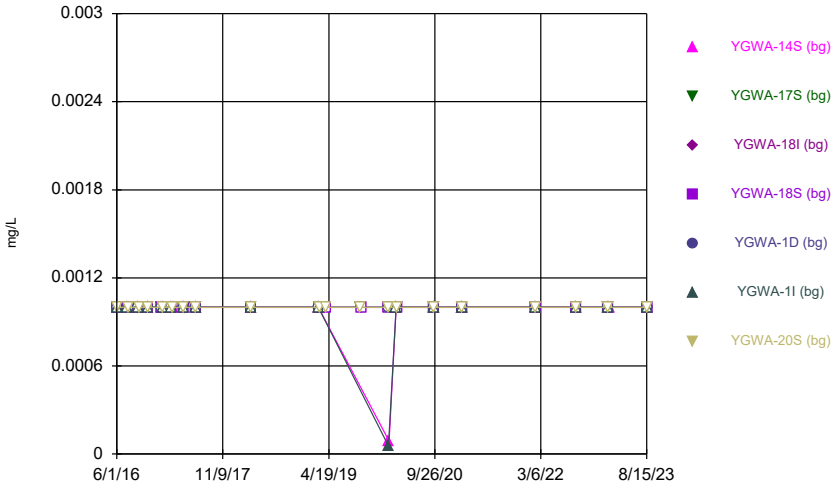


Constituent: Thallium Analysis Run 10/19/2023 8:53 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series

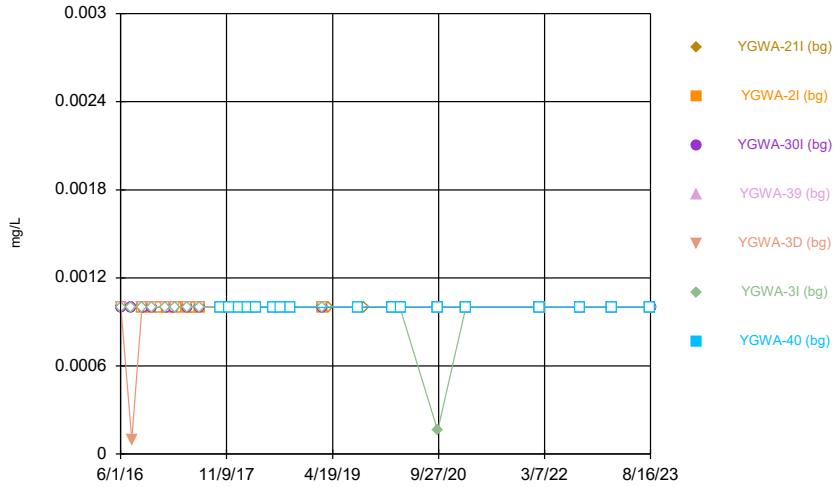


Constituent: Thallium Analysis Run 10/19/2023 8:53 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series

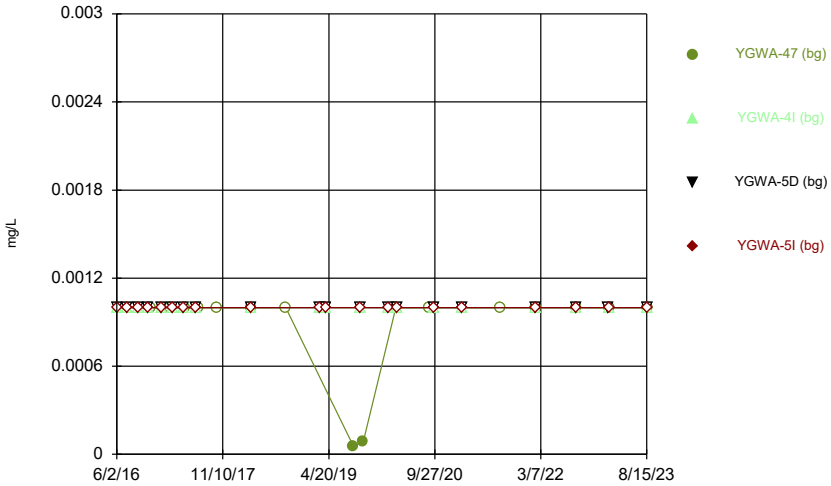


Constituent: Thallium Analysis Run 10/19/2023 8:53 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

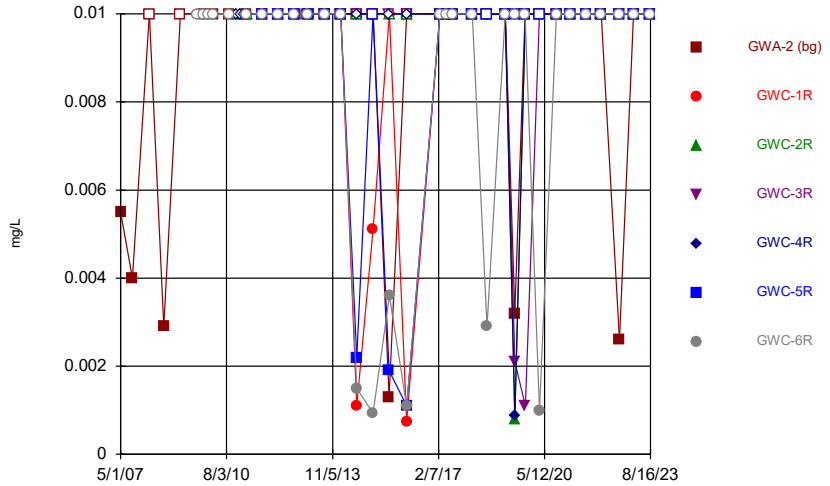
Time Series



Constituent: Thallium Analysis Run 10/19/2023 8:53 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

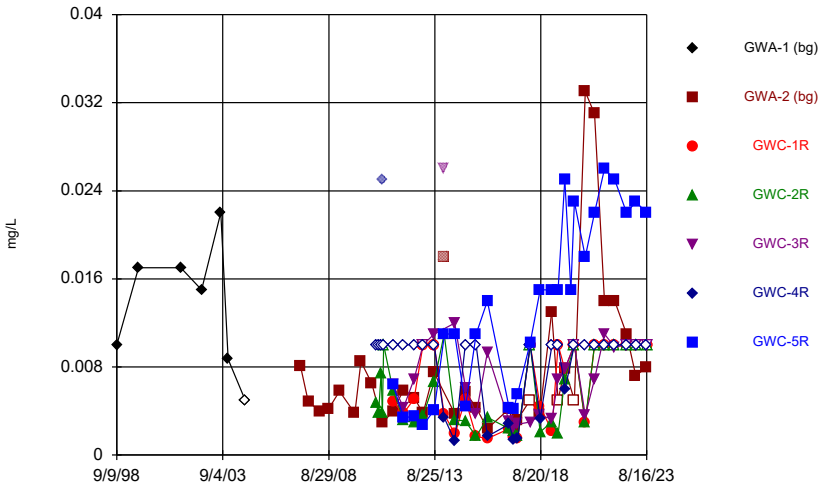
Time Series



Constituent: Vanadium Analysis Run 10/19/2023 8:53 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

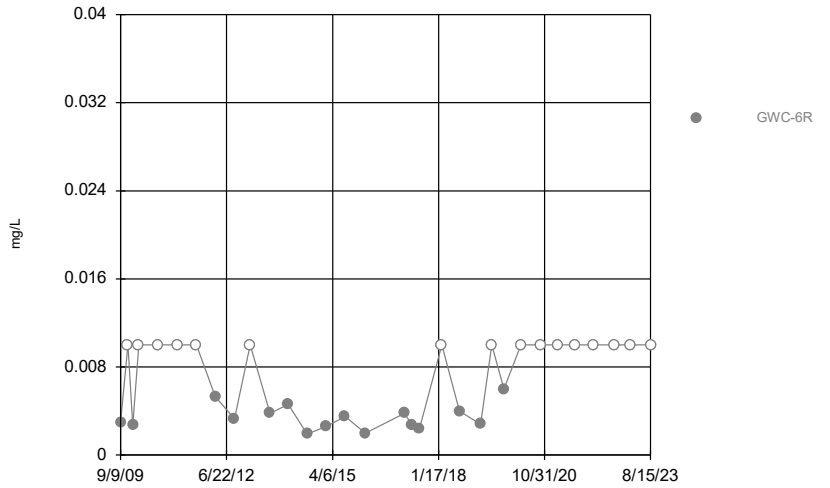
Time Series



Constituent: Zinc Analysis Run 10/19/2023 8:53 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 10/19/2023 8:53 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:54 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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		<0.003	<0.003		<0.003		
3/2/2021	<0.003			<0.003		<0.003	
3/3/2021							<0.003
8/18/2021		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/20/2021	<0.003						
2/8/2022	<0.003	<0.003		<0.003	0.0017 (J)		<0.003
2/9/2022			<0.003			<0.003	
8/30/2022	<0.003	<0.003		<0.003	0.00094 (J)	<0.003	<0.003
8/31/2022			<0.003				
2/7/2023	<0.003	<0.003				<0.003	<0.003
2/8/2023			<0.003	<0.003	<0.003		
8/15/2023	<0.003				<0.003	<0.003	<0.003
8/16/2023		<0.003	<0.003	<0.003			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:54 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						
2/9/2021			<0.003	<0.003			0.00032 (J)
2/10/2021	<0.003						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:54 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)
2/12/2021					<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
8/19/2021	<0.003				<0.003	<0.003	
8/26/2021				<0.003			
8/27/2021		<0.003	<0.003				<0.003
2/9/2022		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2/10/2022	<0.003						
8/30/2022		<0.003	<0.003	<0.003	<0.003		
8/31/2022	<0.003					<0.003	<0.003
2/7/2023		0.0013 (J)	<0.003	<0.003	<0.003	<0.003	<0.003
2/8/2023	<0.003						
8/15/2023	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:54 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)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:54 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
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
8/19/2021			<0.003		<0.003		
8/26/2021				<0.003			
8/27/2021		<0.003				<0.003	
9/1/2021	<0.003						
9/3/2021							<0.003
2/8/2022				<0.003			<0.003
2/9/2022	<0.003	<0.003			0.0018 (J)	<0.003	
2/11/2022			<0.003				
8/30/2022	0.0046	<0.003					
8/31/2022			<0.003	<0.003	<0.003	<0.003	<0.003
2/7/2023	<0.003	<0.003		<0.003			
2/8/2023			<0.003		<0.003	<0.003	<0.003
8/15/2023	<0.003	<0.003		<0.003	<0.003		<0.003
8/16/2023			<0.003			<0.003	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 8:54 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
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		
8/19/2021	<0.003			
8/26/2021		<0.003	<0.003	<0.003
2/8/2022	<0.003			
2/10/2022			<0.003	<0.003
2/11/2022		<0.003		
8/30/2022			<0.003	<0.003
8/31/2022	<0.003	<0.003		
2/7/2023			<0.003	
2/8/2023	<0.003			
2/9/2023		<0.003		<0.003
8/15/2023	<0.003	<0.003	<0.003	<0.003

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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	<0.009						
9/20/1999	<0.009						
9/12/2001	<0.009						
9/3/2002	<0.009						
7/29/2003	<0.009						
12/5/2003	<0.009						
9/22/2004	<0.009						
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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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)
3/1/2021			0.0022 (J)	0.0011 (J)		<0.005	
3/2/2021		<0.005			0.0017 (J)		0.0024 (J)
8/18/2021			0.0016 (J)	<0.005	0.0028 (J)	<0.005	0.0021 (J)
8/20/2021		<0.005					
2/8/2022		0.0033 (J)	0.0026 (J)		0.0015 (J)	0.0013 (J)	
2/9/2022				<0.005			0.0034 (J)
8/30/2022		0.0024 (J)	0.0035 (J)		<0.005	<0.005	0.0035 (J)
8/31/2022				<0.005			
2/7/2023		<0.005	0.0047 (J)				0.0054
2/8/2023				<0.005	<0.005	<0.005	
8/15/2023		<0.005				<0.005	0.0053
8/16/2023			<0.005	<0.005	<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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					
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
8/18/2021	<0.005						
8/19/2021		<0.005				<0.005	<0.005
8/26/2021					<0.005		
8/27/2021			<0.005	<0.005			
2/8/2022	<0.005						
2/9/2022			0.0024 (J)	0.0022 (J)	0.0024 (J)	0.0031 (J)	0.0033 (J)
2/10/2022		0.0016 (J)					
8/30/2022	<0.005		<0.005	<0.005	<0.005	<0.005	
8/31/2022		<0.005					<0.005
2/7/2023	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
2/8/2023		<0.005					
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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		
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		
8/19/2021				<0.005		<0.005	
8/26/2021					<0.005		
8/27/2021	<0.005		<0.005				<0.005
9/1/2021		<0.005					
2/8/2022					0.0034 (J)		
2/9/2022	0.0021 (J)	0.0036 (J)	0.0037 (J)			0.002 (J)	0.0018 (J)
2/11/2022				0.0014 (J)			
8/30/2022		0.0022 (J)	0.0027 (J)				
8/31/2022	<0.005			<0.005	0.0029 (J)	0.0028 (J)	<0.005
2/7/2023	<0.005	0.0028 (J)	<0.005		0.0029 (J)		
2/8/2023				<0.005		0.003 (J)	0.0024 (J)
8/15/2023	<0.005	<0.005	<0.005		<0.005	<0.005	
8/16/2023				<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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				
2/8/2021				<0.005	<0.005
2/9/2021			<0.005		
2/10/2021	<0.005				
3/1/2021		<0.005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 8:54 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)
3/2/2021				<0.005	<0.005
3/3/2021			<0.005		
3/4/2021	<0.005				
8/19/2021		<0.005			
8/26/2021			<0.005	0.0016 (J)	<0.005
9/3/2021	<0.005				
2/8/2022	0.003 (J)	0.0027 (J)			
2/10/2022				0.004 (J)	0.0016 (J)
2/11/2022			0.0014 (J)		
8/30/2022				0.0031 (J)	<0.005
8/31/2022	<0.005	<0.005	<0.005		
2/7/2023				0.003 (J)	
2/8/2023	<0.005	<0.005			
2/9/2023			<0.005		<0.005
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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
3/1/2021			0.063	0.043		0.035	
3/2/2021		0.039			0.015		0.011
8/18/2021			0.076	0.033	0.014	0.04	0.013
8/20/2021		0.036					
2/8/2022		0.037	0.066		0.013	0.031	
2/9/2022				0.038			0.011
8/30/2022		0.031	0.058		0.01	0.022	0.01
8/31/2022				0.026			
2/7/2023		0.034	0.051				0.011
2/8/2023				0.027	0.0089	0.034	
8/15/2023		0.03				0.022	0.01
8/16/2023			0.042	0.026	0.0096		

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:54 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:54 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)					
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
8/18/2021	0.035						
8/19/2021		0.0077				0.0065	0.0079
8/26/2021					0.015		
8/27/2021			0.016	0.02			
2/8/2022	0.03						
2/9/2022			0.017	0.021	0.014	0.0067	0.0088
2/10/2022		0.0088					
8/30/2022	0.028		0.017	0.017	0.012	0.0066	
8/31/2022		0.0075					0.0074
2/7/2023	0.032		0.017	0.019	0.012	0.14	0.21
2/8/2023		0.0089					
8/15/2023	0.028	0.0079	0.016	0.02	0.012	0.0059	0.0078

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:54 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)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:54 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		
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		
8/19/2021				0.0071		0.0052	
8/26/2021					0.038		
8/27/2021	0.013		0.003 (J)				0.0039 (J)
9/1/2021		0.0099					
2/8/2022					0.041		
2/9/2022	0.014	0.011	0.0029 (J)			0.0051	0.0031 (J)
2/11/2022				0.0077			
8/30/2022		0.0085	0.003 (J)				
8/31/2022	0.011			0.0068	0.035	0.0048 (J)	0.003 (J)
2/7/2023	0.014	0.01	0.0026 (J)		0.03		
2/8/2023				0.0066		0.0048 (J)	0.0029 (J)
8/15/2023	0.012	0.0075	0.0031 (J)		0.031	0.0046 (J)	
8/16/2023				0.0066			0.0037 (J)

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:54 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				
2/8/2021				0.0079 (J)	0.02
2/9/2021			0.013		
2/10/2021	0.032				
3/1/2021		0.029			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 10/19/2023 8:54 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)
3/2/2021				0.014	0.019
3/3/2021			0.014		
3/4/2021	0.032				
8/19/2021		0.029			
8/26/2021			0.012	0.0092	0.019
9/3/2021	0.035				
2/8/2022	0.039	0.03			
2/10/2022				0.0084	0.02
2/11/2022			0.013		
8/30/2022				0.0079	0.017
8/31/2022	0.035	0.029	0.013		
2/7/2023				0.0075	
2/8/2023	0.037	0.031			
2/9/2023			0.014		0.019
8/15/2023	0.034	0.032	0.011	0.0074	0.018

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.0005						
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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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			<0.0005		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
8/18/2021			0.0003 (J)	0.00022 (J)	0.0011	0.00011 (J)	0.0033
8/20/2021		<0.0005					
2/8/2022		<0.0005	0.00032 (J)		0.001	8.5E-05 (J)	
2/9/2022				0.00023 (J)			0.0036
8/30/2022		<0.0005	0.00037 (J)		0.00056	7.2E-05 (J)	0.0032
8/31/2022				0.00023 (J)			
2/7/2023		<0.0005	0.00037 (J)				0.0025
2/8/2023				0.00025 (J)	0.00033 (J)	0.00013 (J)	
8/15/2023		<0.0005				<0.0005	0.0033
8/16/2023			0.00033 (J)	0.00021 (J)	0.0006		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.0005						
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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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			<0.0005	<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
8/18/2021	<0.0005						
8/19/2021		0.00022 (J)				<0.0005	<0.0005
8/26/2021					9.3E-05 (J)		
8/27/2021			0.0001 (J)	<0.0005			
2/8/2022	<0.0005						
2/9/2022			0.00011 (J)	<0.0005	8.9E-05 (J)	<0.0005	<0.0005
2/10/2022		0.00025 (J)					
8/30/2022	<0.0005		0.0001 (J)	<0.0005	8.2E-05 (J)	<0.0005	
8/31/2022		0.0002 (J)					<0.0005
2/7/2023	<0.0005		9.6E-05 (J)	<0.0005	7.1E-05 (J)	0.0011	0.00054
2/8/2023		0.00022 (J)					
8/15/2023	<0.0005	0.00018 (J)	<0.0005	<0.0005	5.7E-05 (J)	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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							<0.0005
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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.0005			<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		
8/19/2021				<0.0005		<0.0005	
8/26/2021					<0.0005		
8/27/2021	5.9E-05 (J)		<0.0005				<0.0005
9/1/2021		<0.0005					
2/8/2022					<0.0005		
2/9/2022	7.7E-05 (J)	<0.0005	<0.0005			<0.0005	<0.0005
2/11/2022				<0.0005			
8/30/2022		<0.0005	<0.0005				
8/31/2022	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
2/7/2023	7.4E-05 (J)	<0.0005	<0.0005		<0.0005		
2/8/2023				<0.0005		<0.0005	<0.0005
8/15/2023	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	
8/16/2023				<0.0005			<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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			<0.0005	<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		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 8:54 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)
3/4/2021	0.00021 (J)				
8/19/2021		<0.0005			
8/26/2021			<0.0005	<0.0005	<0.0005
9/3/2021	0.00024 (J)				
2/8/2022	0.00028 (J)	5.6E-05 (J)			
2/10/2022				<0.0005	<0.0005
2/11/2022			<0.0005		
8/30/2022				<0.0005	<0.0005
8/31/2022	0.00025 (J)	<0.0005	<0.0005		
2/7/2023				<0.0005	
2/8/2023	0.00026 (J)	<0.0005			
2/9/2023			<0.0005		<0.0005
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:54 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)					<0.04
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
8/18/2021		0.029 (J)	0.14	<0.04	4.5	0.021 (J)	<0.04
8/20/2021	<0.04						
2/8/2022	<0.04	0.021 (J)		<0.04	5.3		<0.04
2/9/2022			0.23			0.043	
8/30/2022	<0.04	0.015 (J)		0.014 (J)	4.4	0.058	0.0092 (J)
8/31/2022			0.19				
2/7/2023	<0.04	0.015 (J)				0.017 (J)	<0.04
2/8/2023			0.22	<0.04	2.7		
8/15/2023	<0.04				1.9	0.038 (J)	<0.04
8/16/2023		0.019 (J)	0.12	<0.04			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:54 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					<0.04	<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)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:54 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)						
3/2/2021	0.017 (J)						
3/3/2021		0.01 (J)	<0.04	0.0094 (J)	<0.04	<0.04	<0.04
8/19/2021	0.018 (J)				<0.04	<0.04	
8/26/2021				<0.04			
8/27/2021		0.011 (J)	<0.04				<0.04
2/9/2022		0.0098 (J)	<0.04	<0.04	<0.04	<0.04	<0.04
2/10/2022	0.02 (J)						
8/30/2022		0.013 (J)	<0.04	0.014 (J)	<0.04		
8/31/2022	0.015 (J)					<0.04	<0.04
2/7/2023		0.014 (J)	<0.04	<0.04	<0.04	<0.04	<0.04
2/8/2023	0.015 (J)						
8/15/2023	0.017 (J)	<0.04	<0.04	<0.04	<0.04	0.0094 (J)	<0.04

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:54 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						<0.04	
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)						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:54 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			<0.04		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
8/19/2021			<0.04		<0.04		
8/26/2021				0.095			
8/27/2021		<0.04				<0.04	
9/1/2021	<0.04						
9/3/2021							0.077
2/8/2022				0.13			0.074
2/9/2022	<0.04	<0.04			0.01 (J)	<0.04	
2/11/2022			<0.04				
8/30/2022	0.012 (J)	<0.04					
8/31/2022			<0.04	0.14	<0.04	<0.04	0.062
2/7/2023	<0.04	<0.04		0.13			
2/8/2023			<0.04		<0.04	<0.04	0.057
8/15/2023	0.046 (J)	<0.04		0.15 (J)	<0.04		0.052 (J)
8/16/2023			<0.04			<0.04	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 10/19/2023 8:54 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		<0.04	<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)		
8/19/2021	0.011 (J)			
8/26/2021		<0.04	0.009 (J)	<0.04
2/8/2022	0.015 (J)			
2/10/2022			0.011 (J)	<0.04
2/11/2022		<0.04		
8/30/2022			0.0098 (J)	<0.04
8/31/2022	0.0091 (J)	<0.04		
2/7/2023			<0.04	
2/8/2023	0.011 (J)			
2/9/2023		<0.04		<0.04
8/15/2023	<0.04	<0.04	<0.04	<0.04

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.001	
9/8/2011	<0.0005	<0.0025					<0.0005
3/4/2012					<0.0005		
3/5/2012	<0.0005	<0.0025		<0.0005		<0.001	<0.0005
3/6/2012			<0.0005				
9/5/2012		<0.0025		<0.0005		<0.001	<0.0005
9/10/2012	<0.0005				<0.0005		
9/11/2012			<0.0005				
2/5/2013		<0.0025				<0.001	<0.0005
2/6/2013	<0.0005		<0.0005	<0.0005	<0.0005		
8/12/2013	<0.0005						
8/13/2013		<0.0025	<0.0005	<0.0005			<0.0005
8/14/2013					<0.0005	<0.001	
2/4/2014		<0.0025	<0.0005		<0.0005		<0.0005
2/5/2014	<0.0005			<0.0005		<0.001	
8/4/2014				0.00034 (J)	<0.0005	0.00045 (J)	
8/5/2014	<0.0005	<0.0025	<0.0005				<0.0005
2/2/2015		<0.0025	<0.0005		<0.0005		
2/3/2015				<0.0005		<0.001	<0.0005
2/4/2015	<0.0005						
8/3/2015	<0.0005			<0.0005 (D)	<0.0005 (D)	0.00046 (JD)	
8/4/2015		<0.0025 (D)	<0.0005				<0.0005
2/16/2016	<0.0005	<0.0025		0.00025 (J)	<0.0005	0.00097 (J)	<0.0005
2/17/2016			<0.0005				
8/31/2016	<0.0005	<0.0025	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		<0.0025		<0.0005			<0.0005
2/24/2017					<0.0005	0.0003 (J)	
5/8/2017	<0.0005						
5/9/2017		<0.0025		<0.0005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:54 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	0.0003 (J)	<0.0005
7/17/2017	<0.0005					0.0004 (J)	
7/18/2017		<0.0025	<0.0005	<0.0005	<0.0005		<0.0005
10/16/2017	<0.0005					0.0006 (J)	
10/17/2017		<0.0025	<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		<0.0025		<0.0005		<0.001	
8/6/2018	<0.0005						<0.0005
8/7/2018		<0.0025		<0.0005		0.00083 (J)	
8/8/2018			<0.0005		<0.0005		
2/25/2019	<0.0005						<0.0005
2/26/2019		<0.0025	<0.0005	0.00011 (J)	<0.0005	0.00081 (J)	
6/12/2019	<0.0005		<0.0005		<0.0005		
6/13/2019		<0.0025		0.00021 (J)		0.00073 (J)	<0.0005
8/19/2019	<0.0005				<0.0005		
8/20/2019		<0.0025	<0.0005				<0.0005
8/21/2019				<0.0005		0.0012 (J)	
10/8/2019	<0.0005						<0.0005
10/9/2019		<0.0025	<0.0005			0.0011 (J)	
10/10/2019				0.00018 (J)	<0.0005		
3/17/2020	<0.0005	<0.0025		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
8/18/2021		0.00017 (J)	0.00016 (J)	0.00022 (J)	<0.0005	0.001	<0.0005
8/20/2021	<0.0005						
2/8/2022	<0.0005	0.00019 (J)		0.00018 (J)	<0.0005		<0.0005
2/9/2022			<0.0005			0.001	
8/30/2022	<0.0005	0.00026 (J)		0.00016 (J)	0.00011 (J)	0.00098	<0.0005
8/31/2022			0.00012 (J)				
2/7/2023	0.00012 (J)	0.0002 (J)				0.0013	<0.0005
2/8/2023			<0.0005	<0.0005	<0.0005		
8/15/2023	<0.0005				<0.0005	0.0011	<0.0005
8/16/2023		0.00019 (J)	0.00012 (J)	0.00013 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:54 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		<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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:54 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					<0.0005		
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
8/19/2021	<0.0005				<0.0005	<0.0005	
8/26/2021				<0.0005			
8/27/2021		<0.0005	<0.0005				<0.0005
2/9/2022		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/10/2022	<0.0005						
8/30/2022		<0.0005	<0.0005	<0.0005	<0.0005		
8/31/2022	<0.0005					<0.0005	<0.0005
2/7/2023		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/8/2023	<0.0005						
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:54 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	<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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:54 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				<0.0005			<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
8/19/2021			<0.0005		<0.0005		
8/26/2021				0.00049 (J)			
8/27/2021		<0.0005				<0.0005	
9/1/2021	<0.0005						
9/3/2021							<0.0005
2/8/2022				0.00063			<0.0005
2/9/2022	<0.0005	<0.0005			<0.0005	<0.0005	
2/11/2022			<0.0005				
8/30/2022	<0.0005	<0.0005					
8/31/2022			<0.0005	0.00044 (J)	<0.0005	<0.0005	<0.0005
2/7/2023	0.00012 (J)	<0.0005		0.00014 (J)			
2/8/2023			<0.0005		<0.0005	0.00013 (J)	<0.0005
8/15/2023	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005
8/16/2023			<0.0005			<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 8:54 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	0.0001 (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		
8/19/2021	<0.0005			
8/26/2021		<0.0005	<0.0005	<0.0005
2/8/2022	<0.0005			
2/10/2022			<0.0005	<0.0005
2/11/2022		<0.0005		
8/30/2022			<0.0005	<0.0005
8/31/2022	<0.0005	<0.0005		
2/7/2023			<0.0005	
2/8/2023	0.00032 (J)			
2/9/2023		<0.0005		<0.0005
8/15/2023	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		117	54.1		69.5		
3/2/2021	34.2			17.9		145	
3/3/2021							105
8/18/2021		154	45.8	20.2	56.2	159	74.5
8/20/2021	26.5						
2/8/2022	25.6	166		17.9	66.5		61.5
2/9/2022			46.6			139	
8/30/2022	23.5	189		17.5	55.8	135	40.6
8/31/2022			46.9				
2/7/2023	22.3	179				112	30.8
2/8/2023			48	11.2	39		
8/15/2023	20.3				34.6	145	28
8/16/2023		156	44	20.5			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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						
3/2/2021	1.2						
3/3/2021		2.5	5.2	0.96 (J)	14.1	1.8	2.4
8/19/2021	1.2				14.2	2	
8/26/2021				0.98 (J)			
8/27/2021		2.7	5.1				2.4
2/9/2022		2.8	5.1	0.87 (J)	14.9	2.1	2.3
2/10/2022	1.3						
8/30/2022		3	5.7	0.77 (J)	14.9		
8/31/2022	1.3					1.9	2.4
2/7/2023		2.9	5.5	0.79 (J)	15	2.2	2.4
2/8/2023	1.5						
8/15/2023	1.3	2.9	5.1	0.8 (J)	13.5	1.8	2.2

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 8:54 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						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021			1.2				
3/3/2021		25.6			29.8	20.6	
3/4/2021	8.7			8.2			4.6
8/19/2021			1.2		28.1		
8/26/2021				14.1			
8/27/2021		22.6				24.7	
9/1/2021	9.5						
9/3/2021							5.6
2/8/2022				15.2			6
2/9/2022	9.8	23.4			30.3	23.7	
2/11/2022			1.5				
8/30/2022	7.3	25.4					
8/31/2022			1.3	16.3	28.7	23.5	6.2
2/7/2023	7.5	25.6		16.1			
2/8/2023			1.3		28.9	23.3	5.9
8/15/2023	6.1	23.2		17.2	27.4		5.3
8/16/2023			1.4			24.9	

Time Series

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021	10.3			
3/2/2021			1.6	2.6
3/3/2021		7.7		
8/19/2021	9.6			
8/26/2021		7.6	25.2	2.5
2/8/2022	9.4			
2/10/2022			24.8	2.5
2/11/2022		7.5		
8/30/2022			24.8	2.5
8/31/2022	9.6	8.9		
2/7/2023			26.6	
2/8/2023	9.2			
2/9/2023		9.6		2.8
8/15/2023	9.6	7.8	25	2.6

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		8.6	49.6		194		
3/2/2021	4.1			5.5		2.9	
3/3/2021							5
8/18/2021		5.2	26.2	4.6	150	2.3	5.4
8/20/2021	5.2						
2/8/2022	5.7	5.6		4.5	162		6.9
2/9/2022			21.2			2	
8/30/2022	6.3	5.6		3.1	146	1.8	7.5
8/31/2022			14.5				
2/7/2023	6.1	6.2				2.1	7.9
2/8/2023			12.3	3.4	121		
8/15/2023	5.6				72.7	1.9	10.4
8/16/2023		5.3	7	3.4			

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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						
3/2/2021	4.9						
3/3/2021		7.1	7	7.2	0.96 (J)	1.2	2.7
8/19/2021	5				1.1	1.3	
8/26/2021				7.3			
8/27/2021		8.5	7.4				2.8
2/9/2022		10.9	7.5	7	1	1.3	2.8
2/10/2022	4.7						
8/30/2022		12	7.9	7	1.3		
8/31/2022	4.6					1.5	2.9
2/7/2023		11.4	7.4	6.4	1.3	1.5	2.9
2/8/2023	4.9						
8/15/2023	4.1	11.6	7.3	6.7	1.1	1.4	2.8

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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
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
8/19/2021			1.6		1.1		
8/26/2021				7.2			
8/27/2021		0.99 (J)				1.1	
9/1/2021	1.8						
9/3/2021							5.5
2/8/2022				7.4			6.2
2/9/2022	1.7	1 (J)			1.1	1.1	
2/11/2022			2.1				
8/30/2022	2.4	1.2					
8/31/2022			1.8	6.7	1.3	1.3	6.3
2/7/2023	2.4	1.1		5.6			
2/8/2023			1.6		1.2	1.1	6.9
8/15/2023	2.3	0.93 (J)		4.5	1.1		5.6
8/16/2023			1.5			1.1	

Time Series

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021	3.7			
3/2/2021			3.2	4.3
3/3/2021		4.1		
8/19/2021	3.5			
8/26/2021		4.4	3.4	4.3
2/8/2022	3.2			
2/10/2022			3.2	4.4
2/11/2022		4.1		
8/30/2022			3.5	4.4
8/31/2022	3.5	4.4		
2/7/2023			3.3	
2/8/2023	3.5			
2/9/2023		4.5		5
8/15/2023	3.5	4.4	3.1	4.1

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.007						
9/20/1999	0.01						
9/12/2001	<0.007						
9/3/2002	<0.007						
7/29/2003	<0.007						
12/5/2003	<0.007						
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	<0.01
9/8/2011		<0.005	<0.01				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.01		<0.005		<0.01
3/6/2012				<0.005			
9/5/2012			<0.01		<0.005		<0.01
9/10/2012		<0.005				<0.005	
9/11/2012				<0.005			
2/5/2013			<0.01				<0.01
2/6/2013		<0.005		<0.005	<0.005	<0.005	
8/12/2013		<0.005					
8/13/2013			<0.01	0.0017	0.0019		
8/14/2013						<0.005	0.0016
2/4/2014			<0.01	<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	<0.01	<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			<0.01 (D)	<0.005			
2/16/2016		<0.005	<0.01		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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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						<0.005	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			<0.01		<0.005		<0.01
8/6/2018		<0.005					
8/7/2018			<0.01		<0.005		0.0024 (J)
8/8/2018				<0.005		<0.005	
2/25/2019		<0.005					
2/26/2019			<0.01	<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)
8/18/2021			0.0015 (J)	<0.005	<0.005	<0.005	0.0023 (J)
8/20/2021		<0.005					
2/8/2022		<0.005	0.002 (J)		0.0011 (J)	<0.005	
2/9/2022				<0.005			0.0022 (J)
8/30/2022		<0.005	0.0015 (J)		<0.005	<0.005	0.0019 (J)
8/31/2022				<0.005			
2/7/2023		<0.005	0.002 (J)				0.0028 (J)
2/8/2023				<0.005	0.0017 (J)	0.0012 (J)	
8/15/2023		<0.005				<0.005	0.0018 (J)
8/16/2023			0.0016 (J)	<0.005	<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.005
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	<0.01						
3/27/2018		<0.005					<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.01						
2/25/2019	<0.01						
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
8/18/2021	0.0015 (J)						
8/19/2021		<0.005				<0.005	<0.005
8/26/2021					<0.005		
8/27/2021			<0.005	<0.005			
2/8/2022	0.0017 (J)						
2/9/2022			<0.005	<0.005	0.0014 (J)	<0.005	<0.005
2/10/2022		<0.005					
8/30/2022	0.0016 (J)		<0.005	<0.005	0.0015 (J)	0.0011 (J)	
8/31/2022		<0.005					<0.005
2/7/2023	0.0025 (J)		<0.005	<0.005	0.0016 (J)	<0.005	0.0013 (J)
2/8/2023		<0.005					
8/15/2023	0.0021 (J)	<0.005	<0.005	<0.005	0.0013 (J)	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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		0.0013 (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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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)	<0.005					
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		
8/19/2021				<0.005		<0.005	
8/26/2021					<0.005		
8/27/2021	<0.005		<0.005				<0.005
9/1/2021		<0.005					
2/8/2022					<0.005		
2/9/2022	<0.005	<0.005	<0.005			<0.005	<0.005
2/11/2022				<0.005			
8/30/2022		<0.005	<0.005				
8/31/2022	<0.005			<0.005	<0.005	<0.005	<0.005
2/7/2023	<0.005	<0.005	<0.005		<0.005		
2/8/2023				0.0021 (J)		<0.005	<0.005
8/15/2023	<0.005	<0.005	<0.005		<0.005	<0.005	
8/16/2023				<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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		0.0093 (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				
8/19/2021		<0.005			
8/26/2021			<0.005	<0.005	<0.005
9/3/2021	<0.005				
2/8/2022	<0.005	<0.005			
2/10/2022				<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 8:54 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)
2/11/2022			<0.005		
8/30/2022				<0.005	<0.005
8/31/2022	<0.005	<0.005	<0.005		
2/7/2023				<0.005	
2/8/2023	<0.005	<0.005			
2/9/2023			<0.005		0.0012 (J)
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021			0.00083 (J)	0.00074 (J)		0.0016 (J)	
3/2/2021		0.21 (o)			0.0086		0.00039 (J)
8/18/2021			0.0014 (J)	0.00066 (J)	0.01	0.0027 (J)	0.00053 (J)
8/20/2021		0.074 (o)					
2/8/2022		0.072 (o)	0.0019 (J)		0.0074	0.0034 (J)	
2/9/2022				0.00085 (J)			0.00064 (J)
8/30/2022		0.075 (o)	0.00087 (J)		0.0021 (J)	0.002 (J)	0.00077 (J)
8/31/2022				0.0036 (J)			
2/7/2023		0.034	0.00086 (J)				0.00085 (J)
2/8/2023				0.00052 (J)	0.00085 (J)	0.0006 (J)	
8/15/2023		0.031				0.002 (J)	0.0012 (J)
8/16/2023			0.00063 (J)	0.011	0.0032 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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					
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)
8/18/2021	<0.005						
8/19/2021		<0.005				0.00055 (J)	0.0017 (J)
8/26/2021					<0.005		
8/27/2021			<0.005	<0.005			
2/8/2022	<0.005						
2/9/2022			<0.005	<0.005	<0.005	0.00072 (J)	0.0023 (J)
2/10/2022		<0.005					
8/30/2022	<0.005		<0.005	<0.005	<0.005	<0.005	
8/31/2022		<0.005					0.00085 (J)
2/7/2023	<0.005		<0.005	<0.005	<0.005	0.00097 (J)	0.0048 (J)
2/8/2023		<0.005					
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00072 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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)		
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)		
8/19/2021				0.0052		<0.005	
8/26/2021					0.0011 (J)		
8/27/2021	<0.005		<0.005				<0.005
9/1/2021		0.0068					
2/8/2022					0.0012 (J)		
2/9/2022	<0.005	0.0078	<0.005			<0.005	<0.005
2/11/2022				0.0038 (J)			
8/30/2022		0.0066	<0.005				
8/31/2022	<0.005			0.004 (J)	0.00085 (J)	<0.005	<0.005
2/7/2023	<0.005	0.014	<0.005		0.00066 (J)		
2/8/2023				0.0031 (J)		<0.005	<0.005
8/15/2023	<0.005	0.011	<0.005		0.00072 (J)	<0.005	
8/16/2023				0.0028 (J)			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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				
2/8/2021				<0.005	<0.005
2/9/2021			<0.005		
2/10/2021	<0.005				
3/1/2021		0.001 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 8:54 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)
3/2/2021				<0.005	<0.005
3/3/2021			<0.005		
3/4/2021	<0.005				
8/19/2021		0.00099 (J)			
8/26/2021			0.00042 (J)	<0.005	<0.005
9/3/2021	<0.005				
2/8/2022	<0.005	0.0013 (J)			
2/10/2022				<0.005	<0.005
2/11/2022			<0.005		
8/30/2022				<0.005	<0.005
8/31/2022	<0.005	0.00096 (J)	<0.005		
2/7/2023				<0.005	
2/8/2023	<0.005	0.0011 (J)			
2/9/2023			<0.005		<0.005
8/15/2023	<0.005	0.00072 (J)	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 8:54 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)
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)
8/18/2021		0.713 (U)	0.583 (U)	0.544 (U)	0.109 (U)	0.437 (U)	0.352 (U)
8/20/2021	0.528 (U)						
2/8/2022	0.462 (U)	0.649 (U)		0.389 (U)	0.319 (U)		0.413 (U)
2/9/2022			0.42 (U)			0.48 (U)	
8/30/2022	1.52	0.476 (U)		0.884 (U)	0.433 (U)	1.36	0.861 (U)
8/31/2022			1.55				
2/7/2023	1	1.17				0.871 (U)	0.72 (U)
2/8/2023			0.453 (U)	0.0452 (U)	0.453 (U)		
8/15/2023	0.833 (U)				0.7 (U)	0.326 (U)	0.374 (U)
8/16/2023		0.884 (U)	1.69	0.947 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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)						
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)
8/19/2021	0.786 (U)				1.17 (U)	0.0732 (U)	
8/26/2021				0.686 (U)			
8/27/2021		0.9 (U)	0.761 (U)				0.779 (U)
2/9/2022		0.133 (U)	0.571 (U)	0.0618 (U)	1.19	0.422 (U)	0.504 (U)
2/10/2022	0 (U)						
8/30/2022		1.08	1.01	0.611 (U)	0.827		
8/31/2022	0.421 (U)					0.49 (U)	0.184 (U)
2/7/2023		0.367 (U)	0.485 (U)	0.656 (U)	0.92 (U)	0.661 (U)	0.794 (U)
2/8/2023	0.83 (U)						
8/15/2023	0.652 (U)	0.0388 (U)	0.655 (U)	0.347 (U)	0.935 (U)	0.726 (U)	0.165 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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)
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)
8/19/2021			0.234 (U)		3.53		
8/26/2021				0.674 (U)			
8/27/2021		0.409 (U)				1.34	
9/1/2021	1.86						
9/3/2021							0.971 (U)
2/8/2022				0.834			0.534 (U)
2/9/2022	1.94	0.894 (U)			3.28	1.91	
2/10/2022			0.268 (U)				
8/30/2022	1.27	0.699 (U)					
8/31/2022			0.506 (U)	0.937	2.12	1.33	0.513 (U)
2/7/2023	1.53	0.536 (U)		1.41			
2/8/2023			0.417 (U)		2.74	1.18	1.56
8/15/2023	1.68	0.611 (U)		0.608 (U)	2.79		0.325 (U)
8/16/2023			0.895 (U)			1.87	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 8:54 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)
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		
8/19/2021	1.07 (U)			
8/26/2021		1.17 (U)	4.68	0.798 (U)
2/8/2022	0.4 (U)			
2/10/2022			3.33	0.375 (U)
2/11/2022		0.996		
8/30/2022			5.34	0.72 (U)
8/31/2022	0.714 (U)	0.962		
2/7/2023			3.99	
2/8/2023	0.375 (U)			
2/9/2023		1.12		0.0815 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 8:54 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
8/15/2023	0.947 (U)	1.14	3.44	0.846 (U)

Time Series

Constituent: Copper (mg/L) Analysis Run 10/19/2023 8:54 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	<0.006						
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					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Copper (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021			<0.005	<0.005		<0.005	
3/2/2021		0.0027 (J)			<0.005		<0.005
8/18/2021			0.00067 (J)	<0.005	<0.005	<0.005	0.0022 (J)
8/20/2021		0.0012 (J)					
2/8/2022		0.0012 (J)	0.00072 (J)		<0.005	<0.005	
2/9/2022				<0.005			0.0014 (J)
8/30/2022		<0.005	<0.005		<0.005	<0.005	<0.005
8/31/2022				<0.005			
2/7/2023		<0.005	<0.005				<0.005
2/8/2023				<0.005	<0.005	<0.005	
8/15/2023		0.0011 (J)				<0.005	0.0012 (J)
8/16/2023			<0.005	<0.005	<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Copper (mg/L) Analysis Run 10/19/2023 8:54 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
3/3/2021	<0.005
8/18/2021	0.00083 (J)
2/8/2022	0.0008 (J)
8/30/2022	<0.005
2/7/2023	<0.005
8/15/2023	0.0017 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 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	<0.3				<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
8/18/2021		<0.1	<0.1	0.16	<0.1	0.056 (J)	<0.1
8/20/2021	0.06 (J)						
2/8/2022	0.064 (J)	<0.1		0.16	<0.1		<0.1
2/9/2022			<0.1			0.053 (J)	
8/30/2022	0.086 (J)	<0.1		0.14	0.05 (J)	0.11	0.064 (J)
8/31/2022			<0.1				
2/7/2023	0.095 (J)	<0.1				0.077 (J)	0.07 (J)
2/8/2023			<0.1	0.12	0.05 (J)		
8/15/2023	0.065 (J)				<0.1	0.056 (J)	<0.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 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
8/16/2023		<0.1	<0.1	0.087 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 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					<0.3		
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			<0.3	<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					<0.3	<0.1	
6/28/2017			<0.1	<0.1			
6/29/2017		<0.1					<0.1
6/30/2017	<0.1						
10/3/2017					<0.3	<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					<0.3		<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				<0.3	<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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 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						
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
8/19/2021	<0.1				0.074 (J)	<0.1	
8/26/2021				<0.1			
8/27/2021		<0.1	<0.1				<0.1
2/9/2022		<0.1	<0.1	<0.1	0.057 (J)	<0.1	<0.1
2/10/2022	<0.1						
8/30/2022		<0.1	<0.1	<0.1	0.093 (J)		
8/31/2022	0.053 (J)					0.065 (J)	<0.1
2/7/2023		<0.1	<0.1	<0.1	0.093 (J)	0.071 (J)	<0.1
2/8/2023	0.059 (J)						
8/15/2023	<0.1	<0.1	<0.1	<0.1	0.057 (J)	<0.1	<0.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 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	<0.3						
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	<0.3						
11/4/2016		<0.3					
12/15/2016		0.06 (J)					
1/11/2017					0.49	0.09 (J)	
1/13/2017	<0.3						
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		<0.3					
3/6/2017	<0.3						
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	<0.3						
6/30/2017			<0.1				
10/3/2017	<0.3	<0.3					
10/4/2017			<0.1		<0.47	<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	<0.3						
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		<0.3			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)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 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
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
8/19/2021			<0.1		0.47		
8/26/2021				0.063 (J)			
8/27/2021		0.12				0.12	
9/1/2021	0.11						
9/3/2021							<0.1
2/8/2022				0.052 (J)			<0.1
2/9/2022	0.1	0.094 (J)			0.43	0.097 (J)	
2/11/2022			<0.1				
8/30/2022	0.1	0.12					
8/31/2022			0.06 (J)	0.065 (J)	0.42	0.13	0.05 (J)
2/7/2023	0.1	0.12		0.076 (J)			
2/8/2023			0.064 (J)		0.56	0.16	<0.1
8/15/2023	0.061 (J)	0.081 (J)		<0.1	0.42		<0.1
8/16/2023			<0.1			0.11	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 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
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		
8/19/2021	<0.1			
8/26/2021		<0.1	0.061 (J)	<0.1
2/8/2022	<0.1			
2/10/2022			0.055 (J)	<0.1
2/11/2022		<0.1		
8/30/2022			0.085 (J)	<0.1
8/31/2022	0.065 (J)	0.061 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 8:54 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
2/7/2023			0.082 (J)	
2/8/2023	0.077 (J)			
2/9/2023		0.067 (J)		<0.1
8/15/2023	<0.1	<0.1	<0.1	<0.1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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	<0.01						
9/12/2001	0.0042						
9/3/2002	<0.01						
7/29/2003	0.015						
12/5/2003	<0.01						
9/22/2004	<0.01						
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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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		<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)
8/18/2021			<0.001	<0.001	<0.001	<0.001	<0.001
8/20/2021		<0.001					
2/8/2022		<0.001	<0.001		<0.001	<0.001	
2/9/2022				<0.001			<0.001
8/30/2022		<0.001	<0.001		<0.001	<0.001	<0.001
8/31/2022				<0.001			
2/7/2023		<0.001	<0.001				<0.001
2/8/2023				<0.001	<0.001	<0.001	
8/15/2023		<0.001				<0.001	<0.001
8/16/2023			<0.001	<0.001	<0.001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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	<0.001						
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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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			<0.001	<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
8/18/2021	<0.001						
8/19/2021		<0.001				<0.001	<0.001
8/26/2021					<0.001		
8/27/2021			<0.001	<0.001			
2/8/2022	<0.001						
2/9/2022			<0.001	<0.001	<0.001	<0.001	<0.001
2/10/2022		<0.001					
8/30/2022	<0.001		<0.001	<0.001	<0.001	<0.001	
8/31/2022		<0.001					<0.001
2/7/2023	<0.001		<0.001	<0.001	<0.001	<0.001	<0.001
2/8/2023		<0.001					
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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							<0.001
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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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)	<0.001					
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		
8/19/2021				<0.001		<0.001	
8/26/2021					<0.001		
8/27/2021	<0.001		<0.001				<0.001
9/1/2021		<0.001					
2/8/2022					<0.001		
2/9/2022	<0.001	<0.001	<0.001			<0.001	<0.001
2/11/2022				<0.001			
8/30/2022		<0.001	<0.001				
8/31/2022	<0.001			<0.001	<0.001	<0.001	<0.001
2/7/2023	<0.001	<0.001	<0.001		<0.001		
2/8/2023				<0.001		<0.001	<0.001
8/15/2023	<0.001	<0.001	<0.001		<0.001	<0.001	
8/16/2023				<0.001			<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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			<0.001	<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				
8/19/2021		<0.001			
8/26/2021			<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 10/19/2023 8:54 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)
9/3/2021	<0.001				
2/8/2022	<0.001	<0.001			
2/10/2022				<0.001	<0.001
2/11/2022			<0.001		
8/30/2022				<0.001	<0.001
8/31/2022	<0.001	<0.001	<0.001		
2/7/2023				<0.001	
2/8/2023	<0.001	<0.001			
2/9/2023			<0.001		<0.001
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:54 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)
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)
8/18/2021		0.0019 (J)	0.0049 (J)	0.001 (J)	0.00085 (J)	0.0016 (J)	0.0016 (J)
8/20/2021	0.0028 (J)						
2/8/2022	0.0031 (J)	0.0018 (J)		0.00094 (J)	<0.03		0.0016 (J)
2/9/2022			0.0042 (J)			0.0018 (J)	
8/30/2022	0.0025 (J)	0.0019 (J)		<0.03	<0.03	0.0014 (J)	0.0013 (J)
8/31/2022			0.0042 (J)				
2/7/2023	0.0022 (J)	0.0023 (J)				0.0014 (J)	0.0017 (J)
2/8/2023			0.0038 (J)	<0.03	0.00098 (J)		
8/15/2023	<0.03				0.00074 (J)	0.0014 (J)	<0.03
8/16/2023		0.0019 (J)	0.0044 (J)	<0.03			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:54 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)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:54 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						
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
8/19/2021	<0.03				0.013 (J)	0.0023 (J)	
8/26/2021				0.0019 (J)			
8/27/2021		<0.03	0.0032 (J)				<0.03
2/9/2022		<0.03	0.0032 (J)	0.0015 (J)	0.013 (J)	0.0027 (J)	0.00082 (J)
2/10/2022	<0.03						
8/30/2022		<0.03	0.0036 (J)	0.0014 (J)	0.013 (J)		
8/31/2022	<0.03					<0.03	<0.03
2/7/2023		<0.03	0.003 (J)	0.0012 (J)	0.006 (J)	0.0029 (J)	<0.03
2/8/2023	<0.03						
8/15/2023	<0.03	<0.03	<0.03	0.00077 (J)	0.0079 (J)	0.002 (J)	<0.03

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:54 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)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:54 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
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
8/19/2021			0.0012 (J)		0.023 (J)		
8/26/2021				0.0082 (J)			
8/27/2021		0.0058 (J)				0.026 (J)	
9/1/2021	0.0057 (J)						
9/3/2021							<0.03
2/8/2022				0.008 (J)			0.00076 (J)
2/9/2022	0.0061 (J)	0.006 (J)			0.026 (J)	0.021 (J)	
2/11/2022			0.0014 (J)				
8/30/2022	0.0079 (J)	0.0044 (J)					
8/31/2022			0.0012 (J)	0.0065 (J)	0.021 (J)	0.022 (J)	<0.03
2/7/2023	0.0059 (J)	0.0047 (J)		0.0065 (J)			
2/8/2023			0.0011 (J)		0.023 (J)	0.018 (J)	0.00074 (J)
8/15/2023	0.0062 (J)	<0.03		0.0064 (J)	0.023 (J)		<0.03
8/16/2023			<0.03			0.025 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:54 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)
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)		
8/19/2021	0.0038 (J)			
8/26/2021		0.0094 (J)	0.0075 (J)	0.0032 (J)
2/8/2022	0.0039 (J)			
2/10/2022			0.0076 (J)	0.0036 (J)
2/11/2022		0.012 (J)		
8/30/2022			0.0068 (J)	0.0035 (J)
8/31/2022	0.0037 (J)	0.013 (J)		
2/7/2023			0.0059 (J)	
2/8/2023	0.0037 (J)			
2/9/2023		0.014 (J)		0.0036 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 8:54 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
8/15/2023	0.004 (J)	0.0083 (J)	0.0059 (J)	<0.03

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:54 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	<0.0002						
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			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:54 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			<0.0002		<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
8/18/2021		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/20/2021	<0.0002						
2/8/2022	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002
2/9/2022			<0.0002			<0.0002	
8/30/2022	<0.0002	<0.0002		<0.0002	0.00014 (J)	<0.0002	<0.0002
8/31/2022			<0.0002				
2/7/2023	0.00013 (J)	<0.0002				<0.0002	<0.0002
2/8/2023			<0.0002	<0.0002	0.0002 (J)		
8/15/2023	<0.0002				<0.0002	<0.0002	<0.0002
8/16/2023		<0.0002	<0.0002	<0.0002			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:54 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					<0.0002	<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
8/26/2021				<0.0002			
8/27/2021		<0.0002	<0.0002				<0.0002
2/9/2022		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:54 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)
2/10/2022	<0.0002						
8/30/2022		<0.0002	<0.0002	<0.0002	<0.0002		
8/31/2022	<0.0002					<0.0002	<0.0002
2/7/2023		0.00018 (J)	0.00013 (J)	0.00017 (J)	<0.0002	<0.0002	0.00015 (J)
2/8/2023	<0.0002						
8/15/2023	0.00016 (J)	<0.0002	0.00014 (J)	0.00015 (J)	0.00015 (J)	0.00015 (J)	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:54 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						<0.0002	
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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:54 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)
2/9/2021	<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
8/26/2021				<0.0002			
9/1/2021	<0.0002						
9/3/2021							0.00012 (J)
2/8/2022				<0.0002			0.00013 (J)
2/9/2022	<0.0002	<0.0002			<0.0002	<0.0002	
2/11/2022			<0.0002				
8/30/2022	<0.0002	<0.0002					
8/31/2022			<0.0002	<0.0002	<0.0002	<0.0002	0.00064
2/7/2023	0.00017 (J)	<0.0002		<0.0002			
2/8/2023			<0.0002		<0.0002	<0.0002	<0.0002
8/15/2023	<0.0002	0.00015 (J)		<0.0002	0.00014 (J)		0.00037
8/16/2023			<0.0002			<0.0002	

Time Series

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 8:54 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		<0.0002	<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		
8/19/2021	<0.0002			
8/26/2021		<0.0002	<0.0002	<0.0002
2/8/2022	<0.0002			
2/10/2022			<0.0002	<0.0002
2/11/2022		<0.0002		
8/30/2022			<0.0002	<0.0002
8/31/2022	<0.0002	<0.0002		
2/7/2023			<0.0002	
2/8/2023	<0.0002			
2/9/2023		<0.0002		<0.0002
8/15/2023	0.00014 (J)	0.00013 (J)	0.00015 (J)	0.00014 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:54 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		
8/18/2021		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
8/20/2021	<0.01						
2/8/2022	<0.01	<0.01		<0.01	<0.01		<0.01
2/9/2022			<0.01			<0.01	
8/30/2022	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
8/31/2022			<0.01				
2/7/2023	<0.01	<0.01				<0.01	<0.01
2/8/2023			<0.01	<0.01	<0.01		
8/15/2023	<0.01				<0.01	<0.01	<0.01
8/16/2023		<0.01	<0.01	<0.01			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:54 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)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:54 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						
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
8/19/2021	<0.01				0.0083 (J)	0.005 (J)	
8/26/2021				<0.01			
8/27/2021		<0.01	<0.01				<0.01
2/9/2022		<0.01	<0.01	<0.01	0.0093 (J)	0.0055 (J)	<0.01
2/10/2022	<0.01						
8/30/2022		<0.01	<0.01	<0.01	0.0094 (J)		
8/31/2022	<0.01					0.0055 (J)	<0.01
2/7/2023		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2/8/2023	<0.01						
8/15/2023	<0.01	<0.01	<0.01	<0.01	0.0098 (J)	0.0047 (J)	<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:54 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:54 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
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
8/19/2021			<0.01		0.013		
8/26/2021				0.0027 (J)			
8/27/2021		0.0048 (J)				0.0099 (J)	
9/1/2021	<0.01						
9/3/2021							<0.01
2/8/2022				0.0035 (J)			<0.01
2/9/2022	<0.01	0.0057 (J)			0.013	0.0087 (J)	
2/11/2022			<0.01				
8/30/2022	<0.01	0.0068 (J)					
8/31/2022			<0.01	0.0036 (J)	0.011	0.0068 (J)	<0.01
2/7/2023	<0.01	0.0061 (J)		0.0045 (J)			
2/8/2023			<0.01		0.012	0.0065 (J)	<0.01
8/15/2023	<0.01	0.0071 (J)		0.0061 (J)	0.012		<0.01
8/16/2023			<0.01			0.012	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 10/19/2023 8:54 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
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		
8/19/2021	<0.01			
8/26/2021		<0.01	0.001 (J)	<0.01
2/8/2022	<0.01			
2/10/2022			0.00096 (J)	<0.01
2/11/2022		<0.01		
8/30/2022			0.00089 (J)	<0.01
8/31/2022	<0.01	<0.01		
2/7/2023			0.00095 (J)	
2/8/2023	<0.01			
2/9/2023		<0.01		<0.01
8/15/2023	<0.01	<0.01	0.0009 (J)	<0.01

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Nickel (mg/L) Analysis Run 10/19/2023 8:54 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	<0.004						
9/20/1999	<0.004						
9/12/2001	<0.004						
9/3/2002	<0.004						
7/29/2003	0.0061						
12/5/2003	<0.004						
9/22/2004	<0.004						
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			<0.01	0.003	0.0032		
8/14/2013						<0.005	0.0032
2/4/2014			<0.01	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			<0.01 (D)	<0.005			
2/16/2016		0.0039	<0.01		<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)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Nickel (mg/L) Analysis Run 10/19/2023 8:54 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			<0.01		<0.005		0.0019 (J)
8/8/2018				<0.005		0.0012 (J)	
2/25/2019		0.0026 (J)					
2/26/2019			<0.01	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)
8/18/2021			0.0028 (J)	<0.005	<0.005	0.0026 (J)	0.0016 (J)
8/20/2021		0.014					
2/8/2022		0.017	0.0032 (J)		<0.005	0.0017 (J)	
2/9/2022				<0.005			0.0014 (J)
8/30/2022		0.015	0.0027 (J)		<0.005	0.0021 (J)	0.00097 (J)
8/31/2022				<0.005			
2/7/2023		0.0096	0.0028 (J)				<0.005
2/8/2023				<0.005	<0.005	<0.005	
8/15/2023		0.0098				0.00096 (J)	0.001 (J)
8/16/2023			0.0026 (J)	<0.005	<0.005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Nickel (mg/L) Analysis Run 10/19/2023 8:54 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)
3/3/2021	0.0016 (J)
8/18/2021	0.0012 (J)
2/8/2022	0.001 (J)
8/30/2022	<0.005
2/7/2023	<0.005
8/15/2023	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (S.U.) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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
3/1/2021		5.25	5.17		5.62		
3/2/2021	5.42 (D)			4.82		4.63	
3/3/2021							5.78
8/18/2021		5.08	4.96	4.73	5.46	4.76	5.82
8/20/2021	5.86						
2/8/2022	5.83	5.16		5.1	5.67		5.89
2/9/2022			5.2			4.82	
8/30/2022	5.39	5.07		4.85	5.52	4.86	5.82
8/31/2022			5.23				
2/7/2023	5.94	5.16				4.62	4.81
2/8/2023			4.96	5.21	5.64		
8/15/2023	5.3				5.74	4.66	5.4
8/16/2023		5.08	4.89	4.64			

Time Series

Constituent: pH (S.U.) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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						
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
8/19/2021	7.32				6.32	6.38	
8/26/2021				4.4			
8/27/2021		5.27	5.4				5.57
2/9/2022		5.53	5.98	5.28	7.12	6.24	5.91
2/10/2022	4.5						
8/30/2022		4.68	5.82	5.18	7.2		
8/31/2022	5.15					5.64	5.38
2/7/2023		5.47	6	5.03	7.86	6.53	5.63
2/8/2023	5.39						
8/15/2023	5.03	5.54	5.82	5.2	6.98	5.88	7

Time Series

Constituent: pH (S.U.) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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
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
8/19/2021					5.34		
8/26/2021				6.91			
8/27/2021		7.14				7.39	
9/1/2021	6.65						
9/3/2021							4.75
2/8/2022				5.78			5.26
2/9/2022	6.84	5.89			7.97	7.66	
2/11/2022			5.59				
8/30/2022	6.58	7.04					
8/31/2022			5.87	5.3	7.65	7.49	4.53
2/7/2023	6.82	6.94		5.49			
2/8/2023			6.43		7.88	7.73	5.71
8/15/2023	6.84	6.96		5.78	7.69		5
8/16/2023			5.55			7.39	

Time Series

Constituent: pH (S.U.) Analysis Run 10/19/2023 8:54 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			
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		
8/19/2021	5.5			
8/26/2021		5.82	7.16	5.51
2/8/2022	5.4			
2/10/2022			6.99	5.14
2/11/2022		5.95		
8/30/2022			7.4	5
8/31/2022	5.32	5.5		

Time Series

Constituent: pH (S.U.) Analysis Run 10/19/2023 8:54 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
2/7/2023			6.64	
2/8/2023	5.22			
2/9/2023		6.23		5.9
8/15/2023	5.69	5.99	7.34	5.58

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.012						
9/20/1999	<0.012						
9/12/2001	<0.012						
9/3/2002	<0.012						
7/29/2003	0.015						
12/5/2003	<0.012						
9/22/2004	<0.012						
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				<0.01		<0.01	
1/4/2011				<0.01		<0.01	
2/17/2011				<0.01		<0.01	
3/10/2011		<0.005					
3/11/2011				<0.01		<0.01	
3/28/2011				<0.01		<0.01	
9/7/2011				<0.01	<0.01	<0.01	<0.013
9/8/2011		<0.005	<0.01				
3/4/2012						<0.01	
3/5/2012		<0.005	<0.01		<0.01		0.014
3/6/2012				<0.01			
9/5/2012			<0.01		<0.01		0.012
9/10/2012		<0.005				0.011	
9/11/2012				<0.01			
2/5/2013			<0.01				0.011
2/6/2013		<0.005		<0.01	<0.01	0.011	
8/12/2013		<0.005					
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		<0.005			<0.01		0.02
8/4/2014					<0.01	0.0085	0.032
8/5/2014		<0.005	<0.01	<0.01			
2/2/2015			<0.01	<0.01		0.0089	
2/3/2015					<0.01		0.011
2/4/2015		<0.005					
8/3/2015		<0.005			<0.01 (D)	0.0067 (D)	0.046 (D)
8/4/2015			<0.01 (D)	<0.01			
2/16/2016		<0.005	<0.01		<0.01	0.0047 (J)	0.022
2/17/2016				<0.01			
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)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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		<0.005					
5/9/2017			0.0066 (J)		<0.01		
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				<0.01		<0.01	
2/21/2018			<0.01		<0.01		0.0127
8/6/2018		<0.005					
8/7/2018			<0.01		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			<0.01		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
8/18/2021			0.019	0.0042 (J)	0.017	0.0046 (J)	0.017
8/20/2021		<0.005					
2/8/2022		<0.005	0.02		0.0091	0.0044 (J)	
2/9/2022				0.0042 (J)			0.017
8/30/2022		<0.005	0.03		0.0068	0.0038 (J)	0.019
8/31/2022				0.0042 (J)			
2/7/2023		<0.005	0.025				0.02
2/8/2023				0.0043 (J)	0.002 (J)	0.0029 (J)	
8/15/2023		<0.005				0.0021 (J)	0.024
8/16/2023			0.02	0.0033 (J)	0.0052		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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						<0.005	<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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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	
6/7/2018				<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
8/18/2021	0.0016 (J)						
8/19/2021		<0.005				<0.005	<0.005
8/26/2021					<0.005		
8/27/2021			<0.005	<0.005			
2/8/2022	<0.005						
2/9/2022			<0.005	<0.005	<0.005	<0.005	<0.005
2/10/2022		0.0014 (J)					
8/30/2022	<0.005		<0.005	<0.005	<0.005	<0.005	
8/31/2022		<0.005					<0.005
2/7/2023	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
2/8/2023		<0.005					
8/15/2023	<0.005	0.0014 (J)	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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	0.00048 (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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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	<0.005			<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		
8/19/2021				<0.005		<0.005	
8/26/2021					<0.005		
8/27/2021	<0.005		<0.005				<0.005
9/1/2021		<0.005					
2/8/2022					<0.005		
2/9/2022	<0.005	<0.005	<0.005			<0.005	<0.005
2/11/2022				<0.005			
8/30/2022		<0.005	<0.005				
8/31/2022	<0.005			<0.005	<0.005	<0.005	<0.005
2/7/2023	<0.005	<0.005	<0.005		<0.005		
2/8/2023				<0.005		<0.005	<0.005
8/15/2023	<0.005	<0.005	<0.005		<0.005	<0.005	
8/16/2023				<0.005			<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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			0.0009 (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				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 8:54 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)
8/19/2021		<0.005			
8/26/2021			<0.005	<0.005	<0.005
9/3/2021	<0.005				
2/8/2022	0.0014 (J)	<0.005			
2/10/2022				<0.005	<0.005
2/11/2022			<0.005		
8/30/2022				<0.005	<0.005
8/31/2022	<0.005	<0.005	<0.005		
2/7/2023				<0.005	
2/8/2023	<0.005	<0.005			
2/9/2023			<0.005		<0.005
8/15/2023	<0.005	<0.005	<0.005	<0.005	<0.005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Silver (mg/L) Analysis Run 10/19/2023 8:54 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Silver (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		<0.005	<0.005		<0.005		
3/2/2021	<0.005			<0.005		<0.005	
3/3/2021							<0.005
8/18/2021		<0.005	<0.005	<0.005	<0.005	0.00084 (J)	<0.005
8/20/2021	<0.005						
2/8/2022	<0.005	<0.005		<0.005	<0.005		<0.005
2/9/2022			<0.005			<0.005	
8/30/2022	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
8/31/2022			<0.005				
2/7/2023	<0.005	<0.005				<0.005	<0.005
2/8/2023			<0.005	<0.005	<0.005		
8/15/2023	<0.005				<0.005	<0.005	<0.005
8/16/2023		<0.005	<0.005	<0.005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		525	244		177		
3/2/2021	156			95.5		906	
3/3/2021							476
8/18/2021		675	223	114	118	946	345
8/20/2021	121						
2/8/2022	107	687		93.5	146		260
2/9/2022			241			937	
8/30/2022	101	994		76	155	939	174
8/31/2022			280				
2/7/2023	82.4	922				935	110
2/8/2023			288	43.3	87.8		
8/15/2023	74.2				78.6	802	80.1
8/16/2023		722	239	84.1			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:54 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	<1.5			
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	<1.5			
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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:54 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						
3/2/2021	6						
3/3/2021		5.2	<1	1	9	4.4	<1
8/19/2021	6.7				8.9	4.9	
8/26/2021				1.2			
8/27/2021		5.3	0.59 (J)				<1
2/9/2022		4.8	0.51 (J)	1.1	9.3	5.1	<1
2/10/2022	6.2						
8/30/2022		4.7	0.78 (J)	1.3	10.2		
8/31/2022	5.8					4.8	<1
2/7/2023		4.9	0.78 (J)	1.2	10.6	6.6	<1
2/8/2023	6.1						
8/15/2023	6	4.6	0.51 (J)	0.88 (J)	9.6	4.6	<1

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:54 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	<1.5				
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			<1.5				
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						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021			0.88 (J)				
3/3/2021		10.6			7	9.6	
3/4/2021	4.5			12			21.5
8/19/2021			1		7.5		
8/26/2021				19.2			
8/27/2021		16.7				18.2	
9/1/2021	5						
9/3/2021							21.3
2/8/2022				14.6			17.9
2/9/2022	3.9	18			7.2	16	
2/11/2022			2.8				
8/30/2022	3.2	20.1					
8/31/2022			1.1	10.9	6.9	13.9	17.9
2/7/2023	3.8	17.8		9.7			
2/8/2023			0.96 (J)		7.5	14.7	17.5
8/15/2023	4.1	17.2		7.6	6.8		16.4
8/16/2023			0.9 (J)			20.3	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021	51.6			
3/2/2021			2.6	2.3
3/3/2021		7.8		
8/19/2021	52.6			
8/26/2021		8.5	6	2.4
2/8/2022	50.9			
2/10/2022			4.9	2.4
2/11/2022		7.7		
8/30/2022			5.7	2.4
8/31/2022	48	8		
2/7/2023			5.2	
2/8/2023	50.5			
2/9/2023		8.9		2.9
8/15/2023	47.7	7.5	4.8	2.2

Time Series

Constituent: TDS (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		974	516		666		
3/2/2021	296 (D)			167		980	
3/3/2021							942
8/18/2021		1200	474	214	630	1660	682
8/20/2021	254						
2/8/2022	283	1310		231	648		549
2/9/2022			466			1440	
8/30/2022	244	1600		150	628	1570	400
8/31/2022			510				
2/7/2023	207	1400				1370	259
2/8/2023			540	101	718		
8/15/2023	230				395	1520	254
8/16/2023		1270	450	140			

Time Series

Constituent: TDS (mg/L) Analysis Run 10/19/2023 8:54 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 10/19/2023 8:54 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						
3/2/2021	67						
3/3/2021		57	95	37	99	39	53
8/19/2021	54				105	44	
8/26/2021				31			
8/27/2021		93	112				67
2/9/2022		81	103	60	105	57	72
2/10/2022	56						
8/30/2022		81	100	52	116		
8/31/2022	51					46	62
2/7/2023		78	96	55	131	121	89
2/8/2023	56						
8/15/2023	69	74	96	81	121	65	62

Time Series

Constituent: TDS (mg/L) Analysis Run 10/19/2023 8:54 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						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: TDS (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021			23				
3/3/2021		138			137	111	
3/4/2021	110			168			57
8/19/2021			50		144		
8/26/2021				249			
8/27/2021		150				155	
9/1/2021	137						
9/3/2021							88
2/8/2022				248			93
2/9/2022	131	156			154	145	
2/11/2022			66				
8/30/2022	122	153					
8/31/2022			33	242	141	137	92
2/7/2023	163	159		224			
2/8/2023			43		144	145	115
8/15/2023	126	157		225	231		83
8/16/2023			48			148	

Time Series

Constituent: TDS (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021	145			
3/2/2021			52	67
3/3/2021		80		
8/19/2021	134			
8/26/2021		93	123	86
2/8/2022	151			
2/10/2022			127	77
2/11/2022		102		
8/30/2022			148	86
8/31/2022	116	92		
2/7/2023			180	
2/8/2023	141			
2/9/2023		124		59
8/15/2023	186	99	219	76

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:54 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		<0.001	<0.001		<0.001		
3/2/2021	<0.001			<0.001		<0.001	
3/3/2021							<0.001
8/18/2021		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/20/2021	<0.001						
2/8/2022	<0.001	<0.001		<0.001	<0.001		<0.001
2/9/2022			<0.001			<0.001	
8/30/2022	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001
8/31/2022			<0.001				
2/7/2023	<0.001	<0.001				<0.001	<0.001
2/8/2023			<0.001	<0.001	<0.001		
8/15/2023	<0.001				<0.001	0.00029 (J)	<0.001
8/16/2023		<0.001	<0.001	<0.001			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:54 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						
2/9/2021			<0.001	<0.001			<0.001
2/10/2021	<0.001						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:54 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)
2/12/2021					<0.001	<0.001	
2/9/2022		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/10/2022	<0.001						
8/30/2022		<0.001	<0.001	<0.001	<0.001		
8/31/2022	<0.001					<0.001	<0.001
2/7/2023		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2/8/2023	<0.001						
8/15/2023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:54 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

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:54 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
2/9/2021	<0.001						
2/10/2021		<0.001		<0.001	<0.001	<0.001	<0.001
2/11/2021			<0.001				
2/8/2022				<0.001			<0.001
2/9/2022	<0.001	<0.001			<0.001	<0.001	
2/11/2022			<0.001				
8/30/2022	<0.001	<0.001					
8/31/2022			<0.001	<0.001	<0.001	<0.001	<0.001
2/7/2023	<0.001	<0.001		<0.001			
2/8/2023			<0.001		<0.001	<0.001	<0.001
8/15/2023	<0.001	<0.001		<0.001	<0.001		<0.001
8/16/2023			<0.001			<0.001	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 8:54 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
2/8/2021			<0.001	<0.001
2/9/2021		<0.001		
8/19/2021	<0.001			
2/8/2022	<0.001			
2/10/2022			<0.001	<0.001
2/11/2022		<0.001		
8/30/2022			<0.001	<0.001
8/31/2022	<0.001	<0.001		
2/7/2023			<0.001	
2/8/2023	<0.001			
2/9/2023		<0.001		<0.001
8/15/2023	<0.001	<0.001	<0.001	<0.001

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Vanadium (mg/L) Analysis Run 10/19/2023 8:54 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	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Vanadium (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021		<0.01	<0.01		<0.01		
3/2/2021	<0.01			<0.01		<0.01	
3/3/2021							<0.01
8/18/2021		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
8/20/2021	<0.01						
2/8/2022	<0.01	<0.01		<0.01	<0.01		<0.01
2/9/2022			<0.01			<0.01	
8/30/2022	0.0026 (J)	<0.01		<0.01	<0.01	<0.01	<0.01
8/31/2022			<0.01				
2/7/2023	<0.01	<0.01				<0.01	<0.01
2/8/2023			<0.01	<0.01	<0.01		
8/15/2023	<0.01				<0.01	<0.01	<0.01
8/16/2023		<0.01	<0.01	<0.01			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Zinc (mg/L) Analysis Run 10/19/2023 8:54 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)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Zinc (mg/L) Analysis Run 10/19/2023 8:54 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
3/1/2021			<0.01	<0.01		<0.01	
3/2/2021		0.031			0.0069 (J)		0.022
8/18/2021			<0.01	<0.01	0.011	<0.01	0.026
8/20/2021		0.014					
2/8/2022		0.014	<0.01		0.0098 (J)	<0.01	
2/9/2022				<0.01			0.025
8/30/2022		0.011	<0.01		<0.01	<0.01	0.022
8/31/2022				<0.01			
2/7/2023		0.0072 (J)	<0.01				0.023
2/8/2023				<0.01	<0.01	<0.01	
8/15/2023		0.008 (J)				<0.01	0.022
8/16/2023			<0.01	<0.01	<0.01		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Zinc (mg/L) Analysis Run 10/19/2023 8:54 AM

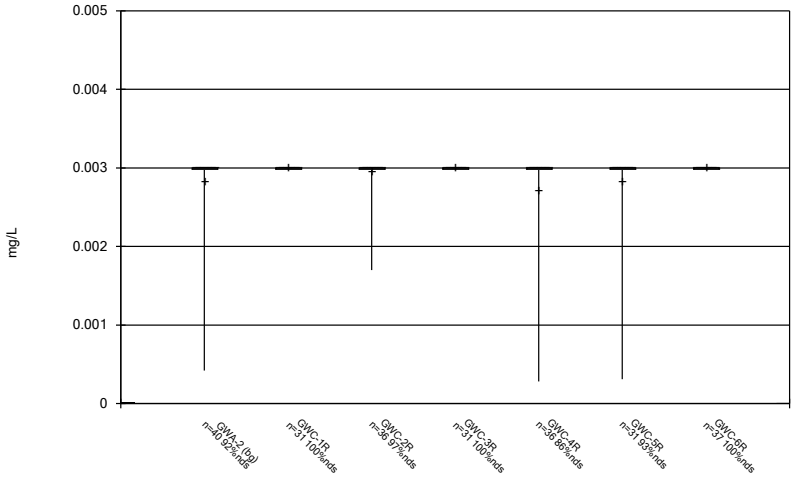
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	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
3/3/2021	<0.01
8/18/2021	<0.01
2/8/2022	<0.01
8/30/2022	<0.01
2/7/2023	<0.01
8/15/2023	<0.01

ND substitution: RL or RL/2 if <15% NDs.

FIGURE B.

Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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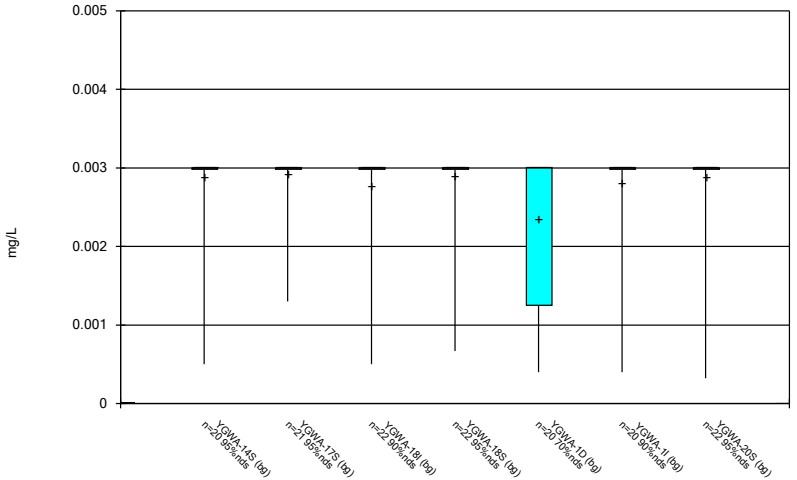
Box & Whiskers Plot



Constituent: Antimony Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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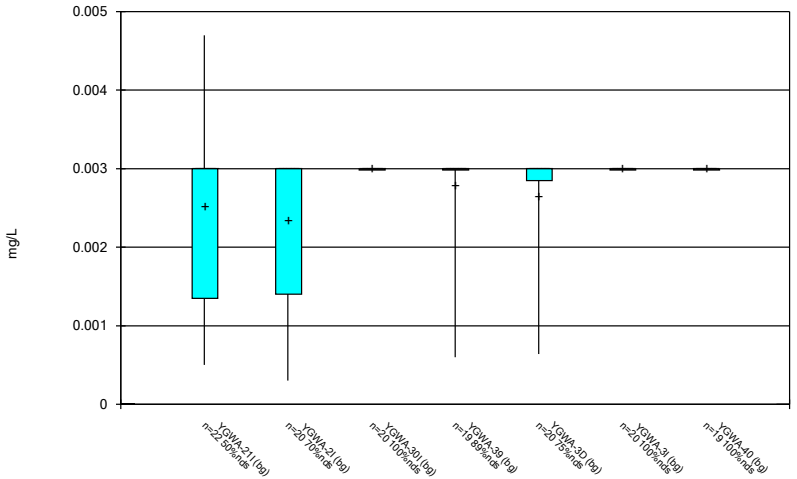
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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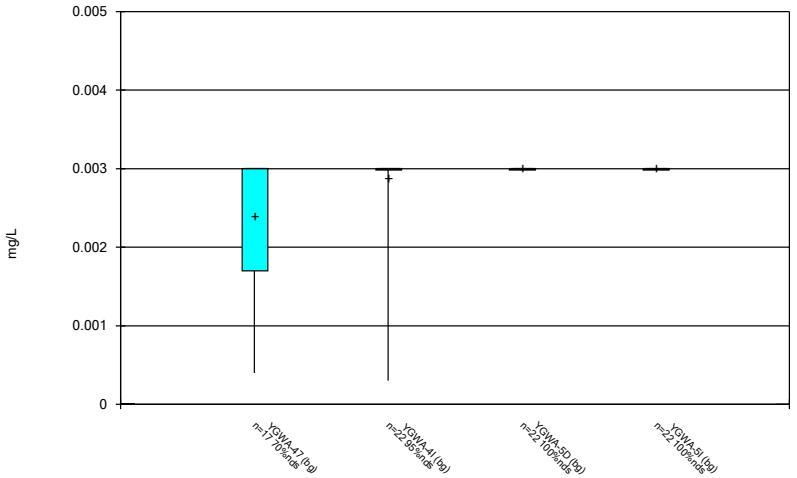
Box & Whiskers Plot



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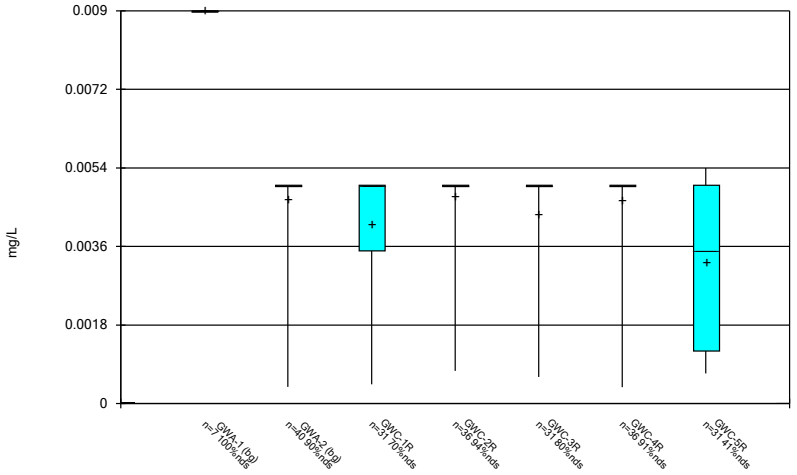
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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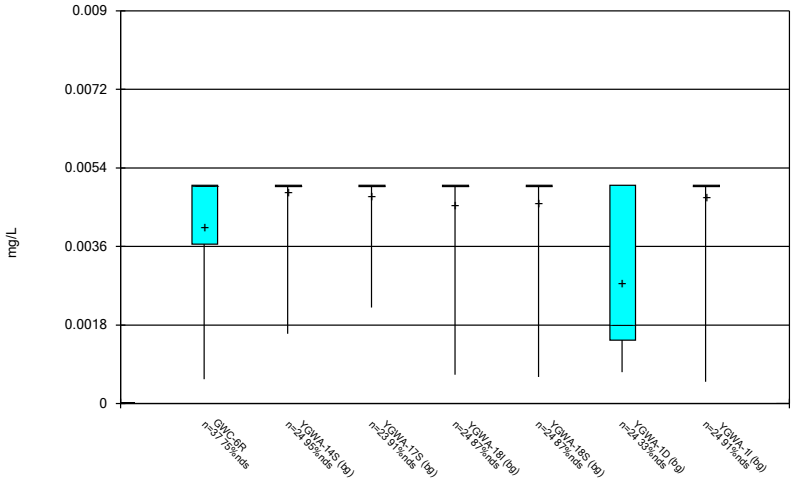
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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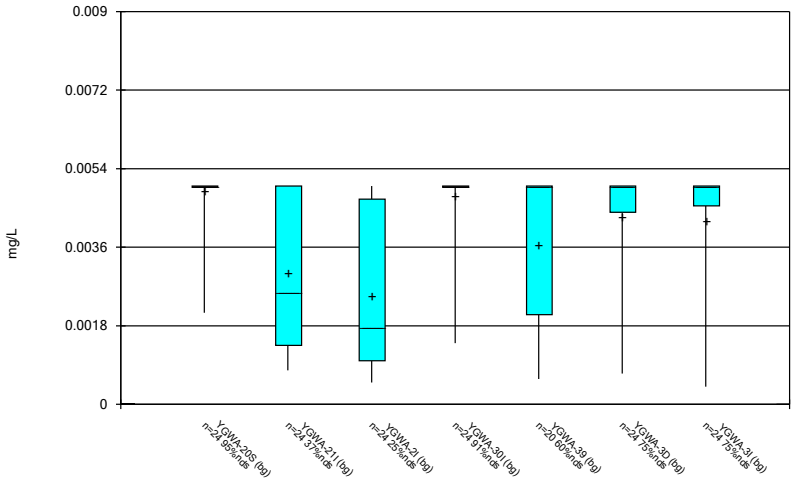
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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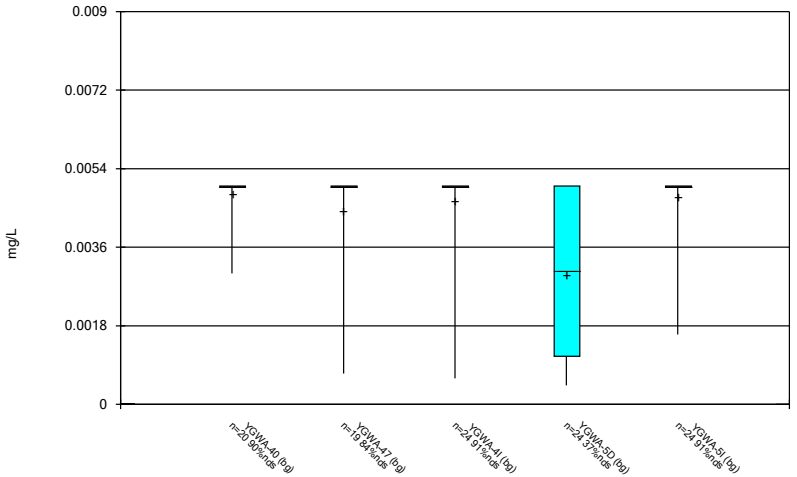
Box & Whiskers Plot



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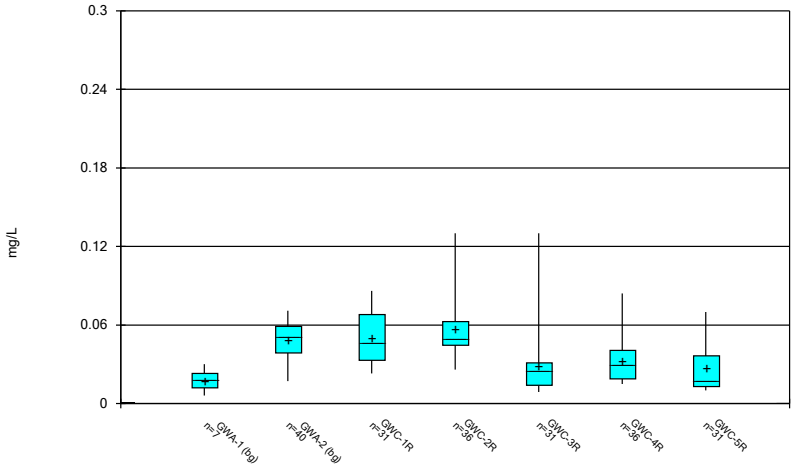
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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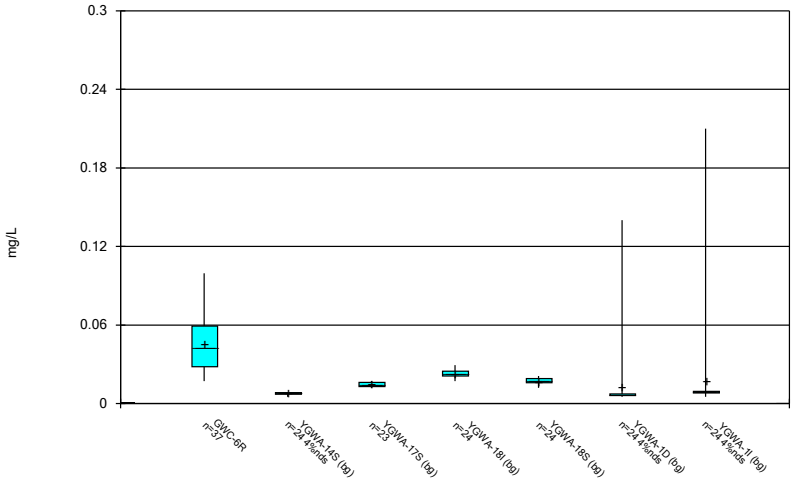
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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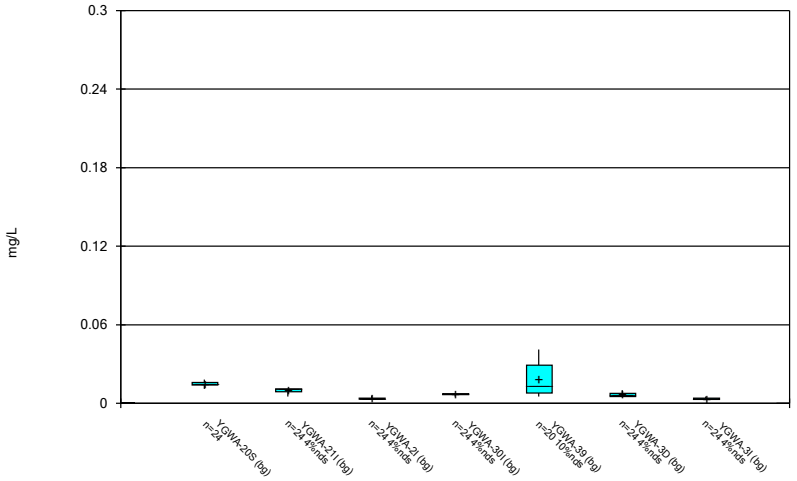
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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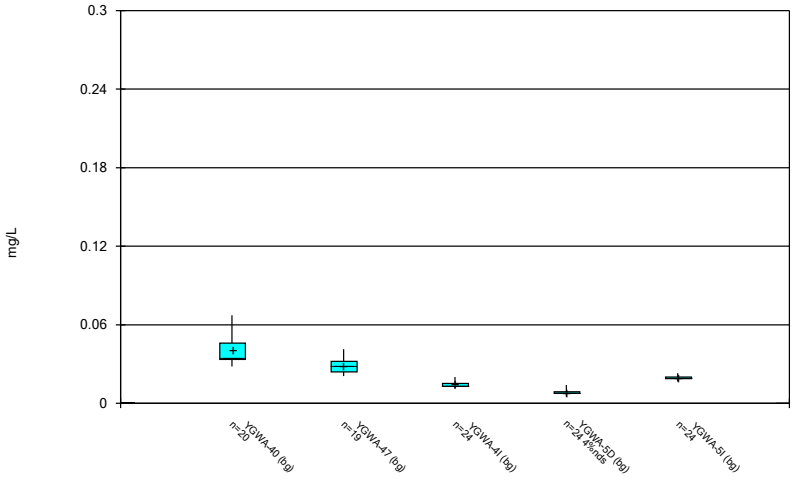
Box & Whiskers Plot



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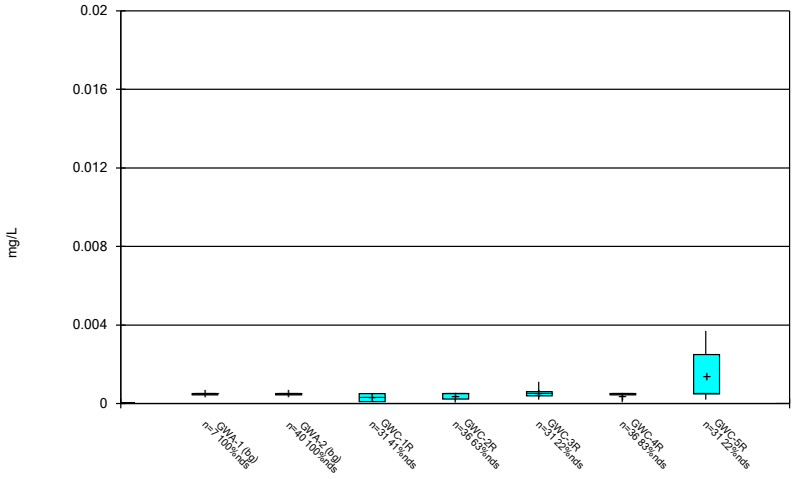
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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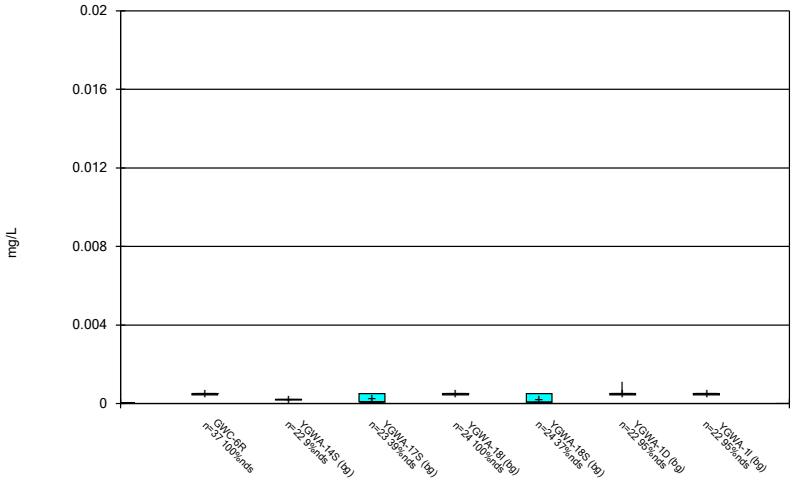
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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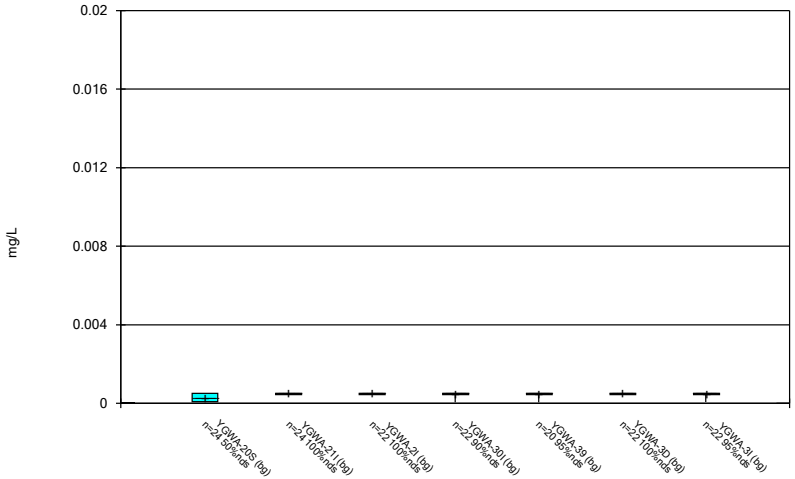
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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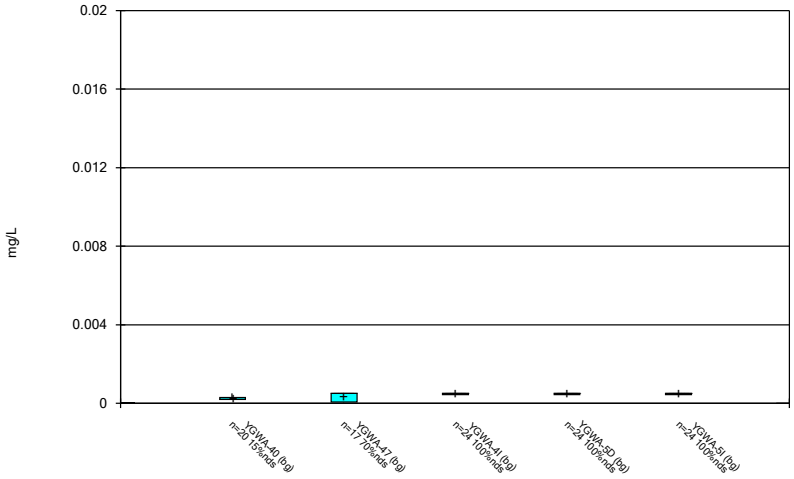
Box & Whiskers Plot



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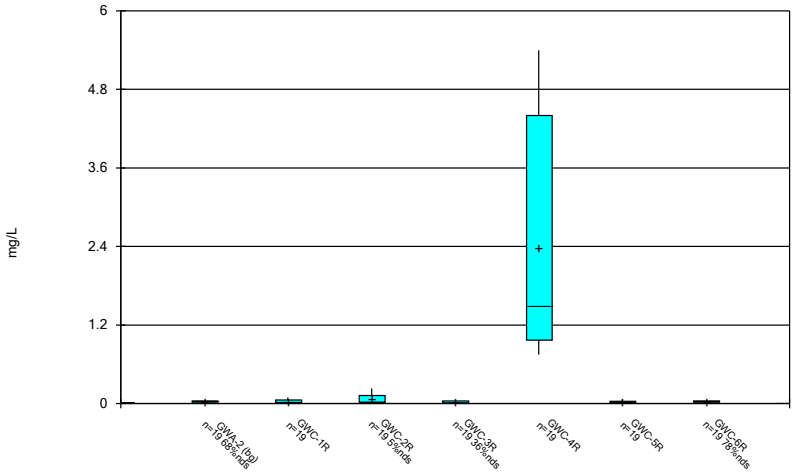
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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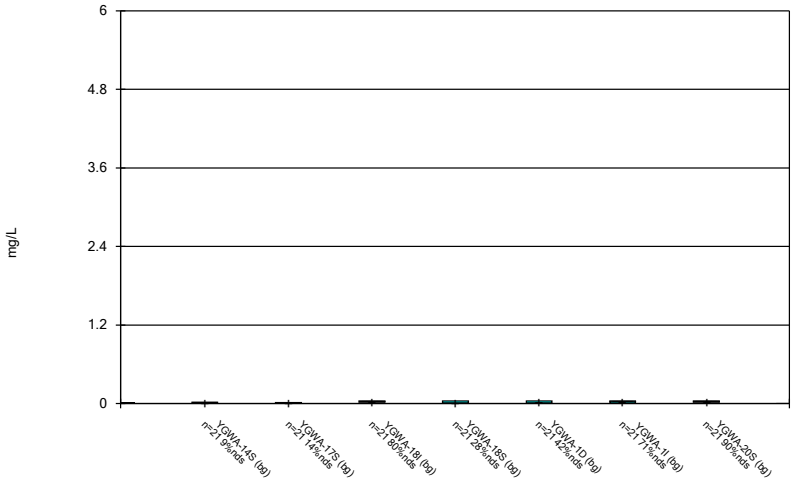
Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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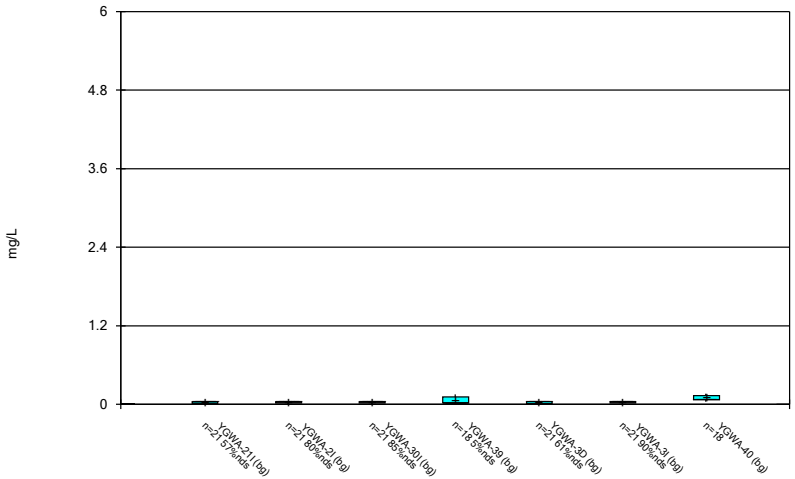
Box & Whiskers Plot



Constituent: Boron Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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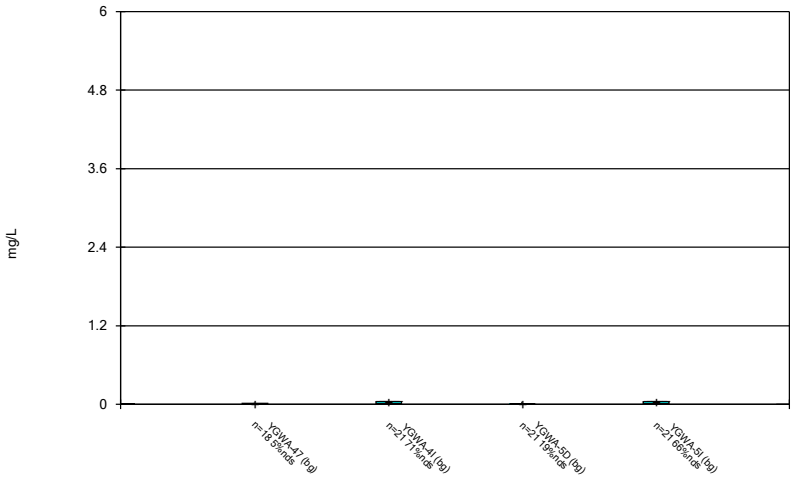
Box & Whiskers Plot



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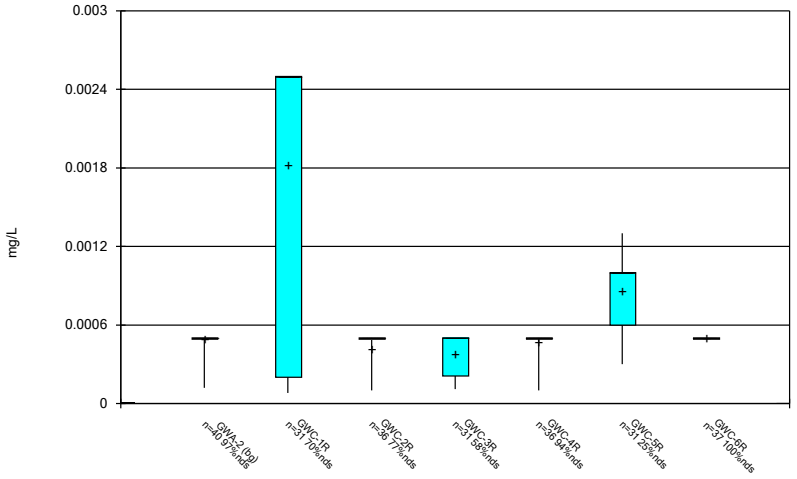
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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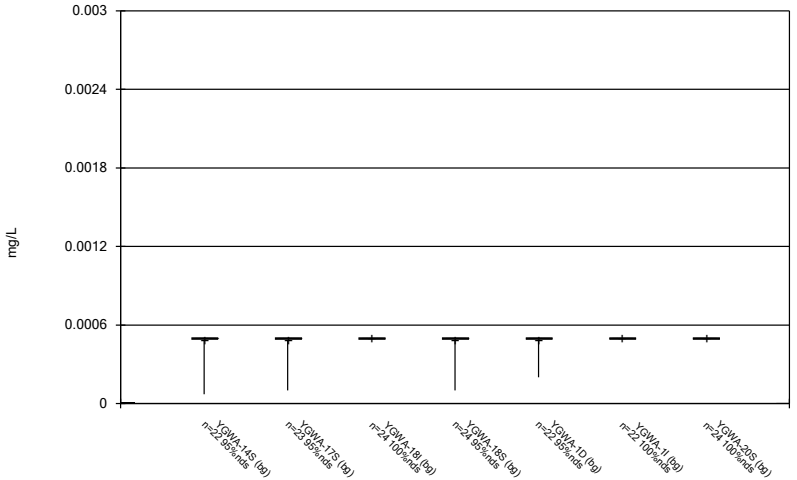
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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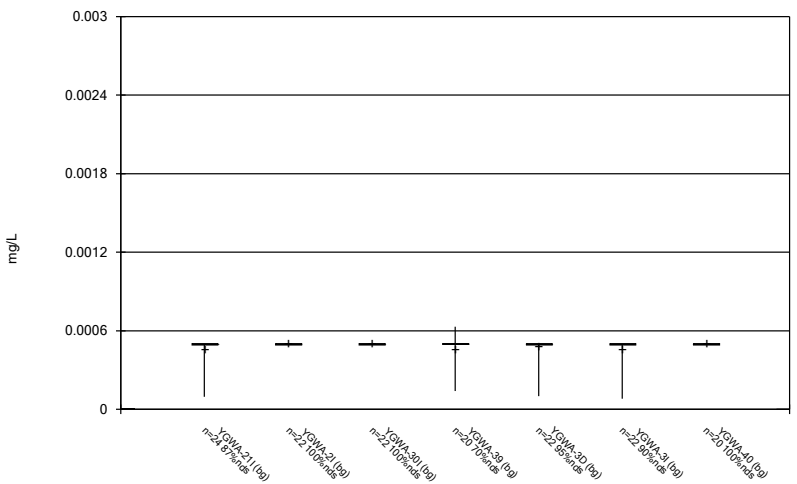
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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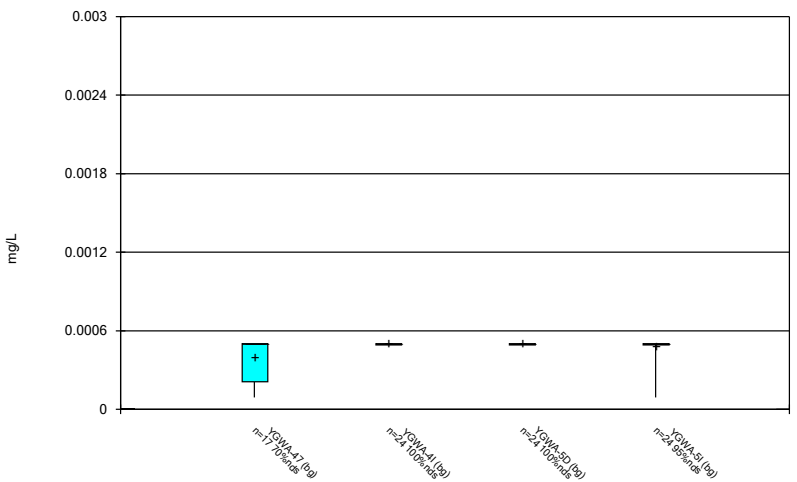
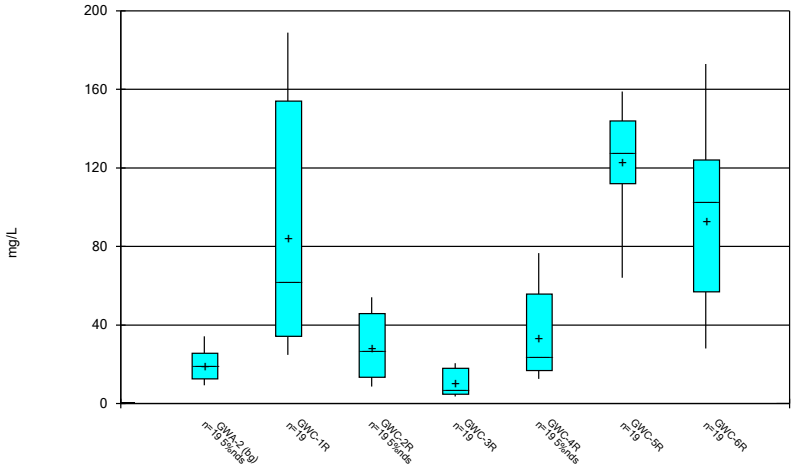
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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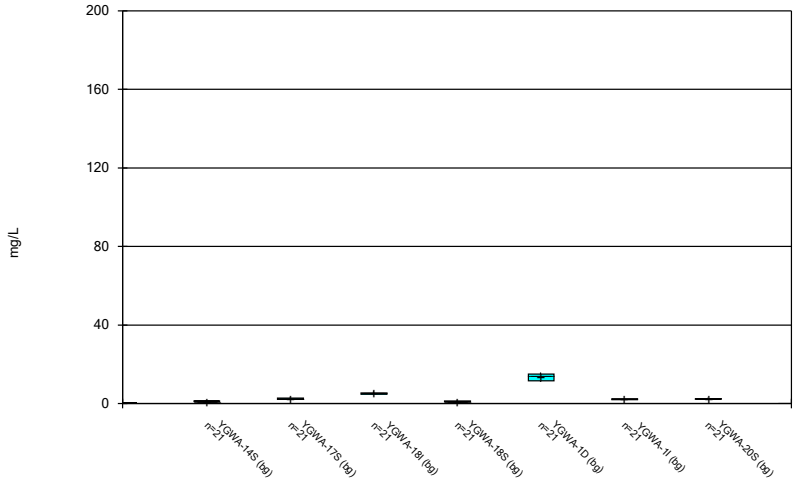
Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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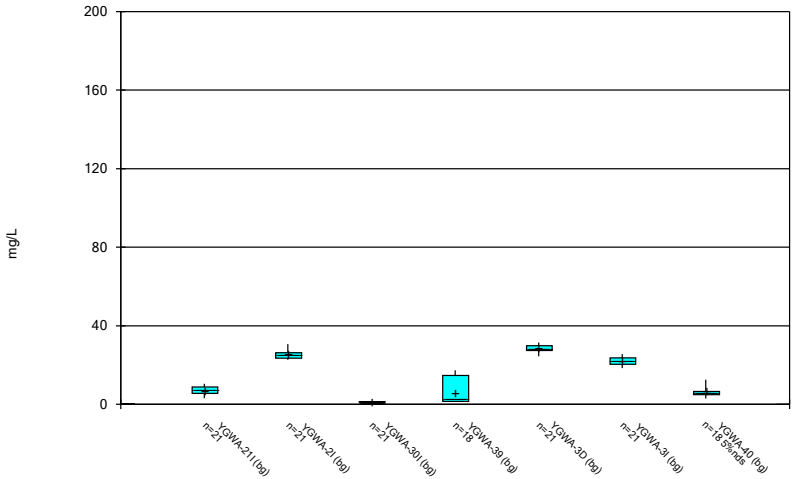
Box & Whiskers Plot



Constituent: Calcium Analysis Run 10/19/2023 8:55 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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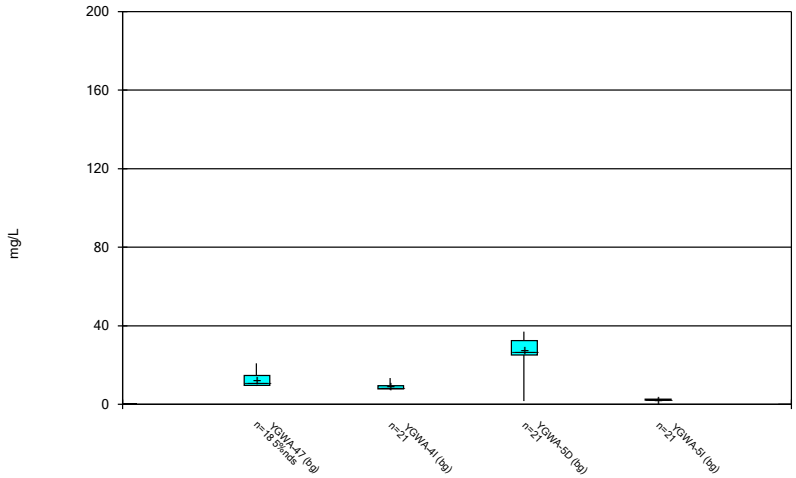
Box & Whiskers Plot



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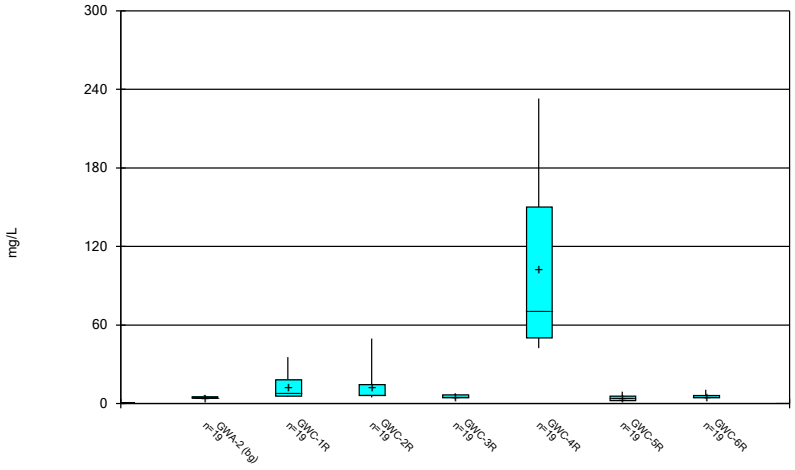
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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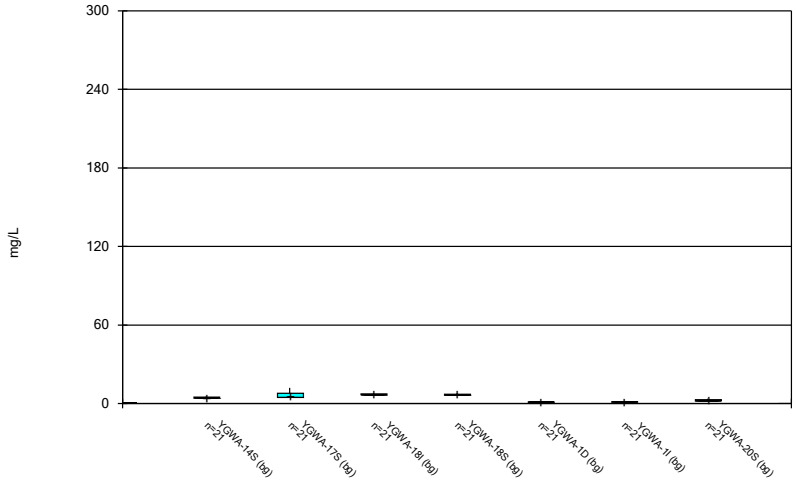
Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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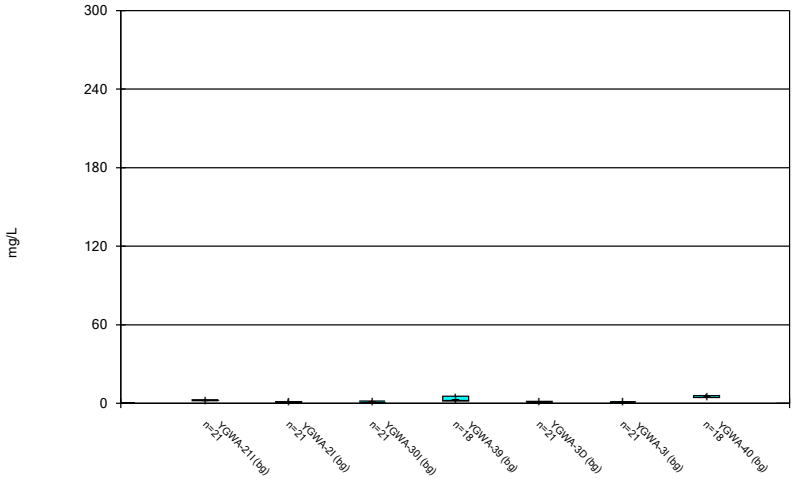
Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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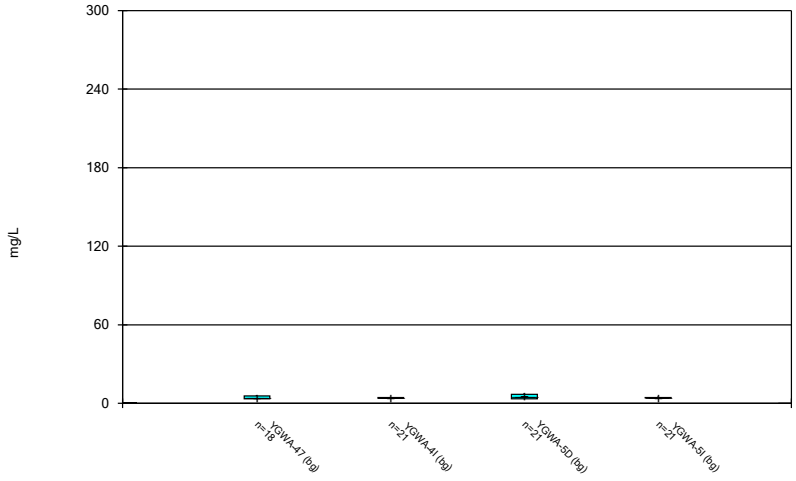
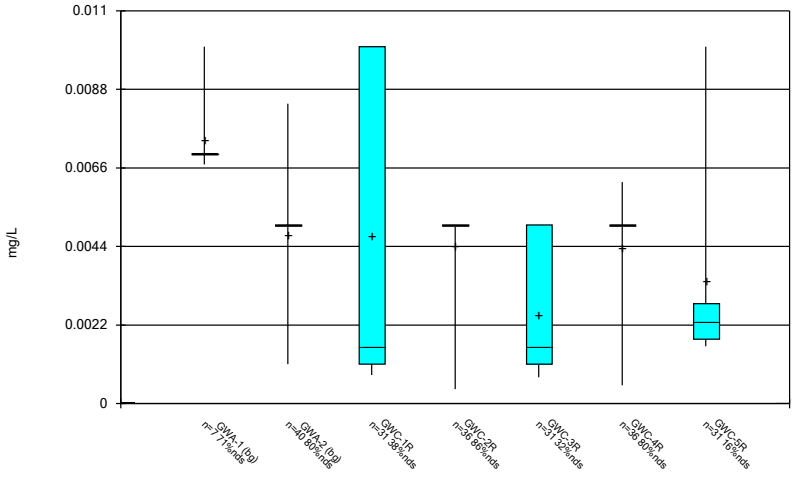
Box & Whiskers Plot



Constituent: Chloride Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Chromium Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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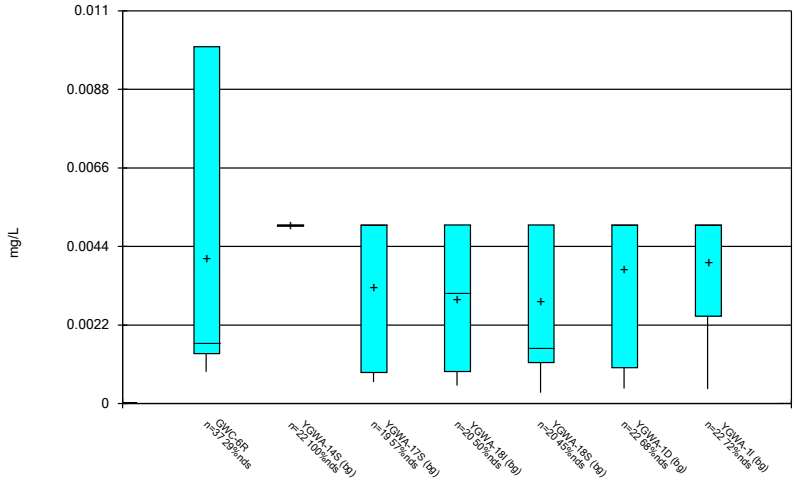
Box & Whiskers Plot



Constituent: Chromium Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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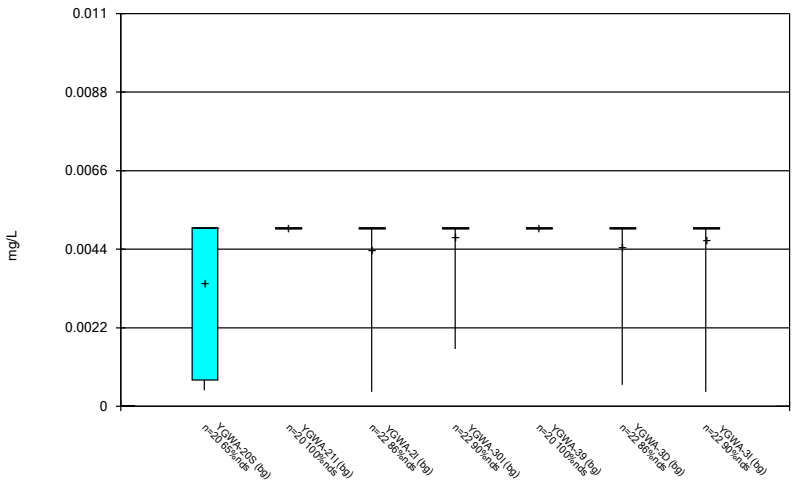
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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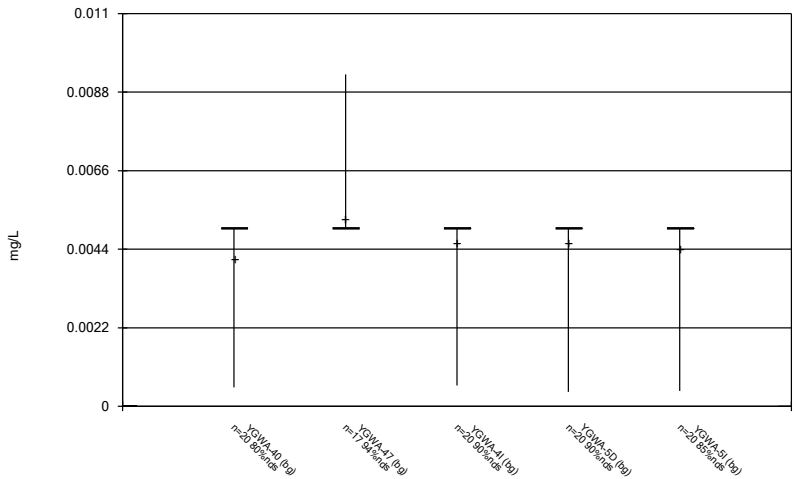
Box & Whiskers Plot



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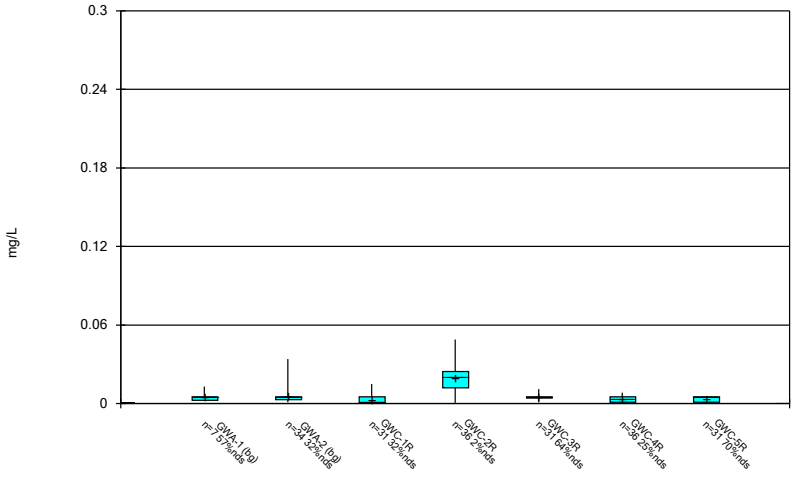
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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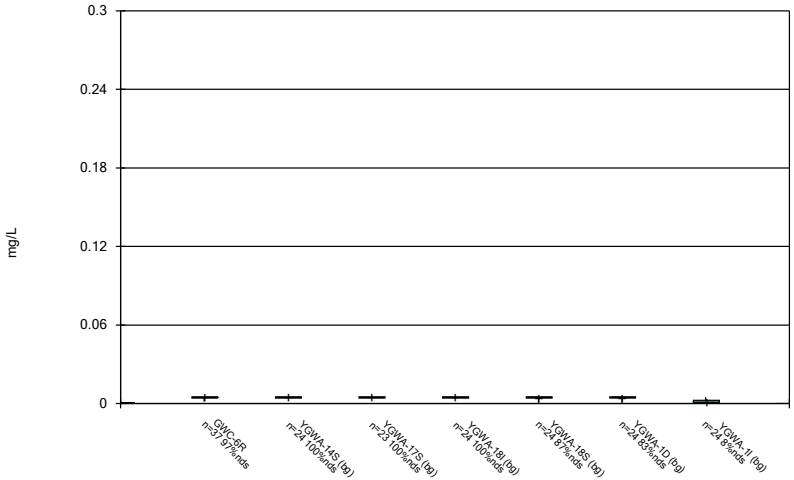
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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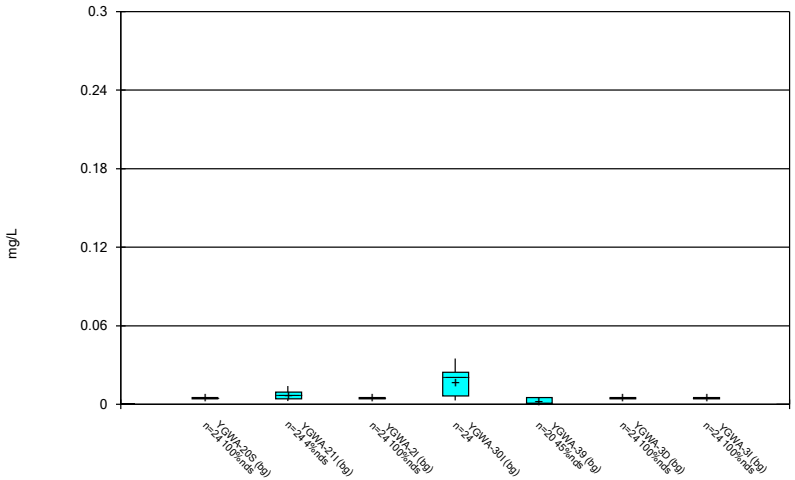
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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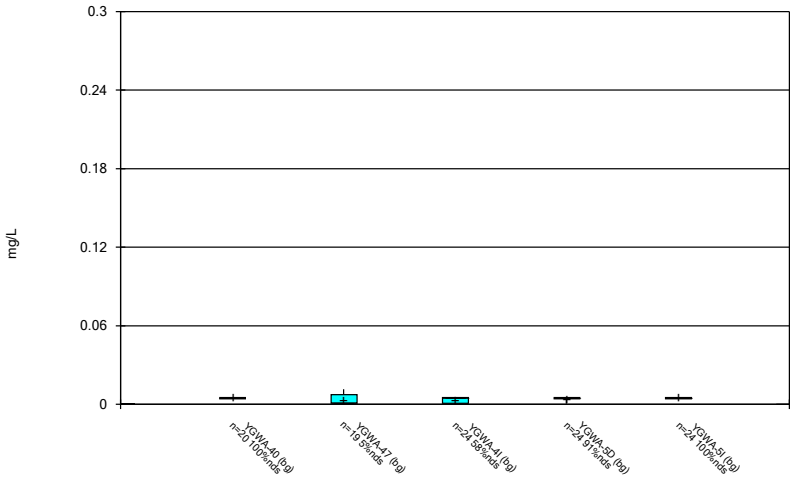
Box & Whiskers Plot



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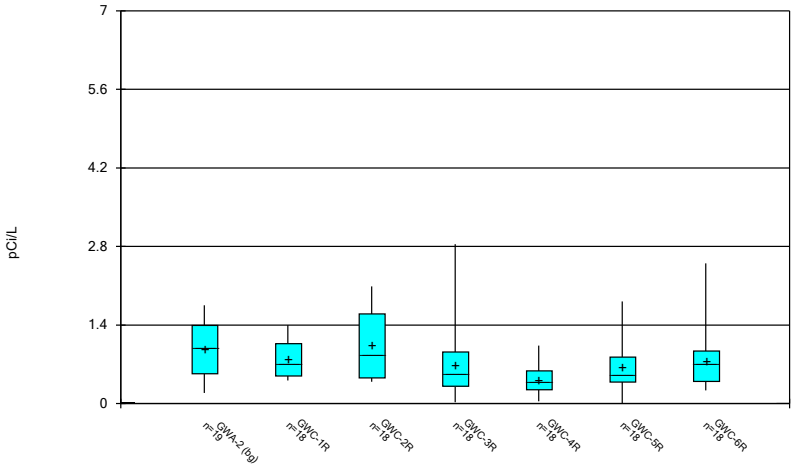
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:56 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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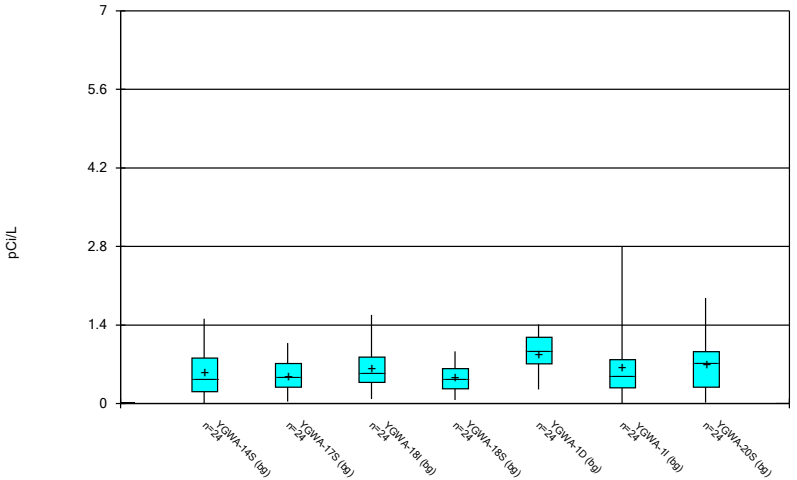
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 8:56 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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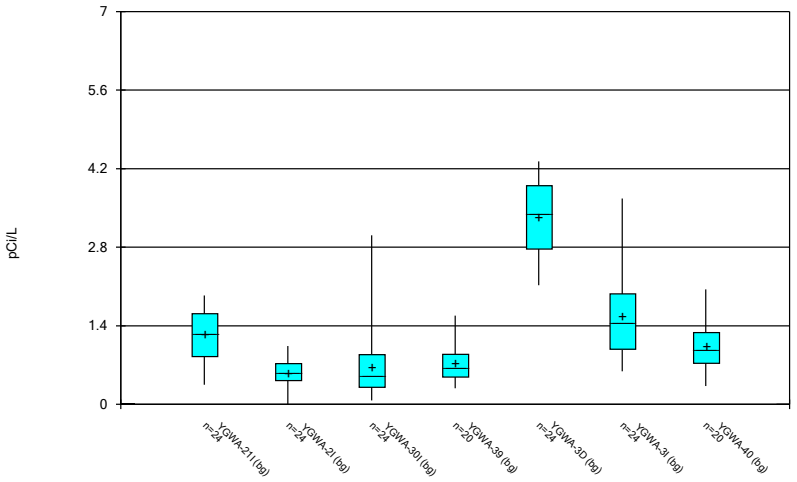
Box & Whiskers Plot



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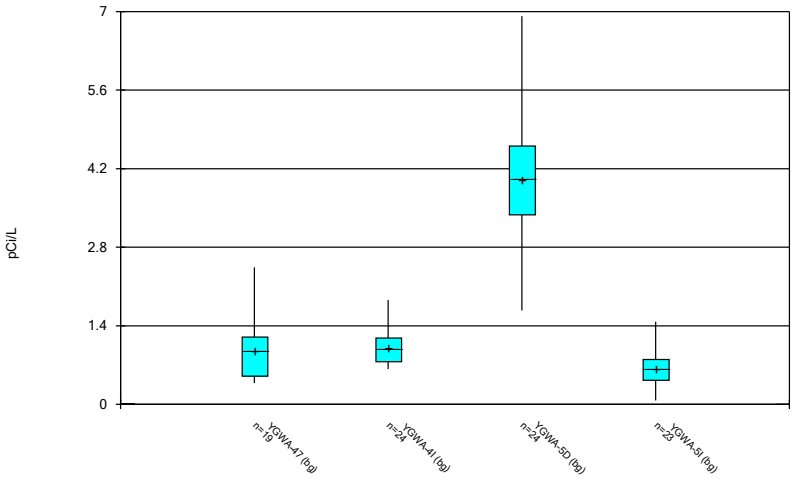
Box & Whiskers Plot



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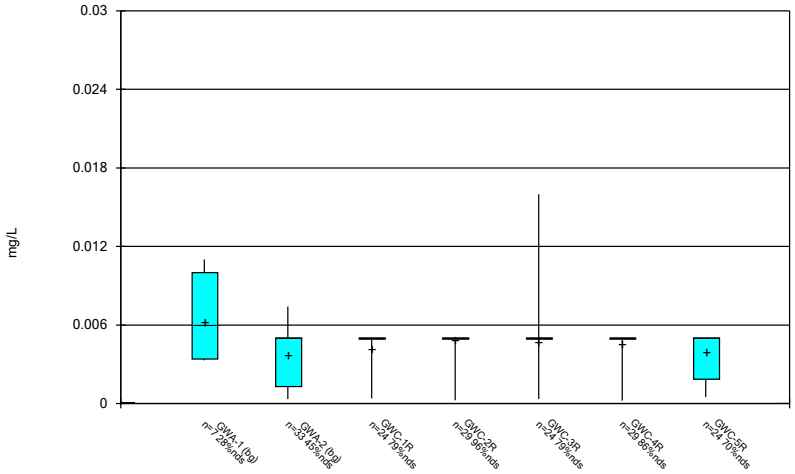
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Copper Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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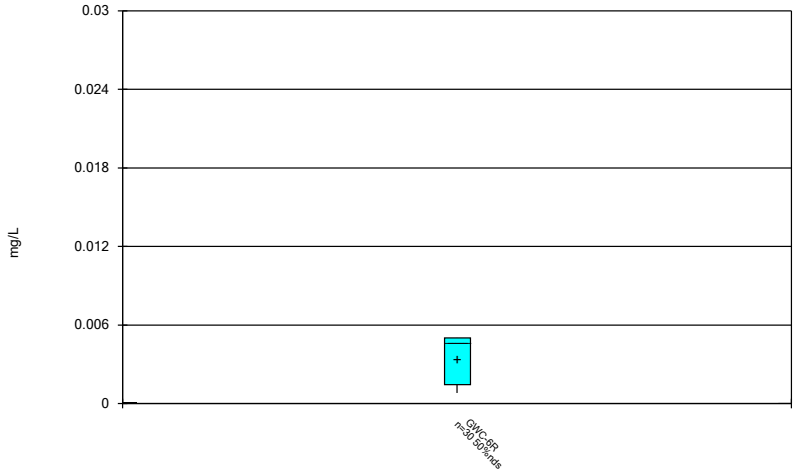
Box & Whiskers Plot



Constituent: Copper Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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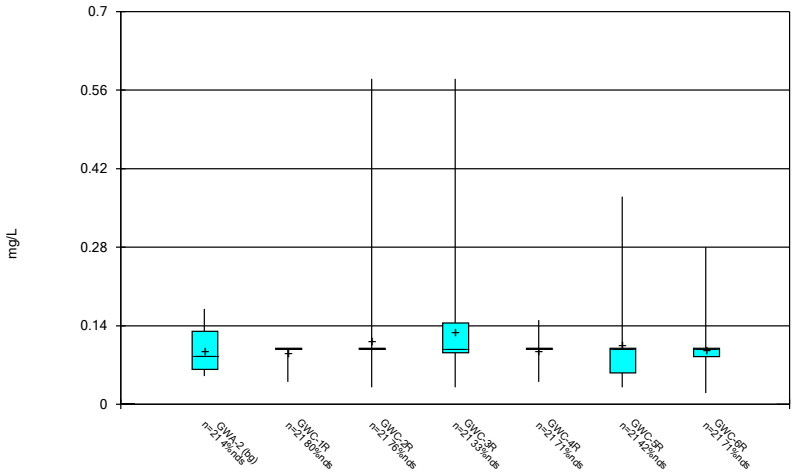
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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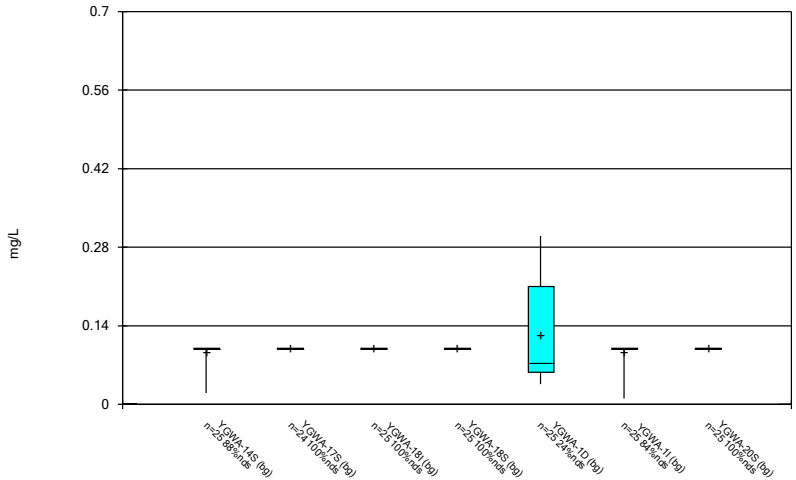
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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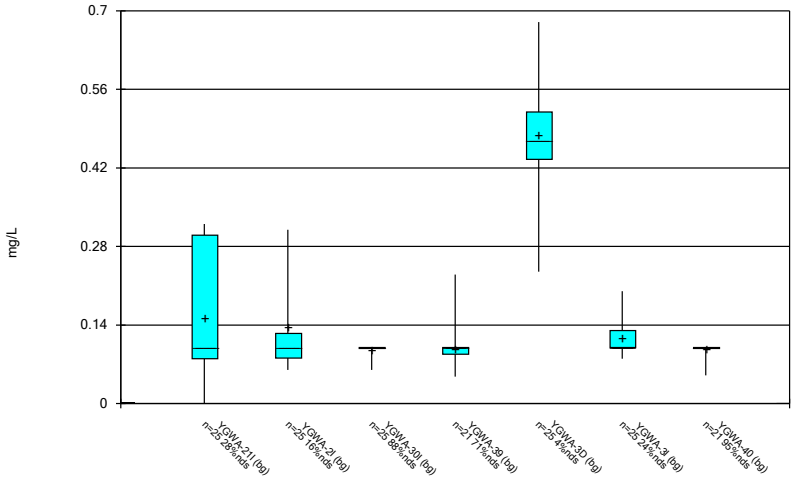

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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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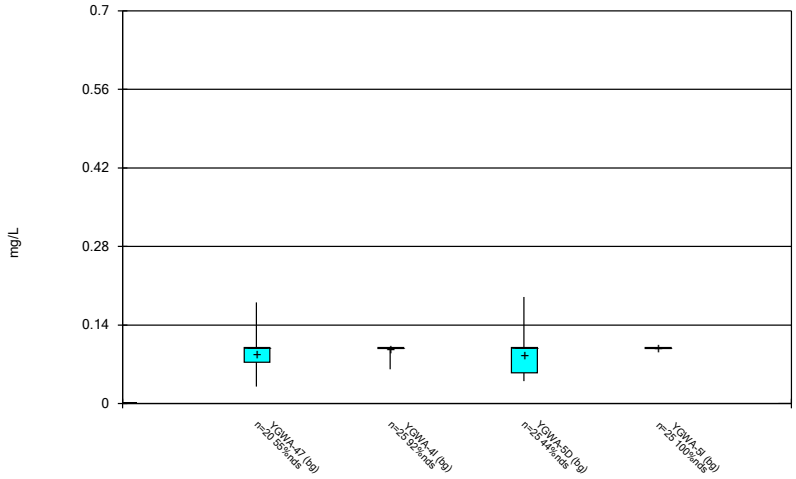
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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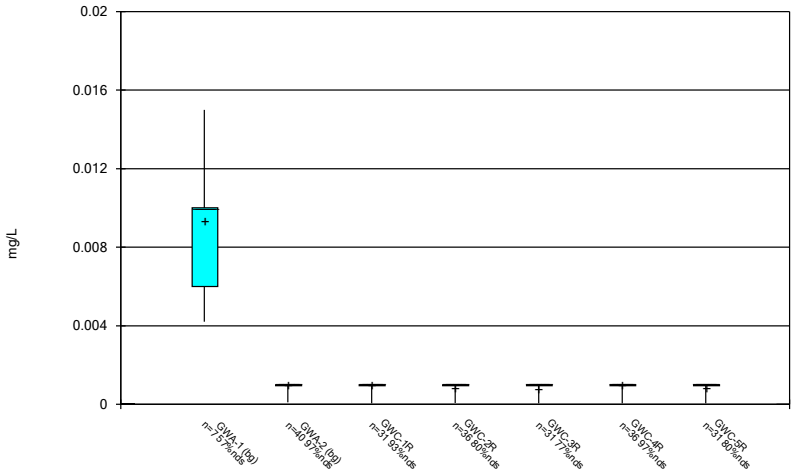
Box & Whiskers Plot



Constituent: Lead Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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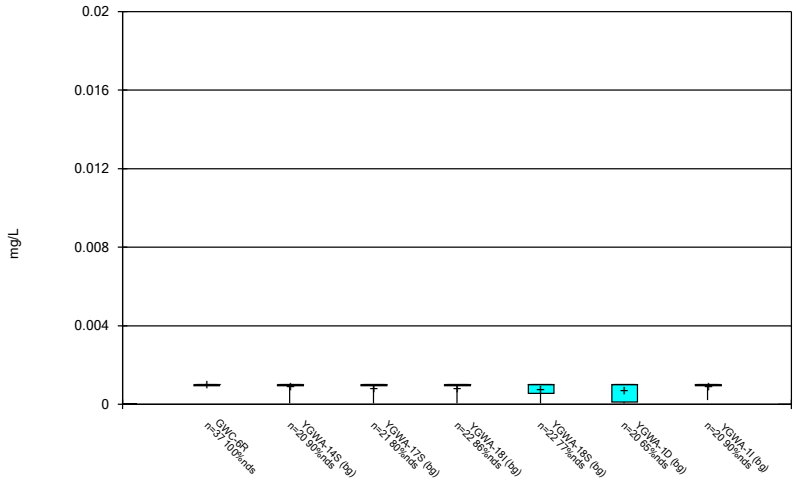
Box & Whiskers Plot



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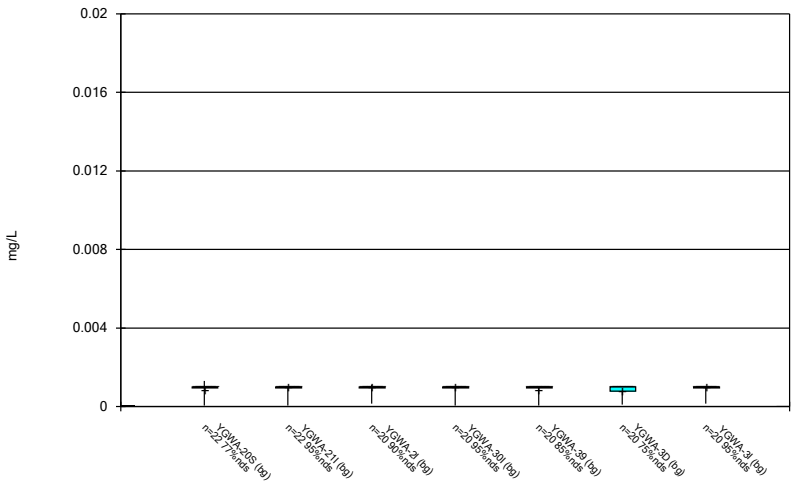
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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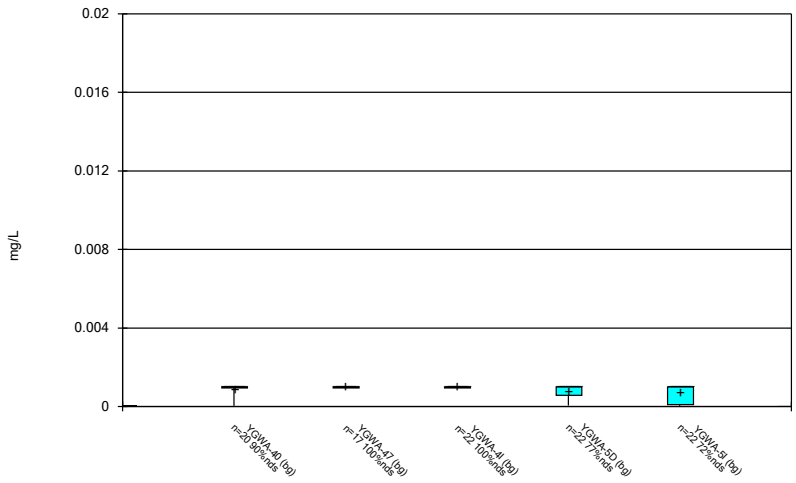

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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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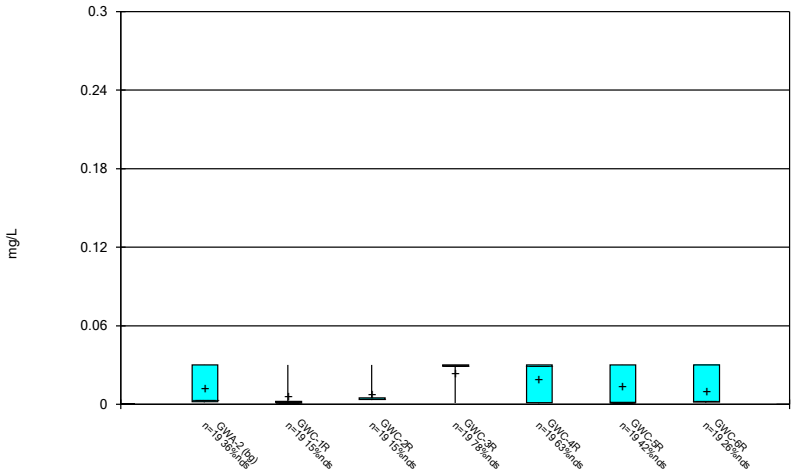
Box & Whiskers Plot



Constituent: Lithium Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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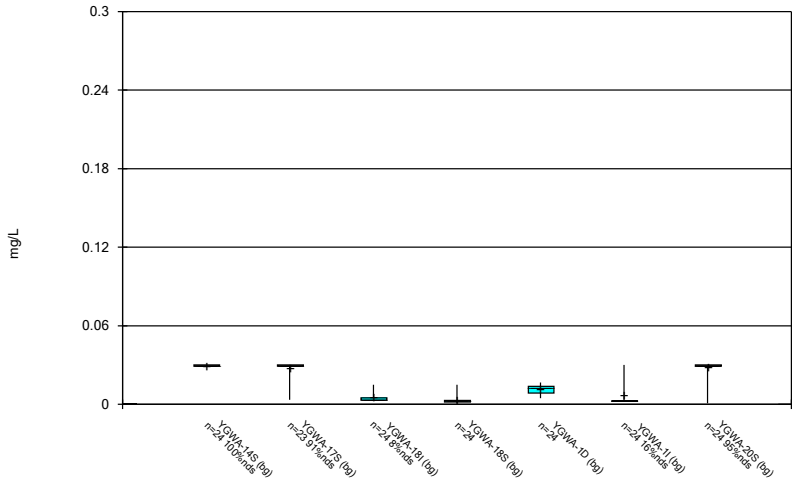
Box & Whiskers Plot



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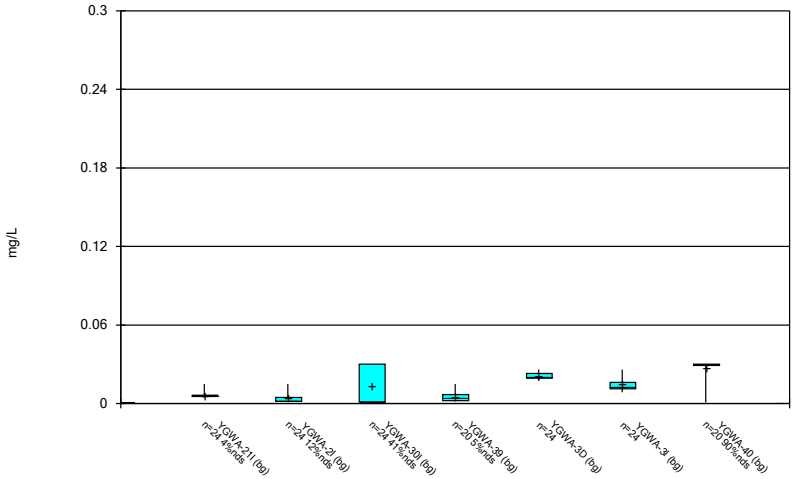
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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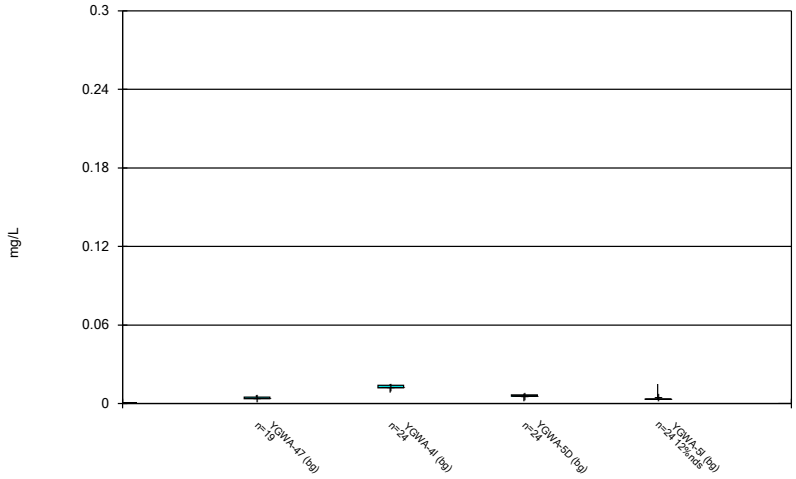
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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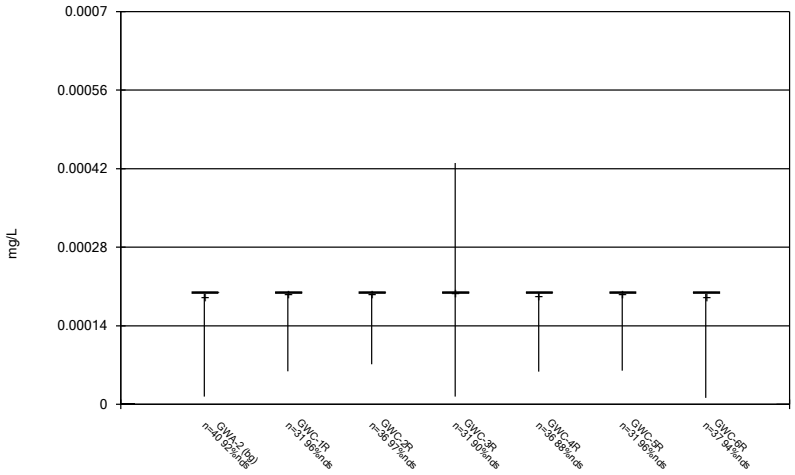
Box & Whiskers Plot



Constituent: Mercury Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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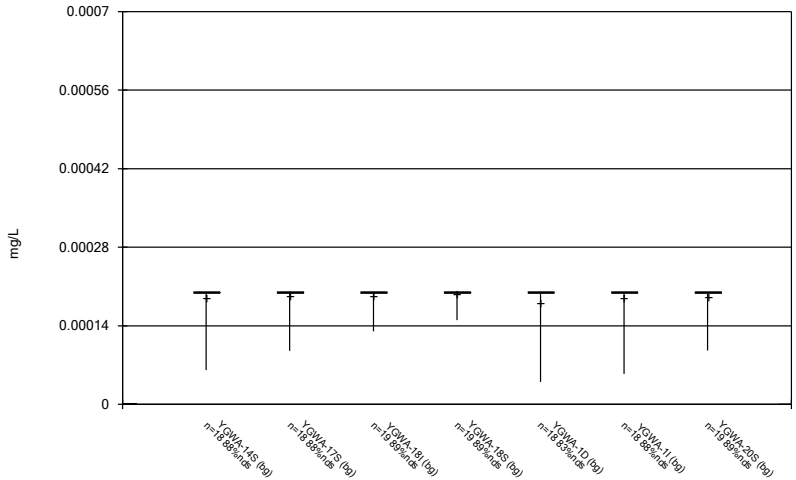

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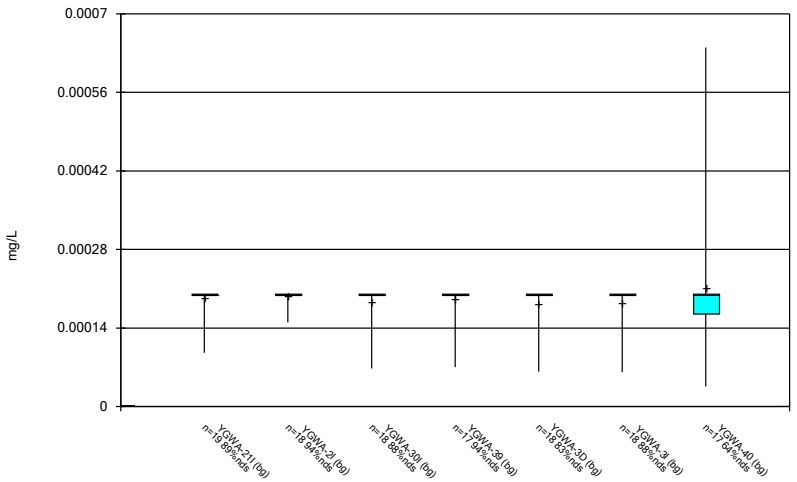
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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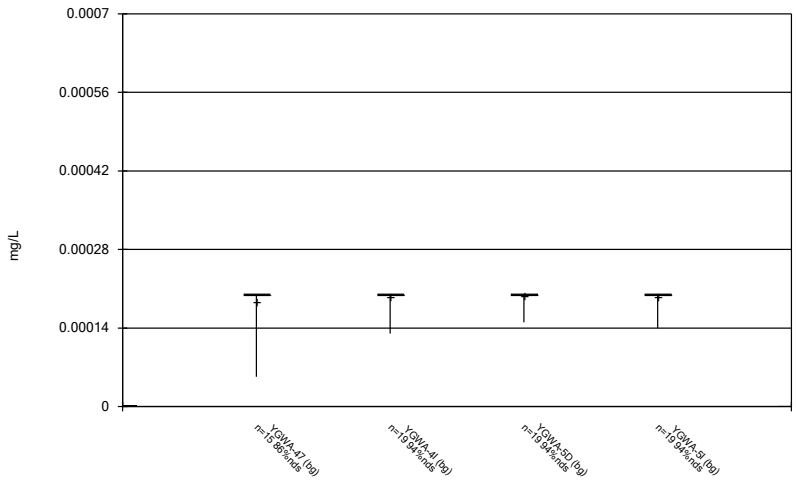
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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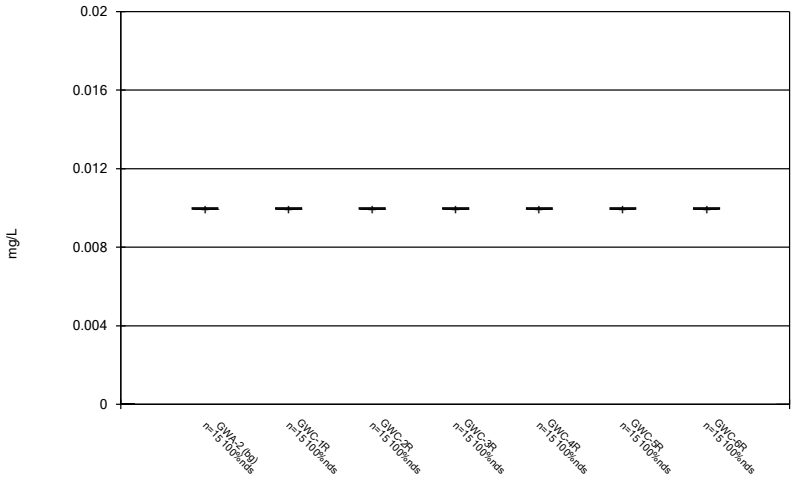
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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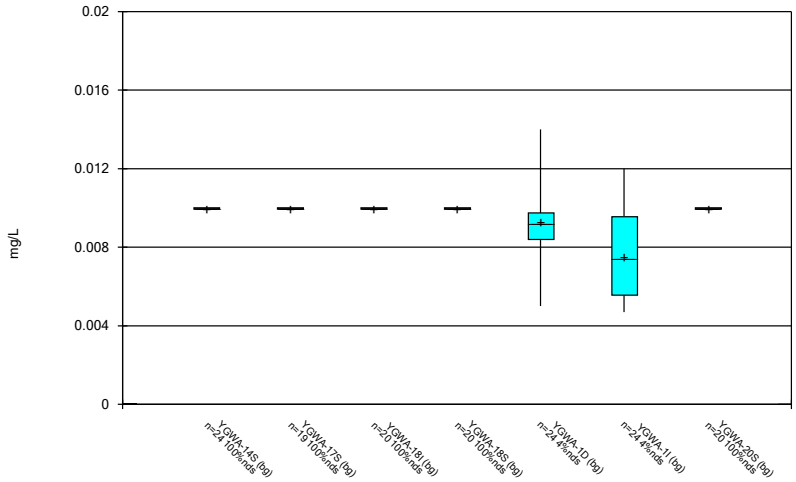
Box & Whiskers Plot



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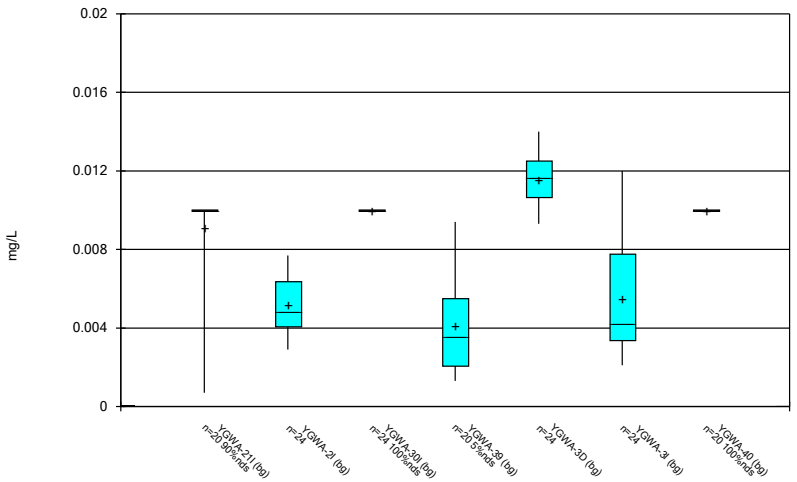
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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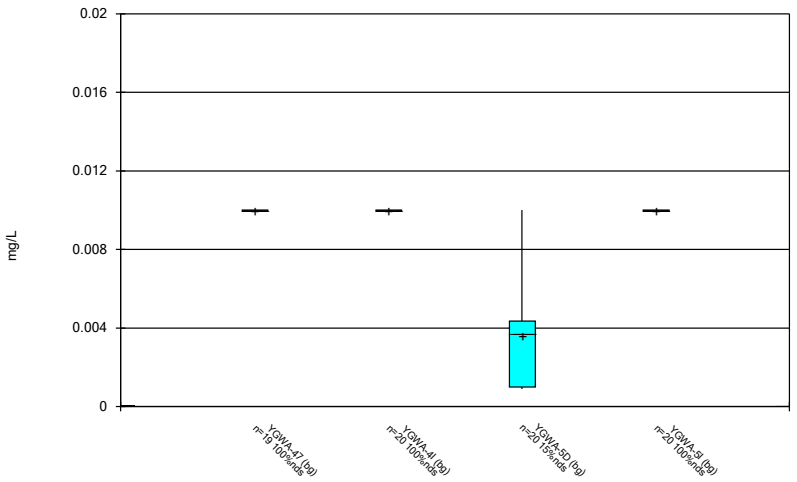
Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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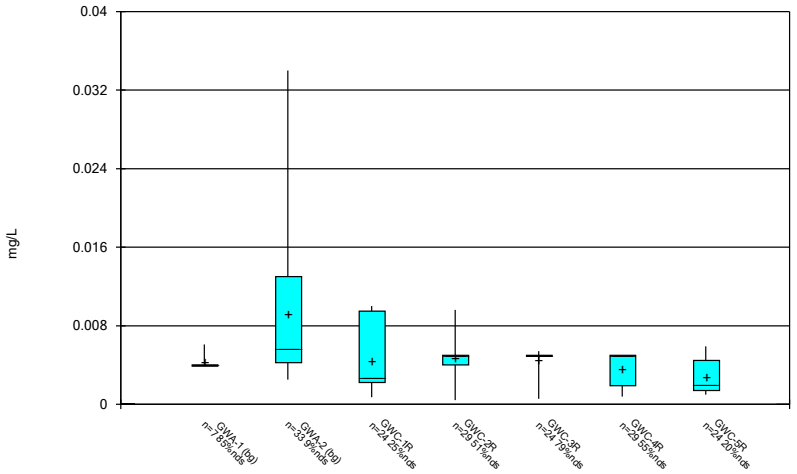
Box & Whiskers Plot



Constituent: Nickel Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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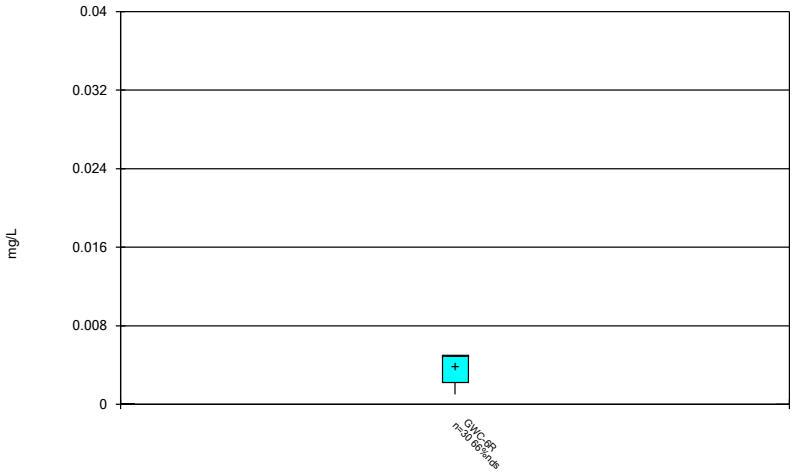
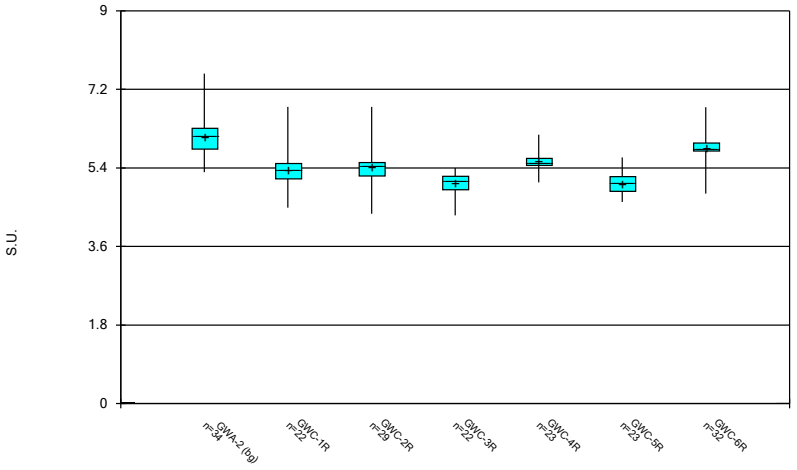
Box & Whiskers Plot



Constituent: Nickel Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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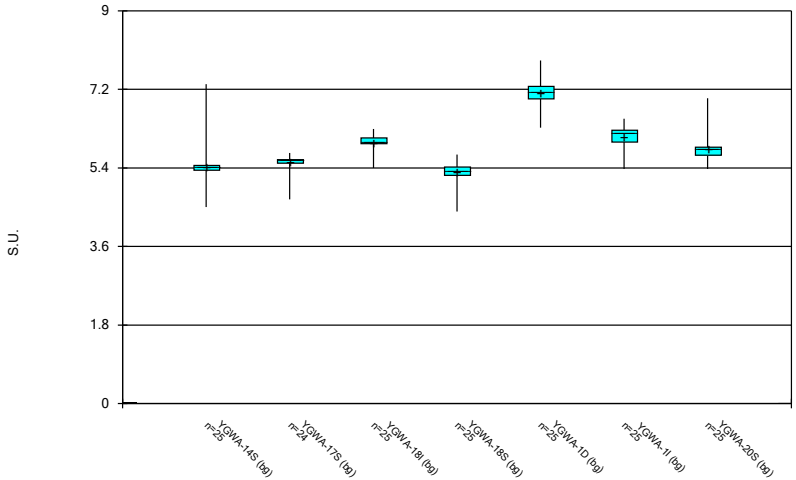
Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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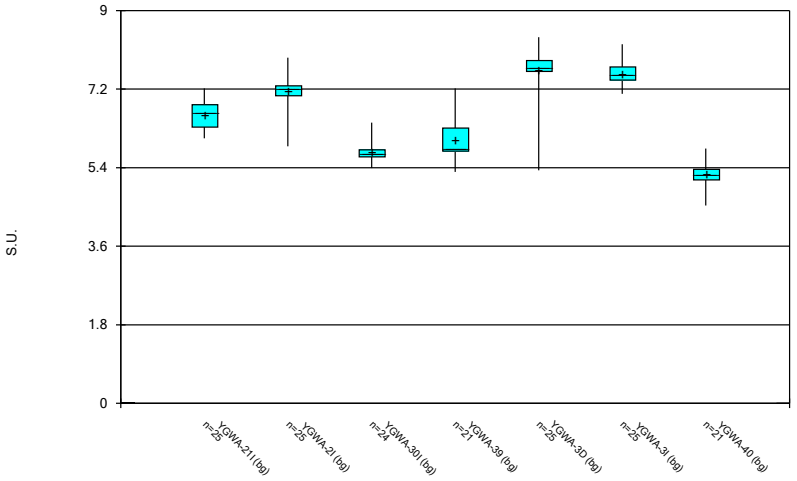
Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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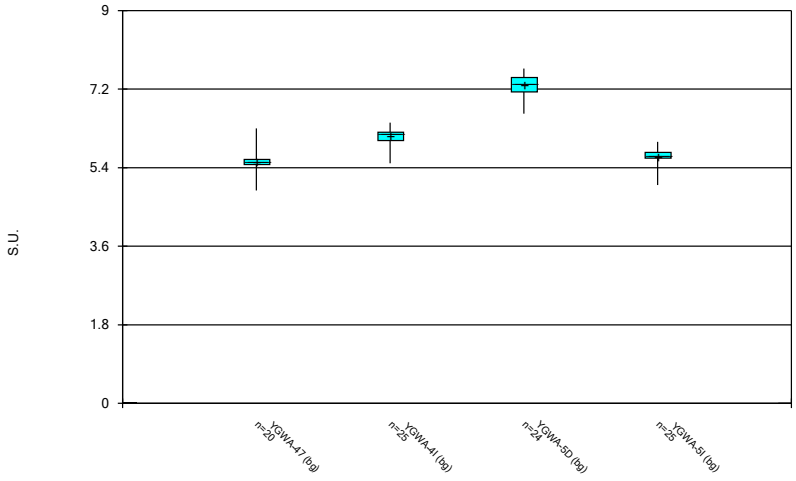
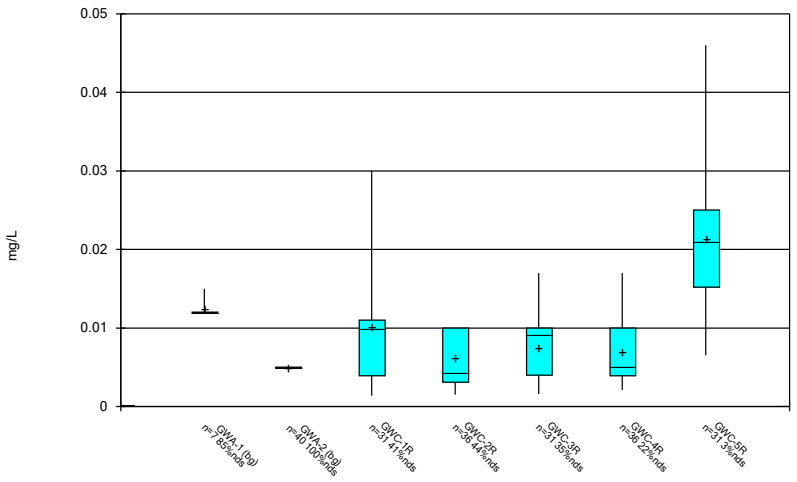
Box & Whiskers Plot



Constituent: pH Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Selenium Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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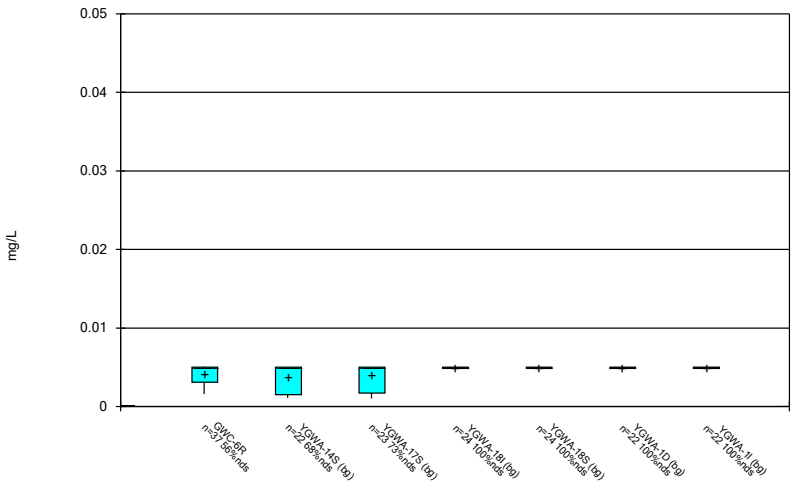

Constituent: Selenium Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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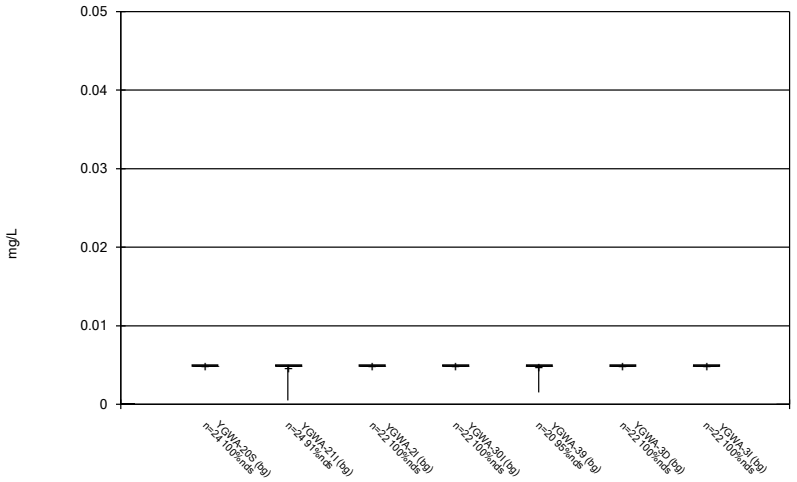
Box & Whiskers Plot



Constituent: Selenium Analysis Run 10/19/2023 8:56 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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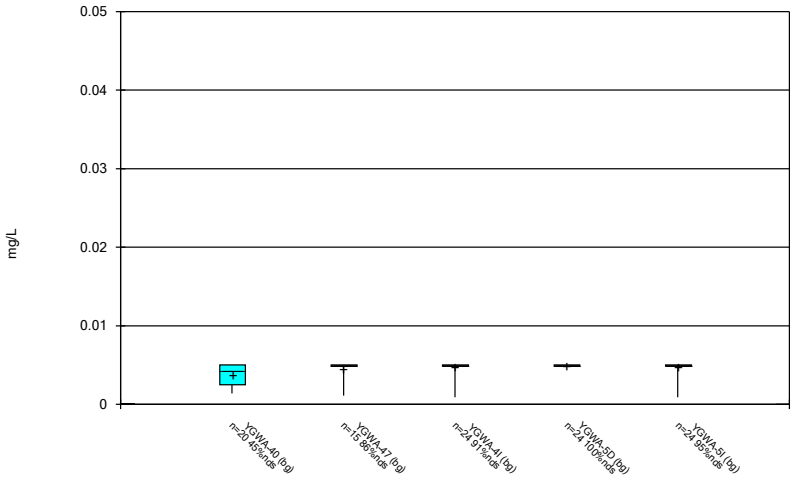
Box & Whiskers Plot



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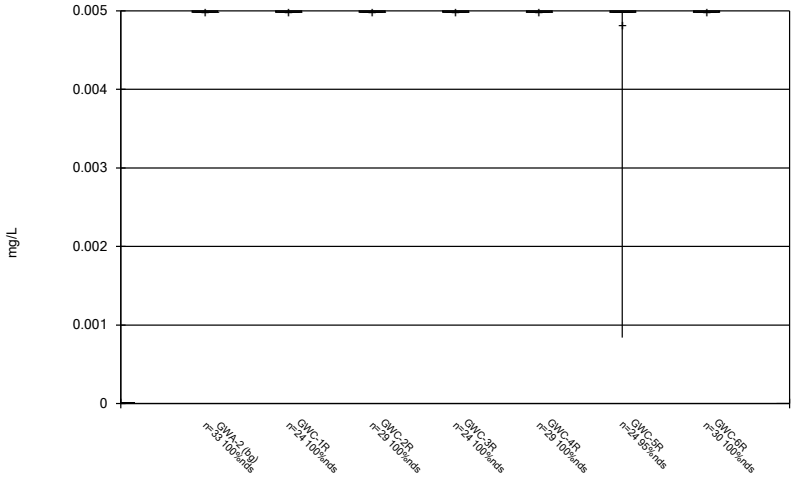
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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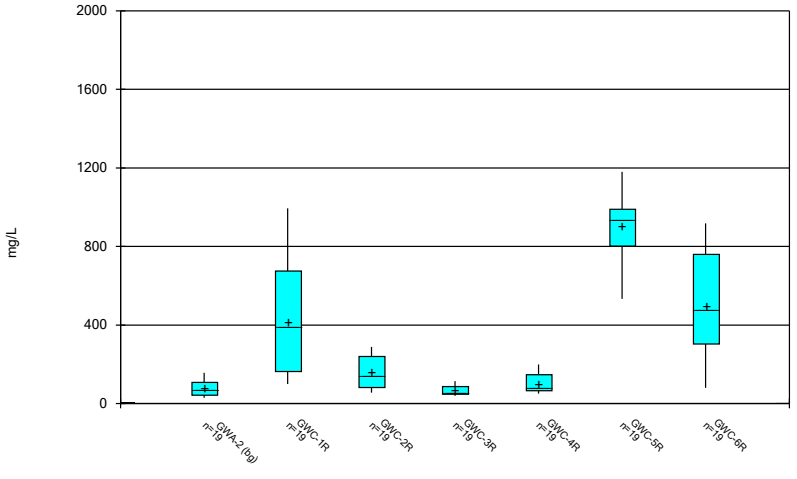
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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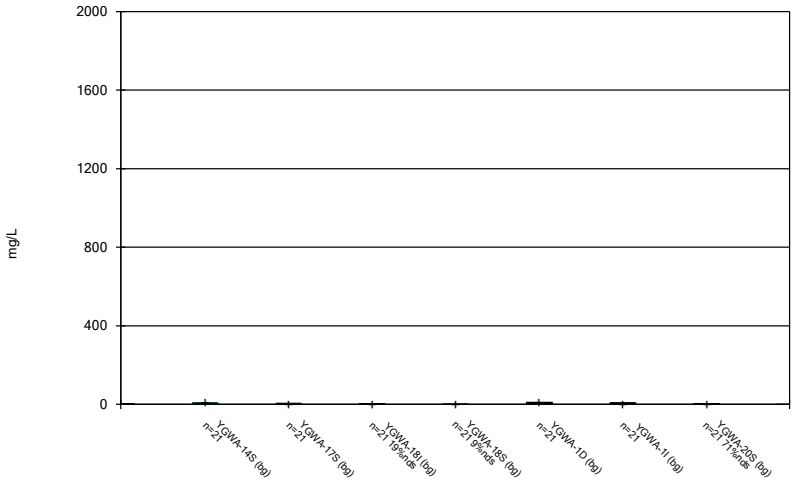
Box & Whiskers Plot



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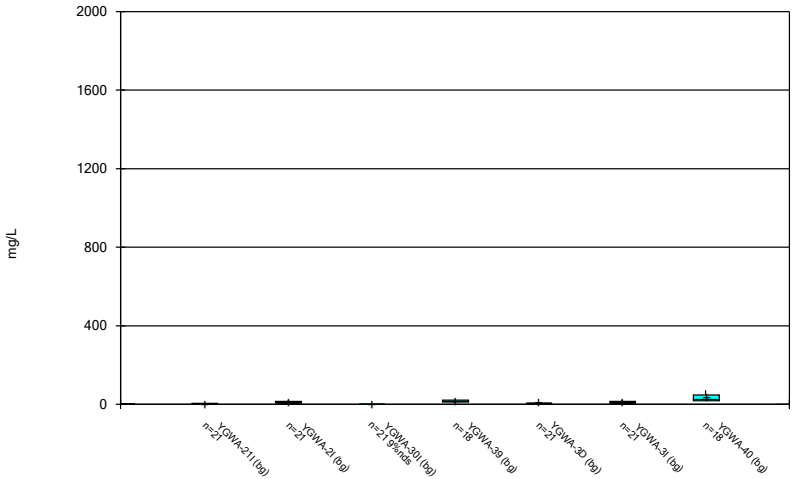
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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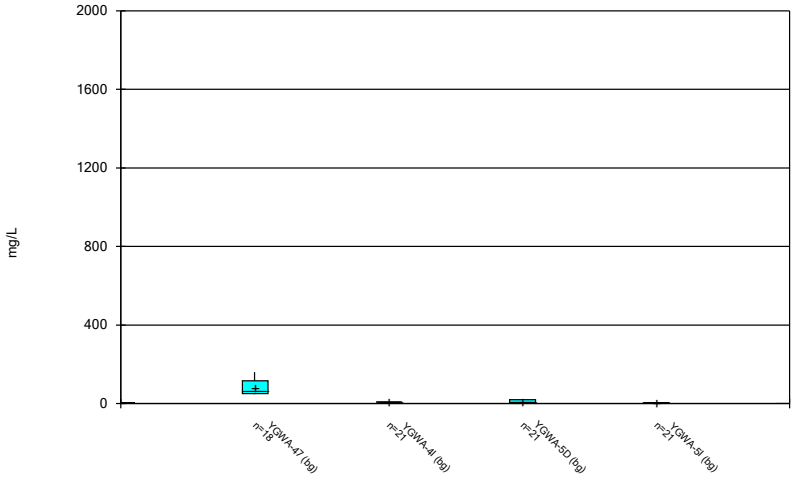
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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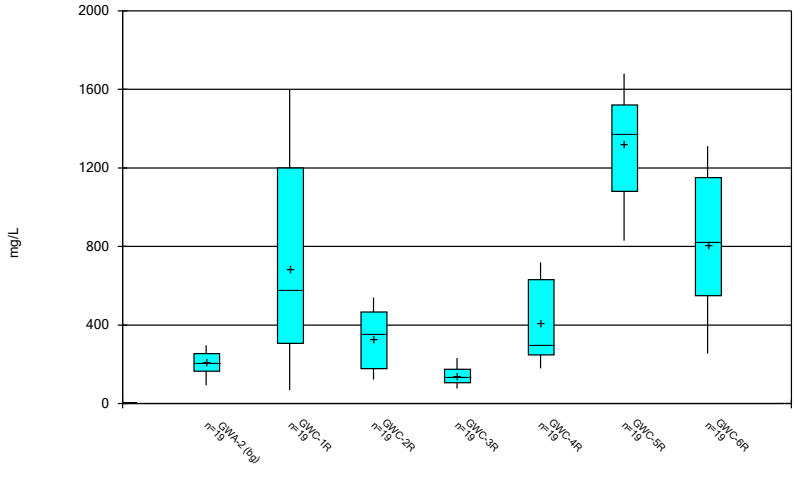
Box & Whiskers Plot



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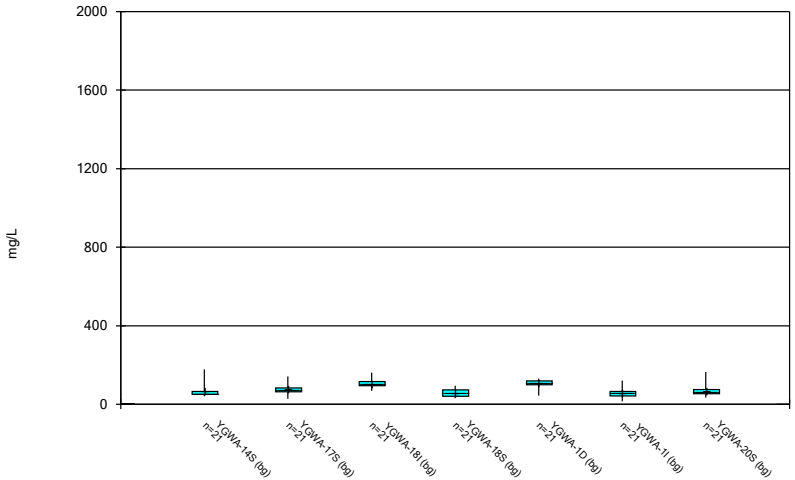
Box & Whiskers Plot



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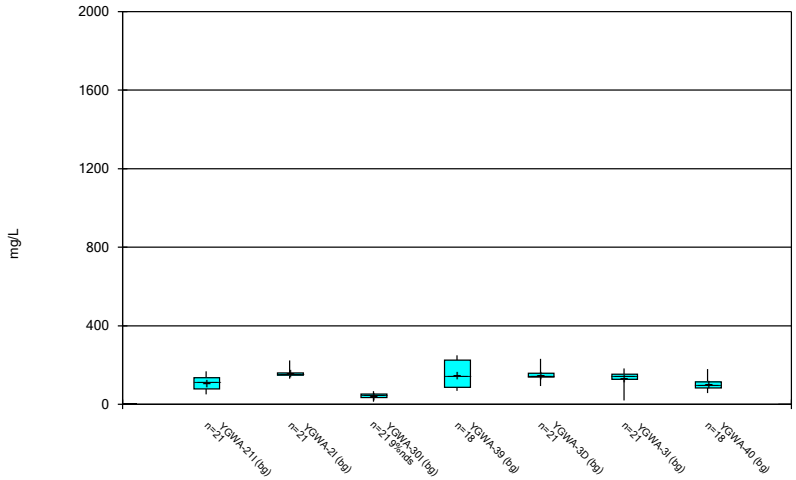
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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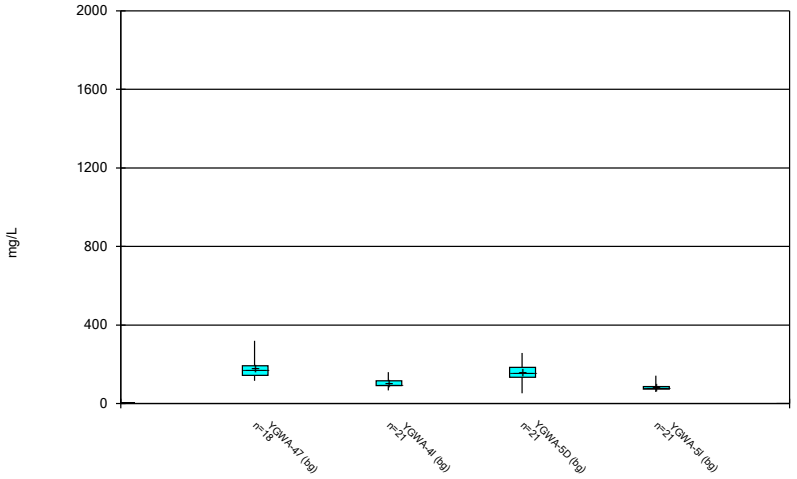
Box & Whiskers Plot



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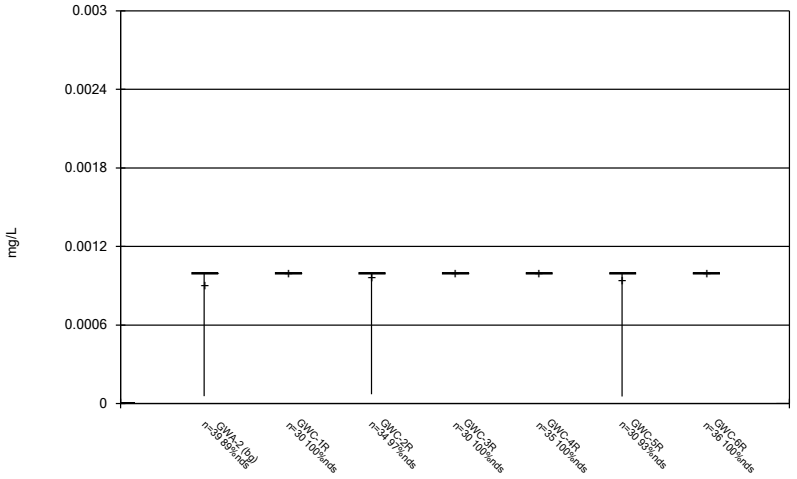
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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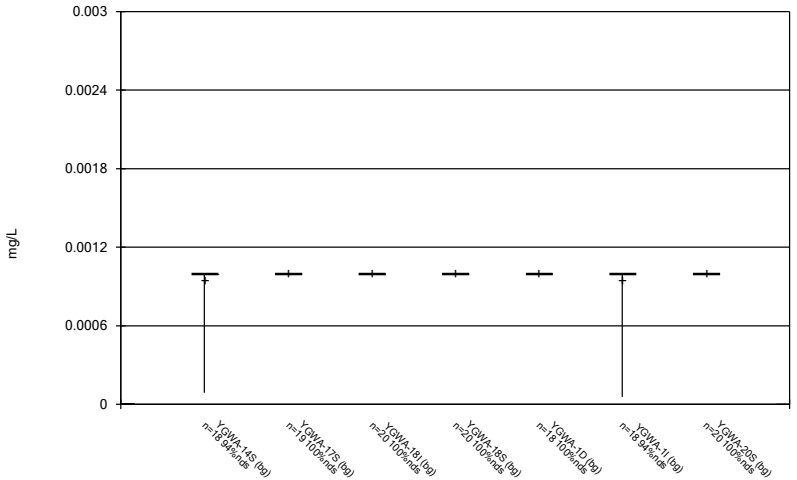
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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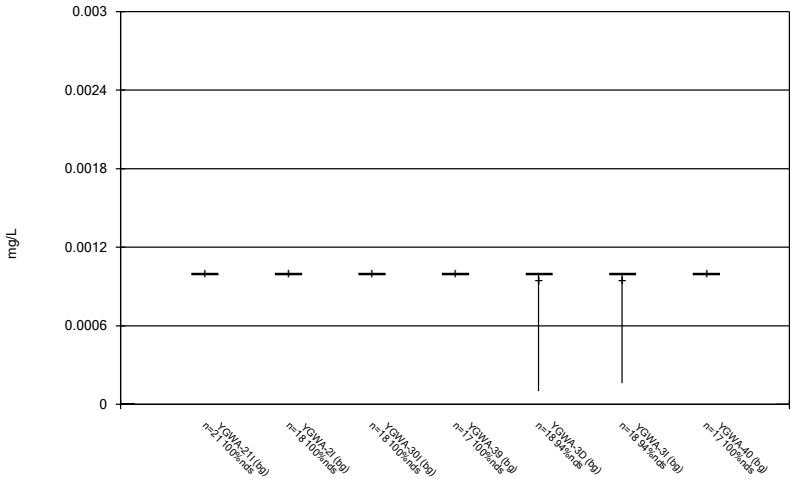
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



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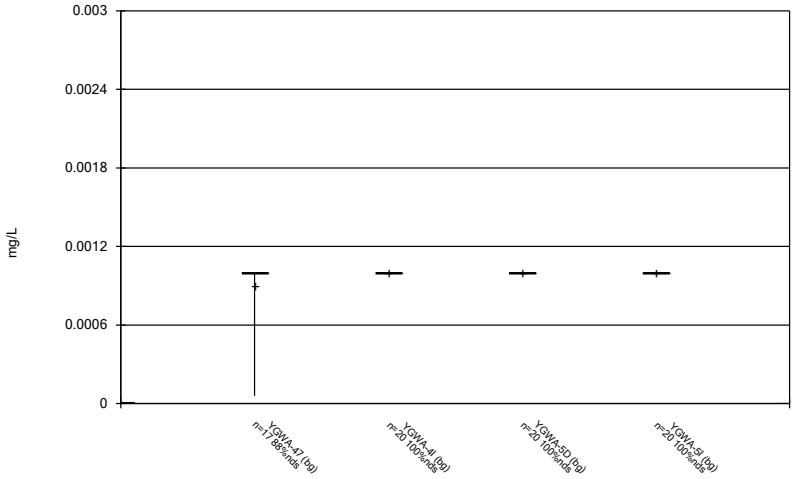
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/19/2023 8:57 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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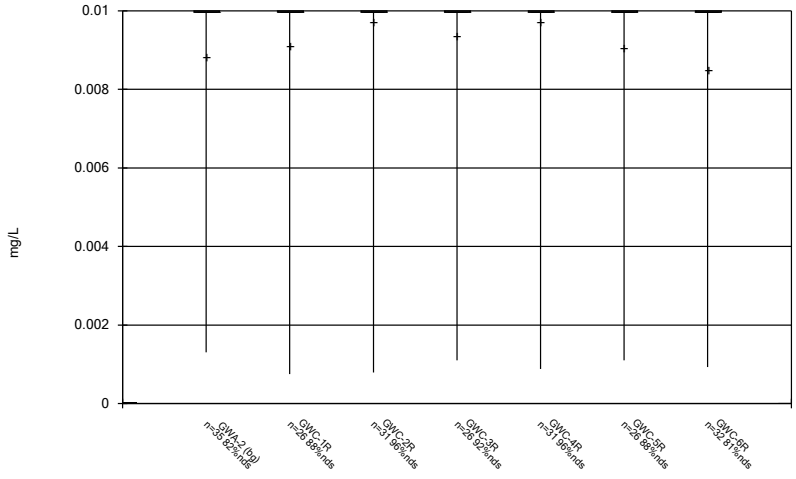

Constituent: Vanadium Analysis Run 10/19/2023 8:57 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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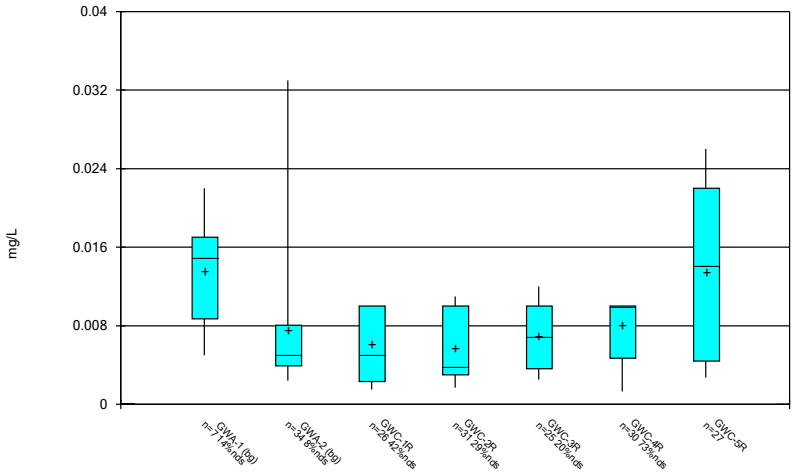
Box & Whiskers Plot



Constituent: Zinc Analysis Run 10/19/2023 8:57 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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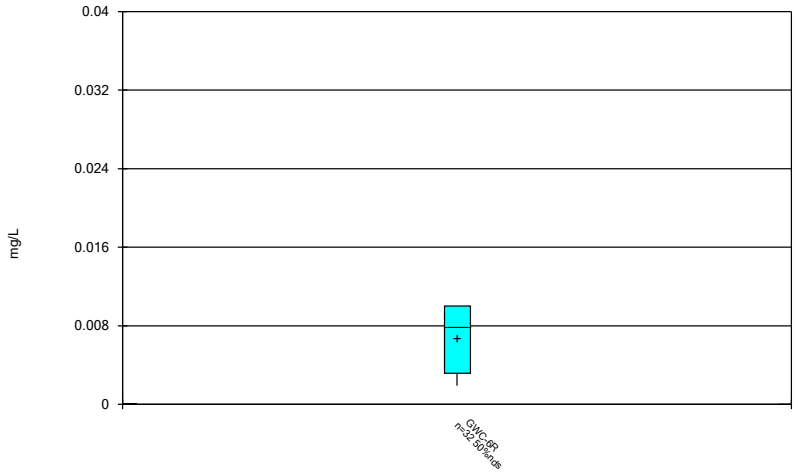
Box & Whiskers Plot



Constituent: Zinc Analysis Run 10/19/2023 8:57 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE C.

Outlier Summary

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 10/19/2023, 9:01 AM

	GWA-2 Cobalt (mg/L)	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)	
8/26/2020	0.2 (o)			
9/22/2020	0.16 (o)			
3/2/2021	0.21 (o)			
8/20/2021	0.074 (o)			
2/8/2022	0.072 (o)			
8/30/2022	0.075 (o)			

FIGURE D.

Appendix I & II Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 10/24/2023, 8:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GWC-5R**	**0.005**	**n/a**	**8/15/2023**	**0.0053**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**
Cobalt (mg/L)	**GWA-2**	**0.006801**	**n/a**	**8/15/2023**	**0.031**	**Yes**	**32**	**0.00327**	**0.001613**	**34.38**	**Kaplan-Meier**	**No**	**0.0005852**	**Param Intra 1 of 2**
Selenium (mg/L)	**GWC-1R**	**0.019**	**n/a**	**8/16/2023**	**0.02**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**

Appendix I & II Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 10/24/2023, 8:06 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	8/15/2023	0.003ND	No	36	n/a	n/a	91.67	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-2R	0.003	n/a	8/16/2023	0.003ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-4R	0.003	n/a	8/15/2023	0.003ND	No	32	n/a	n/a	90.63	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-5R	0.003	n/a	8/15/2023	0.003ND	No	27	n/a	n/a	92.59	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-2	0.005	n/a	8/15/2023	0.005ND	No	36	n/a	n/a	94.44	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-1R	0.005	n/a	8/16/2023	0.005ND	No	27	n/a	n/a	77.78	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-2R	0.005	n/a	8/16/2023	0.005ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-3R	0.005	n/a	8/16/2023	0.005ND	No	27	n/a	n/a	81.48	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-4R	0.005	n/a	8/15/2023	0.005ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	**GWC-5R**	**0.005**	**n/a**	**8/15/2023**	**0.0053**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**
Arsenic (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.005ND	No	33	n/a	n/a	72.73	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-2	0.07655	n/a	8/15/2023	0.03	No	36	0.04995	0.01231	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-1R	0.09209	n/a	8/16/2023	0.042	No	27	0.04909	0.01922	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-2R	0.13	n/a	8/16/2023	0.026	No	32	n/a	n/a	0	n/a	n/a	0.001803	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-3R	0.08517	n/a	8/16/2023	0.0096	No	27	0.3004	0.06239	0	None	x^(1/3)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-4R	0.06816	n/a	8/15/2023	0.022	No	28	0.3039	0.04699	0	None	x^(1/3)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-5R	0.058	n/a	8/15/2023	0.01	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-6R	0.09329	n/a	8/15/2023	0.028	No	33	0.04743	0.02102	0	None	No	0.0005852	Param Intra 1 of 2
Beryllium (mg/L)	GWC-1R	0.0005	n/a	8/16/2023	0.00033J	No	27	n/a	n/a	48.15	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWC-2R	0.0005	n/a	8/16/2023	0.00021J	No	32	n/a	n/a	71.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-3R	0.001019	n/a	8/16/2023	0.0006	No	27	0.02024	0.00522	25.93	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Beryllium (mg/L)	GWC-4R	0.0005	n/a	8/15/2023	0.0005ND	No	32	n/a	n/a	90.63	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-5R	0.0037	n/a	8/15/2023	0.0033	No	27	n/a	n/a	25.93	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Cadmium (mg/L)	GWA-2	0.0005	n/a	8/15/2023	0.0005ND	No	36	n/a	n/a	100	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-1R	0.0025	n/a	8/16/2023	0.00019J	No	27	n/a	n/a	81.48	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-2R	0.0005	n/a	8/16/2023	0.00012J	No	32	n/a	n/a	81.25	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-3R	0.0005	n/a	8/16/2023	0.00013J	No	27	n/a	n/a	62.96	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-4R	0.0005	n/a	8/15/2023	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-5R	0.00114	n/a	8/15/2023	0.0011	No	27	4.6e-10	4.5e-10	29.63	Kaplan-Meier	x^3	0.0005852	Param Intra 1 of 2
Chromium (mg/L)	GWA-2	0.0084	n/a	8/15/2023	0.005ND	No	36	n/a	n/a	77.78	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-1R	0.01	n/a	8/16/2023	0.0016J	No	27	n/a	n/a	44.44	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWC-2R	0.005	n/a	8/16/2023	0.005ND	No	32	n/a	n/a	84.38	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-3R	0.005	n/a	8/16/2023	0.005ND	No	27	n/a	n/a	29.63	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWC-4R	0.0062	n/a	8/15/2023	0.005ND	No	32	n/a	n/a	81.25	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-5R	0.01	n/a	8/15/2023	0.0018J	No	27	n/a	n/a	18.52	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWC-6R	0.01	n/a	8/15/2023	0.0021J	No	33	n/a	n/a	33.33	n/a	n/a	0.001701	NP Intra (normality) 1 of 2
Cobalt (mg/L)	**GWA-2**	**0.006801**	**n/a**	**8/15/2023**	**0.031**	**Yes**	**32**	**0.00327**	**0.001613**	**34.38**	**Kaplan-Meier**	**No**	**0.0005852**	**Param Intra 1 of 2**
Cobalt (mg/L)	GWC-1R	0.015	n/a	8/16/2023	0.00063J	No	27	n/a	n/a	37.04	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Cobalt (mg/L)	GWC-2R	0.04612	n/a	8/16/2023	0.011	No	32	0.02126	0.01136	3.125	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-3R	0.011	n/a	8/16/2023	0.0032J	No	27	n/a	n/a	74.07	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-4R	0.006272	n/a	8/15/2023	0.002J	No	32	0.002253	0.001836	28.13	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-5R	0.005	n/a	8/15/2023	0.0012J	No	27	n/a	n/a	81.48	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.005ND	No	33	n/a	n/a	96.97	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-2	0.0074	n/a	8/15/2023	0.0011J	No	29	n/a	n/a	44.83	n/a	n/a	0.002172	NP Intra (normality) 1 of 2
Copper (mg/L)	GWC-1R	0.005	n/a	8/16/2023	0.005ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-2R	0.005	n/a	8/16/2023	0.005ND	No	25	n/a	n/a	96	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-3R	0.016	n/a	8/16/2023	0.005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-4R	0.005	n/a	8/15/2023	0.005ND	No	25	n/a	n/a	84	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-5R	0.005	n/a	8/15/2023	0.0012J	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.0017J	No	26	n/a	n/a	50	n/a	n/a	0.002667	NP Intra (normality) 1 of 2
Lead (mg/L)	GWA-2	0.001	n/a	8/15/2023	0.001ND	No	36	n/a	n/a	97.22	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-1R	0.001	n/a	8/16/2023	0.001ND	No	27	n/a	n/a	92.59	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-2R	0.001	n/a	8/16/2023	0.001ND	No	32	n/a	n/a	78.13	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-3R	0.001	n/a	8/16/2023	0.001ND	No	27	n/a	n/a	74.07	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-4R	0.001	n/a	8/15/2023	0.001ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-5R	0.001	n/a	8/15/2023	0.001ND	No	27	n/a	n/a	77.78	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2

Appendix I & II Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 10/24/2023, 8:06 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	GWA-2	0.0002	n/a	8/15/2023	0.0002ND	No	36	n/a	n/a	94.44	n/a	n/a	0.001429	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-1R	0.0002	n/a	8/16/2023	0.0002ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-2R	0.0002	n/a	8/16/2023	0.0002ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-3R	0.00043	n/a	8/16/2023	0.0002ND	No	27	n/a	n/a	88.89	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-4R	0.0002	n/a	8/15/2023	0.0002ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-5R	0.0002	n/a	8/15/2023	0.0002ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-6R	0.0002	n/a	8/15/2023	0.0002ND	No	33	n/a	n/a	93.94	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-2	0.03314	n/a	8/15/2023	0.0098	No	29	-5.033	0.7342	10.34	None	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-1R	0.008772	n/a	8/16/2023	0.0026J	No	20	-6.236	0.6381	30	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-2R	0.0096	n/a	8/16/2023	0.005ND	No	25	n/a	n/a	44	n/a	n/a	0.002832	NP Intra (normality) 1 of 2
Nickel (mg/L)	GWC-3R	0.0054	n/a	8/16/2023	0.005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-4R	0.005	n/a	8/15/2023	0.00096J	No	25	n/a	n/a	60	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-5R	0.005199	n/a	8/15/2023	0.001J	No	20	0.0448	0.01162	20	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-6R	0.005	n/a	8/15/2023	0.005ND	No	26	n/a	n/a	65.38	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-1R**	**0.019**	**n/a**	**8/16/2023**	**0.02**	**Yes**	**27**	**n/a**	**n/a**	**48.15**	**n/a**	**n/a**	**0.002502**	**NP Intra (normality) 1 of 2**
Selenium (mg/L)	GWC-2R	0.01	n/a	8/16/2023	0.0033J	No	32	n/a	n/a	50	n/a	n/a	0.001803	NP Intra (normality) 1 of 2
Selenium (mg/L)	GWC-3R	0.017	n/a	8/16/2023	0.0052	No	27	n/a	n/a	40.74	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Selenium (mg/L)	GWC-4R	0.01445	n/a	8/15/2023	0.0021J	No	32	0.07177	0.02213	25	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-5R	0.0414	n/a	8/15/2023	0.024	No	27	0.02145	0.008917	3.704	None	No	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-6R	0.0051	n/a	8/15/2023	0.005ND	No	33	n/a	n/a	51.52	n/a	n/a	0.001701	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-2	0.001	n/a	8/15/2023	0.001ND	No	35	n/a	n/a	88.57	n/a	n/a	0.001497	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-2R	0.001	n/a	8/16/2023	0.001ND	No	30	n/a	n/a	96.67	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-5R	0.001	n/a	8/15/2023	0.00029J	No	26	n/a	n/a	96.15	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-2	0.01	n/a	8/15/2023	0.01ND	No	31	n/a	n/a	83.87	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-1R	0.01	n/a	8/16/2023	0.01ND	No	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-2R	0.01	n/a	8/16/2023	0.01ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-3R	0.01	n/a	8/16/2023	0.01ND	No	22	n/a	n/a	90.91	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-4R	0.01	n/a	8/15/2023	0.01ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-5R	0.01	n/a	8/15/2023	0.01ND	No	22	n/a	n/a	86.36	n/a	n/a	0.003707	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-6R	0.01	n/a	8/15/2023	0.01ND	No	28	n/a	n/a	78.57	n/a	n/a	0.002337	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-2	0.033	n/a	8/15/2023	0.008J	No	30	n/a	n/a	10	n/a	n/a	0.002008	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-1R	0.01	n/a	8/16/2023	0.01ND	No	22	n/a	n/a	31.82	n/a	n/a	0.003707	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-2R	0.01022	n/a	8/16/2023	0.01ND	No	27	-5.718	0.507	18.52	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-3R	0.01375	n/a	8/16/2023	0.01ND	No	21	0.006395	0.003152	9.524	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-4R	0.01	n/a	8/15/2023	0.01ND	No	26	n/a	n/a	69.23	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-5R	0.02878	n/a	8/15/2023	0.022	No	23	0.01173	0.007426	0	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-6R	0.01	n/a	8/15/2023	0.01ND	No	28	n/a	n/a	42.86	n/a	n/a	0.002337	NP Intra (normality) 1 of 2

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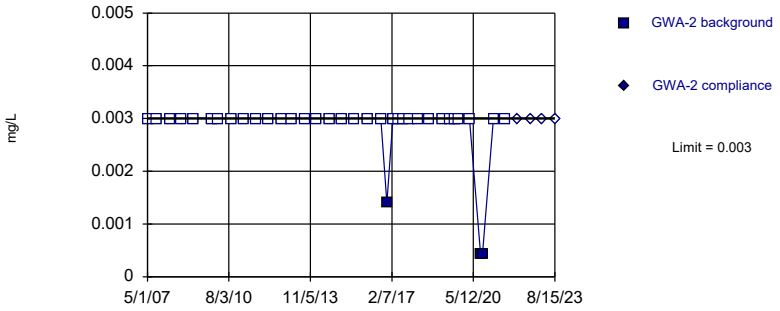
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Antimony Analysis Run 10/24/2023 7:54 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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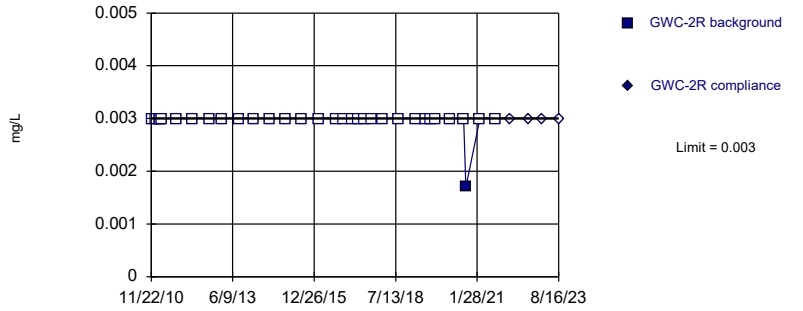
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 10/24/2023 7:54 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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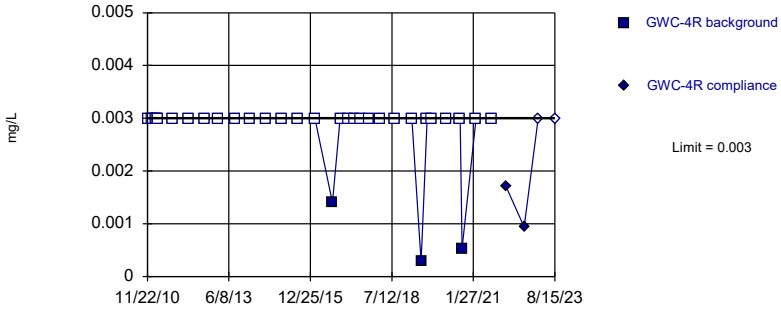
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 10/24/2023 7:54 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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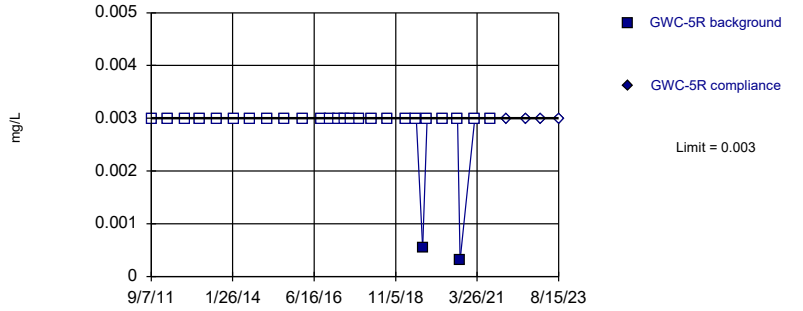
Hollow symbols indicate censored values.
Within Limit

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. 92.59% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Antimony Analysis Run 10/24/2023 7:54 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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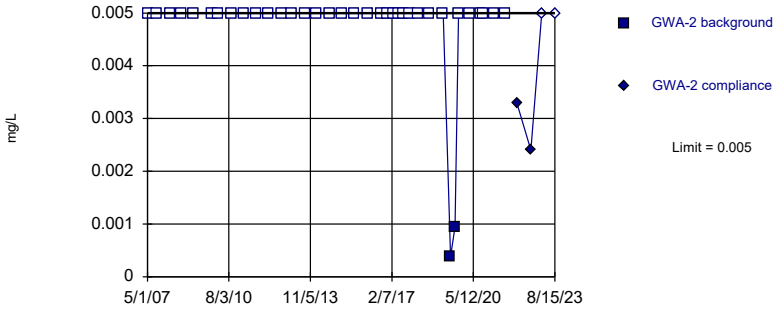
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 94.44% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Arsenic Analysis Run 10/24/2023 7:54 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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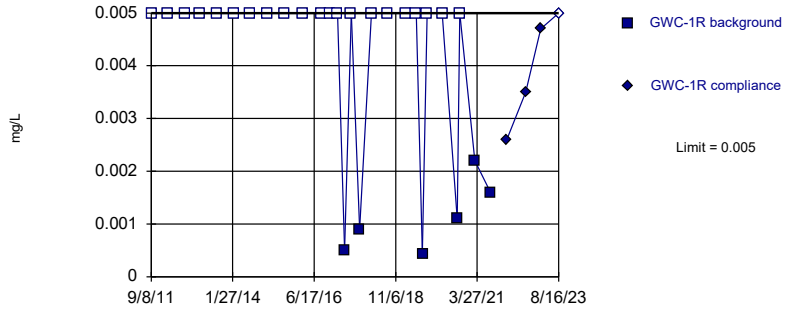
Hollow symbols indicate censored values.

Within Limit

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. 77.78% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Arsenic Analysis Run 10/24/2023 7:54 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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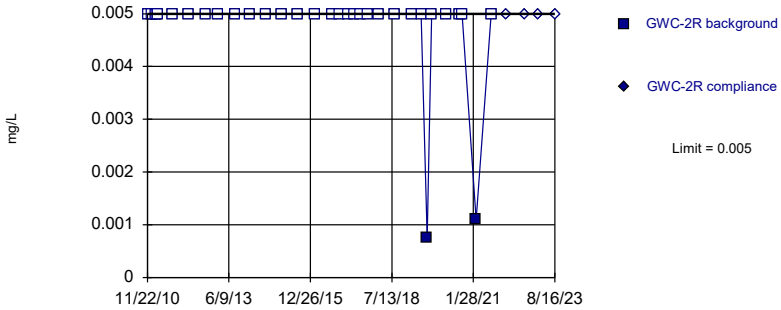
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 10/24/2023 7:54 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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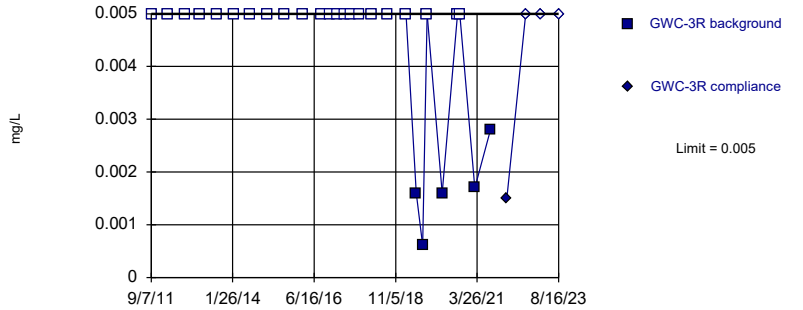
Hollow symbols indicate censored values.

Within Limit

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. 81.48% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Arsenic Analysis Run 10/24/2023 7:54 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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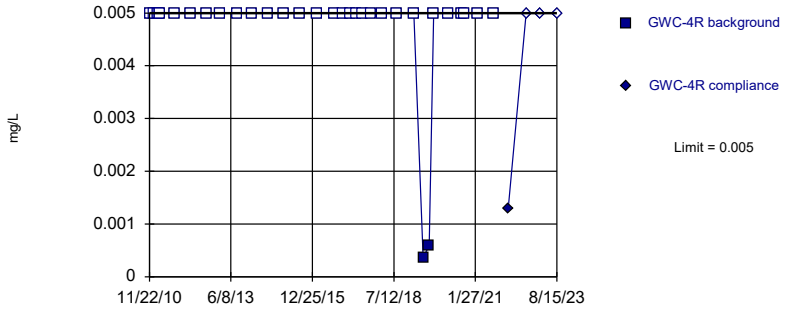
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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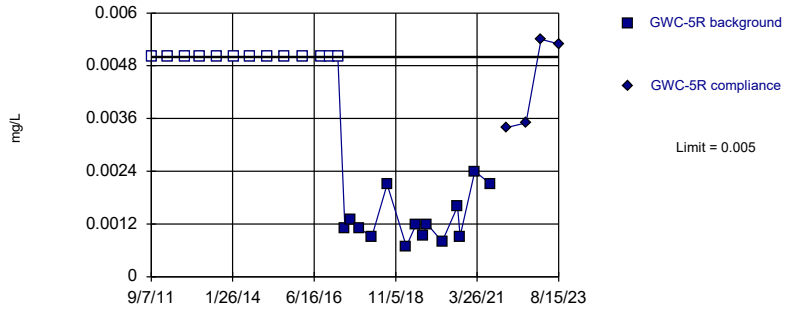
Hollow symbols indicate censored values.

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 27 background values. 48.15% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

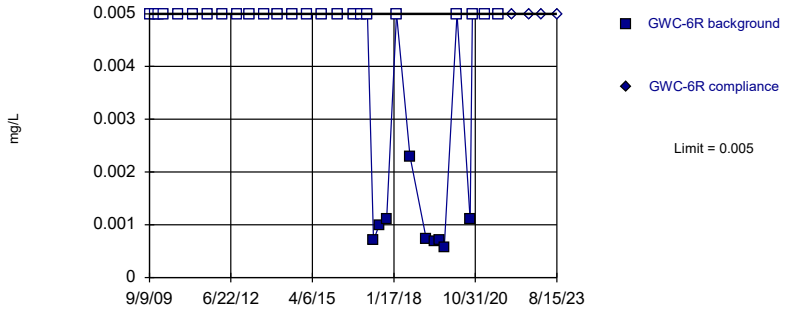
Constituent: Arsenic Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2).

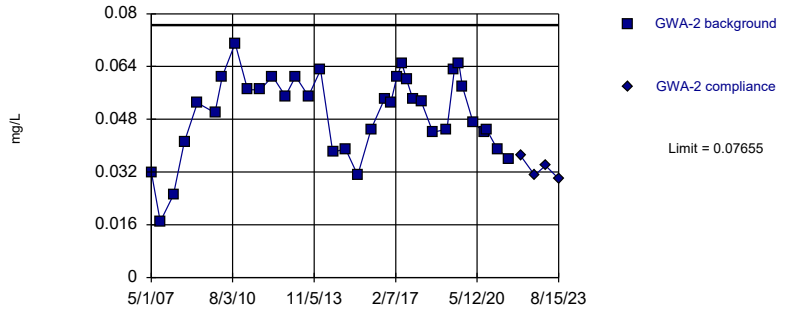
Constituent: Arsenic Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Within Limit

Prediction Limit

Intrawell Parametric



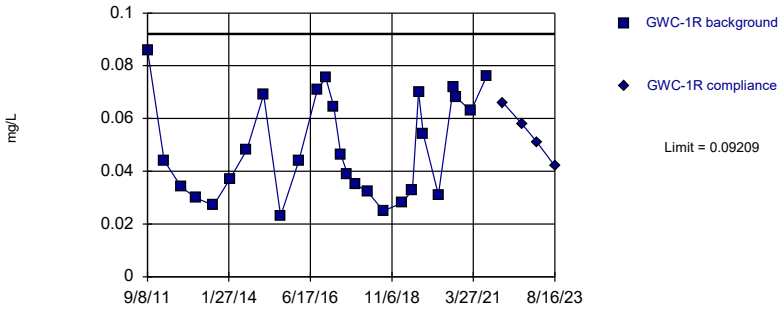
Background Data Summary: Mean=0.04995, Std. Dev.=0.01231, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9537, critical = 0.912. Kappa = 2.161 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.04909, Std. Dev.=0.01922, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9082, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

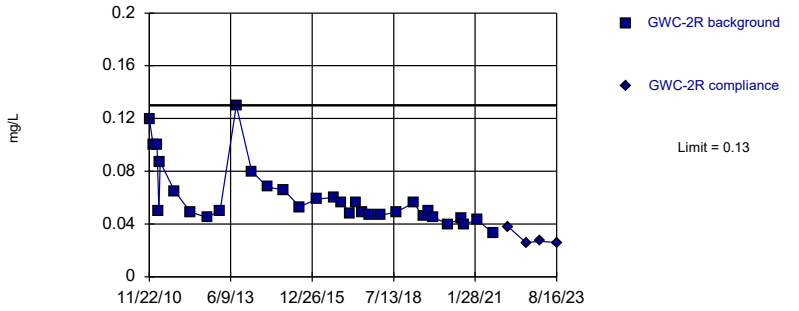
Constituent: Barium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

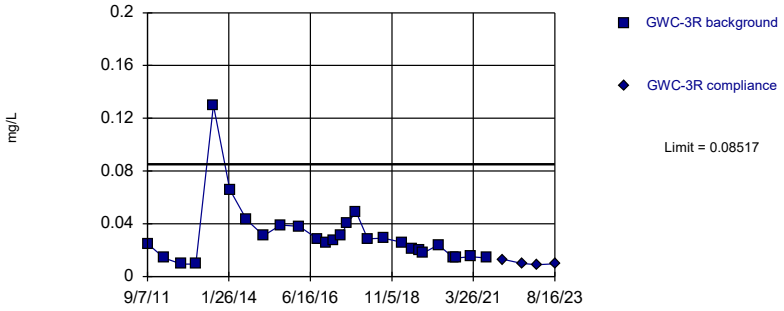
Constituent: Barium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.3004, Std. Dev.=0.06239, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9031, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

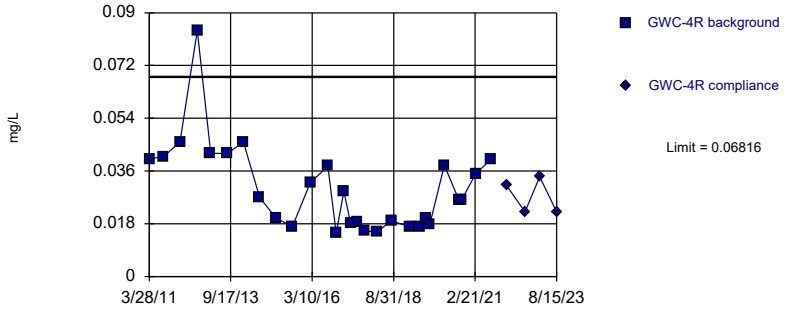
Constituent: Barium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.3039, Std. Dev.=0.04699, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9014, critical = 0.896. Kappa = 2.226 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

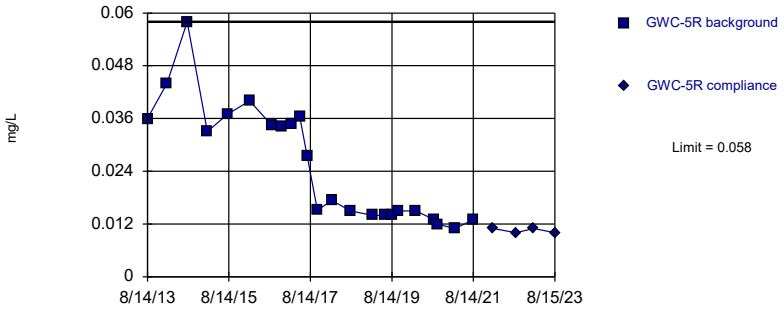
Constituent: Barium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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).

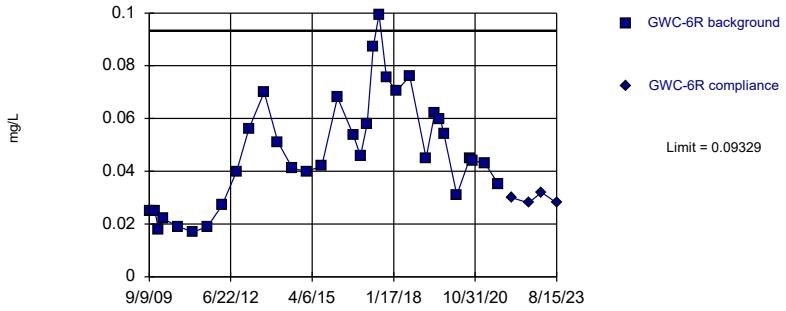
Constituent: Barium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.04743, Std. Dev.=0.02102, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.958, critical = 0.906. Kappa = 2.181 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

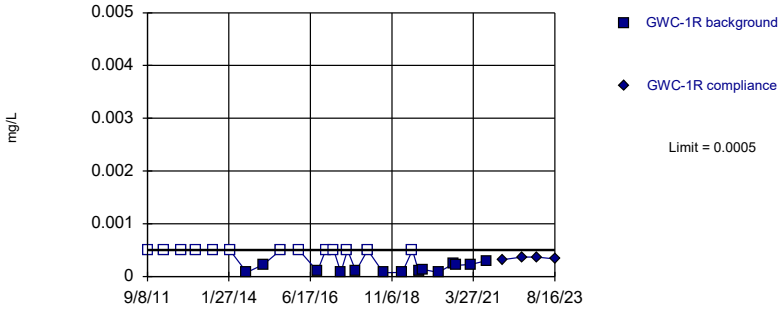
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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 27 background values. 48.15% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Beryllium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

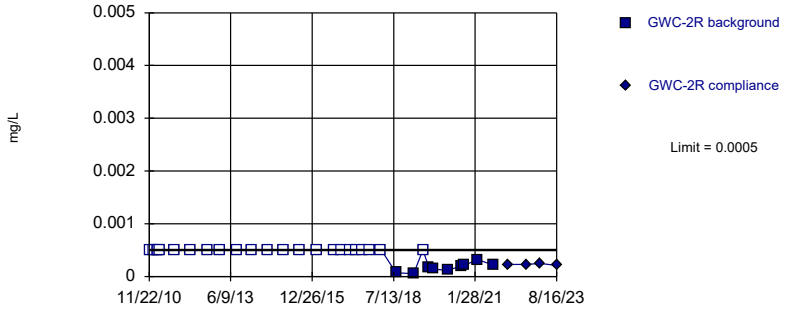
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 71.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

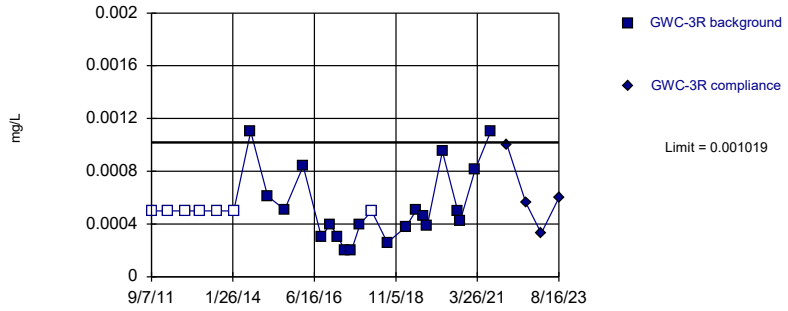
Constituent: Beryllium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



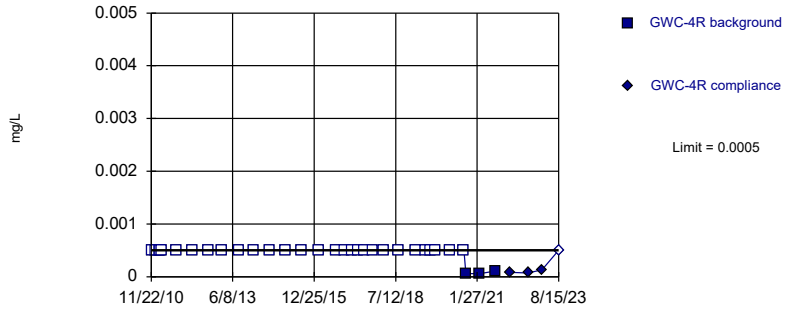
Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.02024, Std. Dev.=0.00522, n=27, 25.93% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9068, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Beryllium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



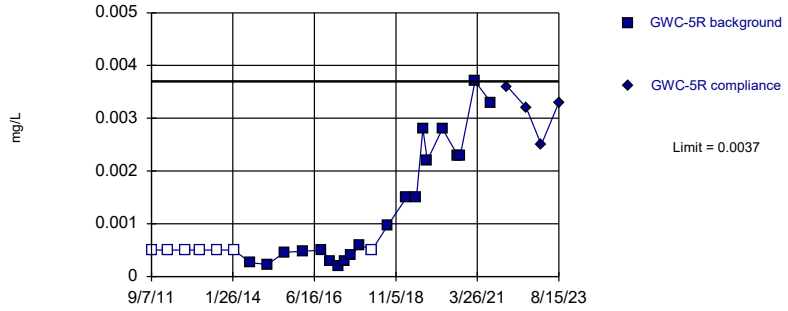
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Beryllium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



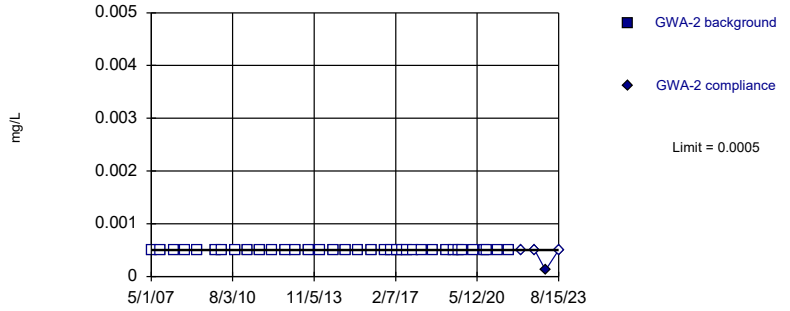
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 25.93% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Beryllium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate 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 = 36) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Cadmium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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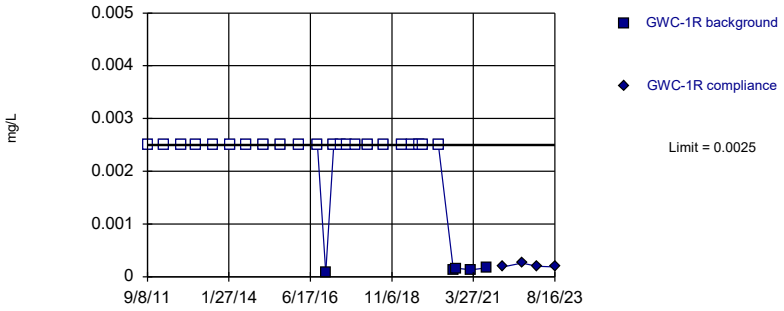
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



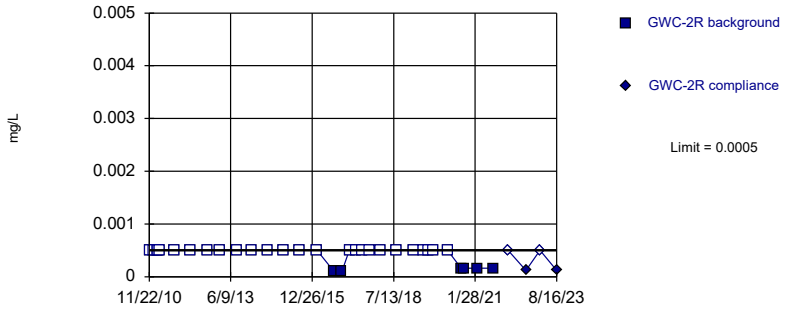
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Cadmium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



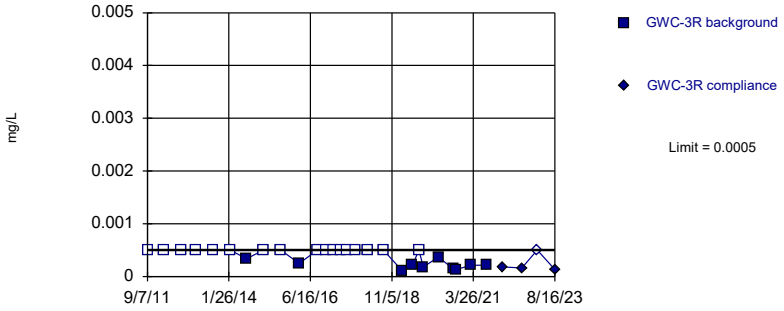
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



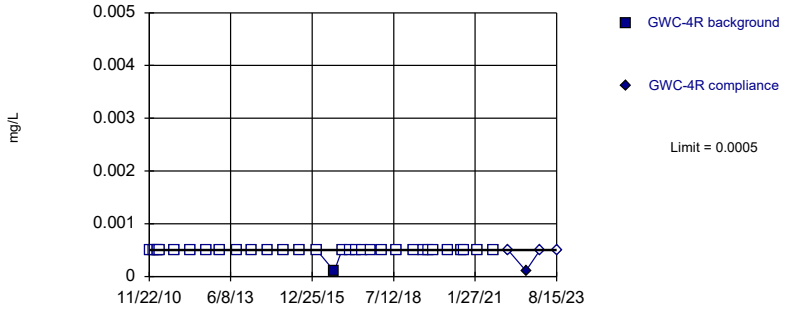
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Cadmium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



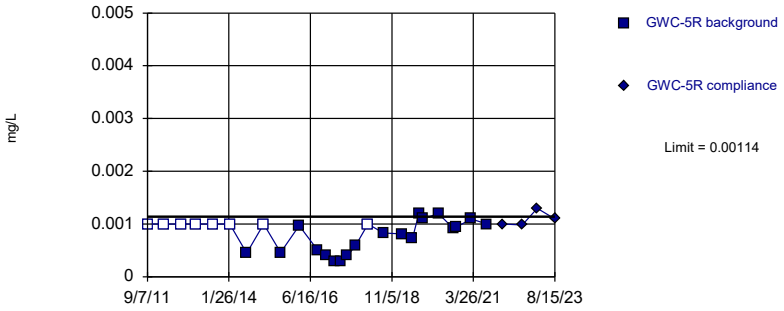
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



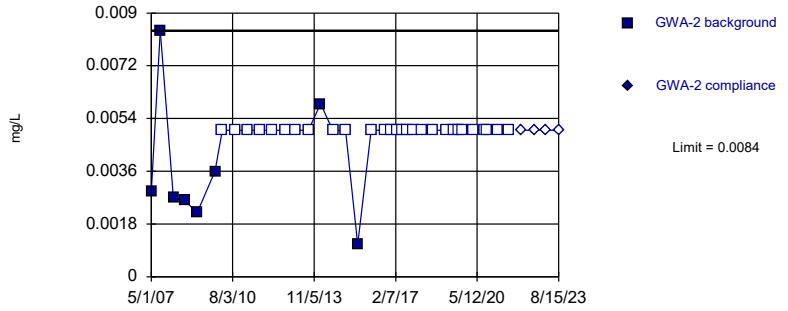
Background Data Summary (based on cube transformation) (after Kaplan-Meier Adjustment): Mean=4.6e-10, Std. Dev.=4.5e-10, n=27, 29.63% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.898, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Cadmium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



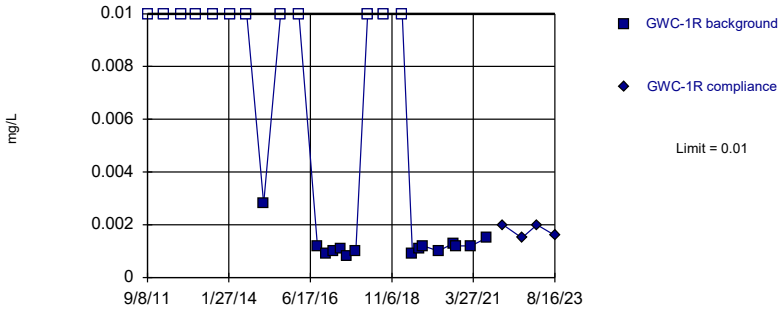
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Chromium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



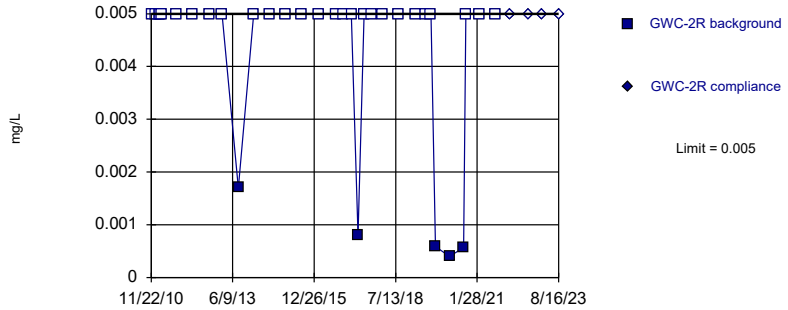
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 44.44% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Chromium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



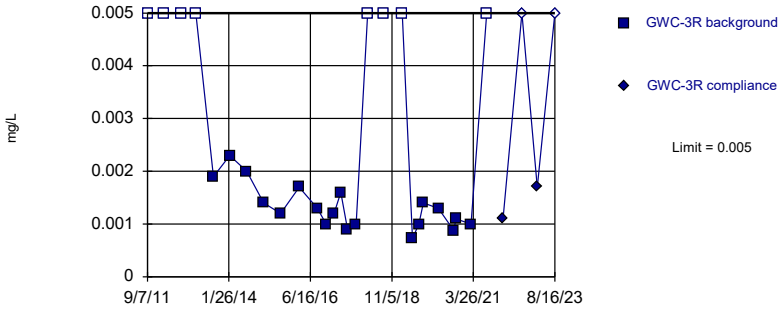
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 84.38% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Chromium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



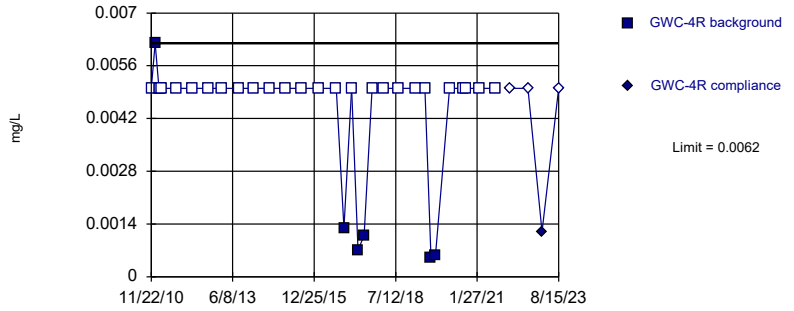
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 29.63% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Chromium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



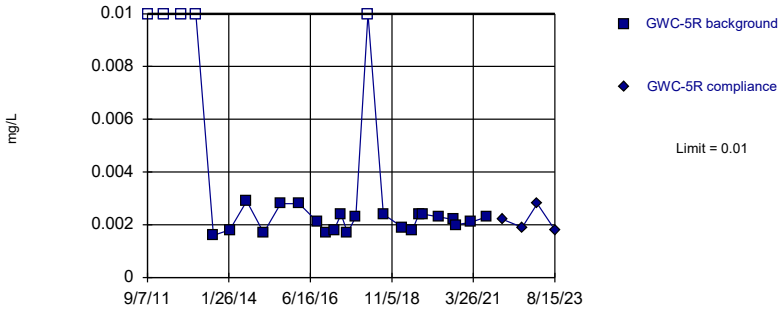
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Chromium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



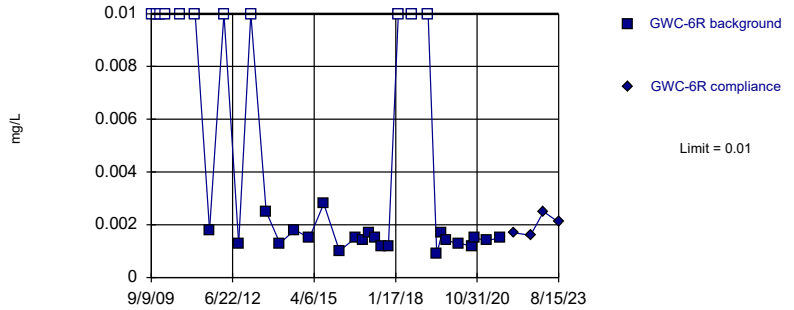
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 18.52% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Chromium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . 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 33 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2).

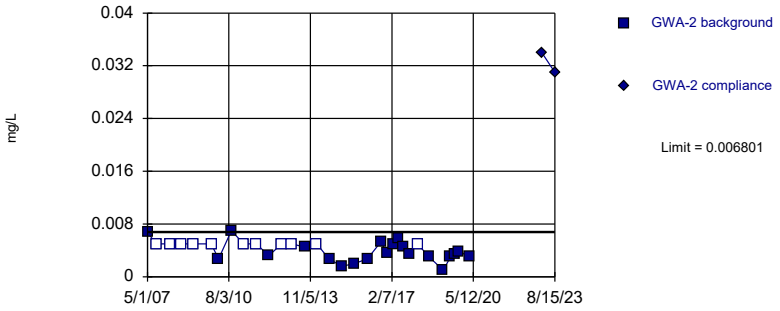
Constituent: Chromium Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.00327, Std. Dev.=0.001613, n=32, 34.38% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9368, critical = 0.904. Kappa = 2.189 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

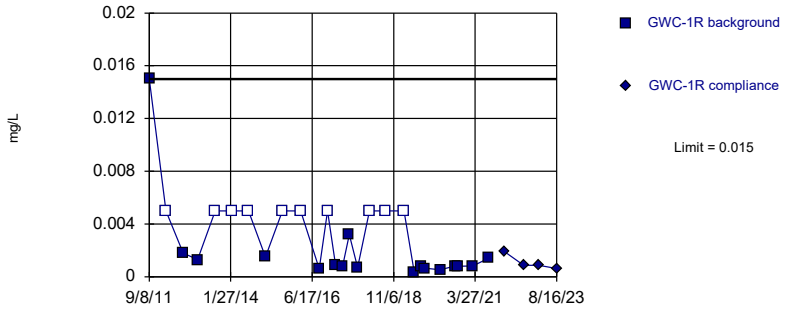
Constituent: Cobalt Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . 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 27 background values. 37.04% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

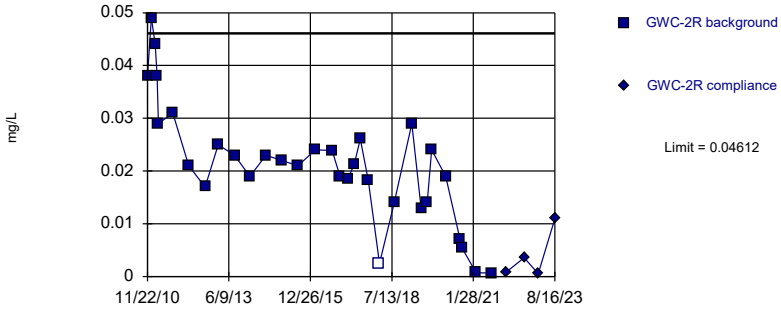
Constituent: Cobalt Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02126, Std. Dev.=0.01136, n=32, 3.125% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.956, critical = 0.904. Kappa = 2.189 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

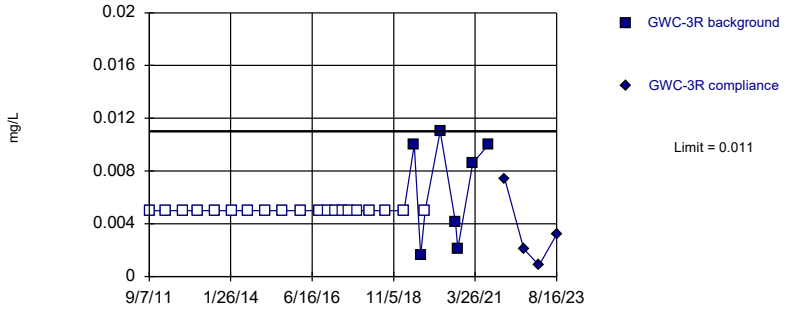
Constituent: Cobalt Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



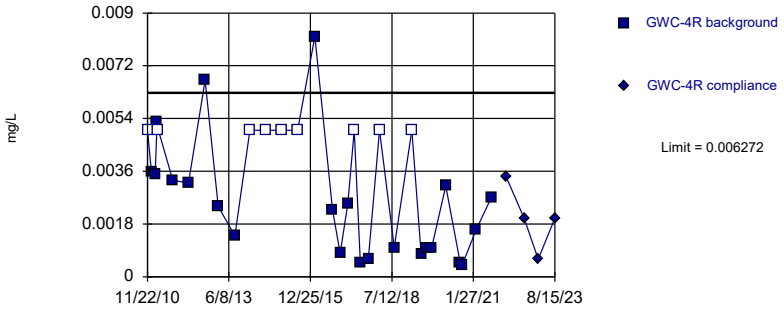
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Cobalt Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



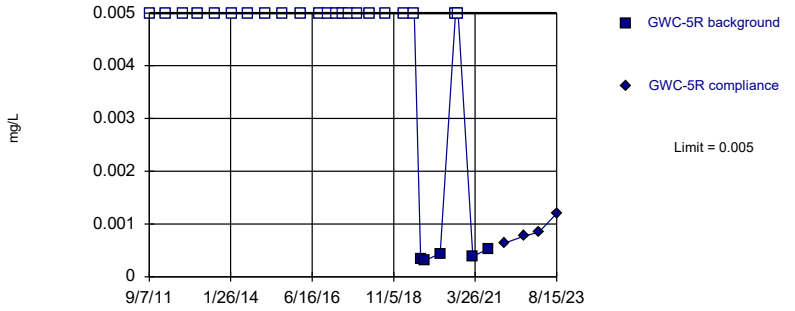
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002253, Std. Dev.=0.001836, n=32, 28.13% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9125, critical = 0.904. Kappa = 2.189 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Cobalt Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



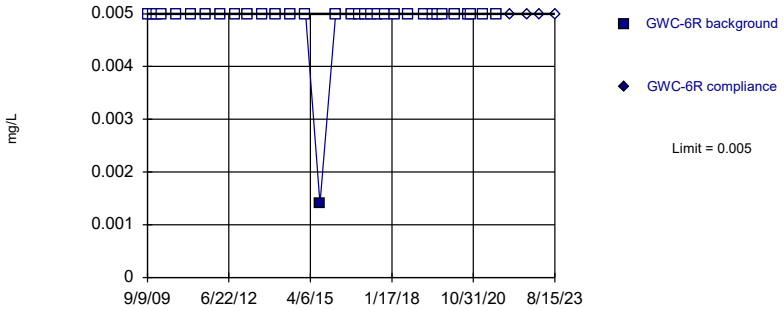
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Cobalt Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



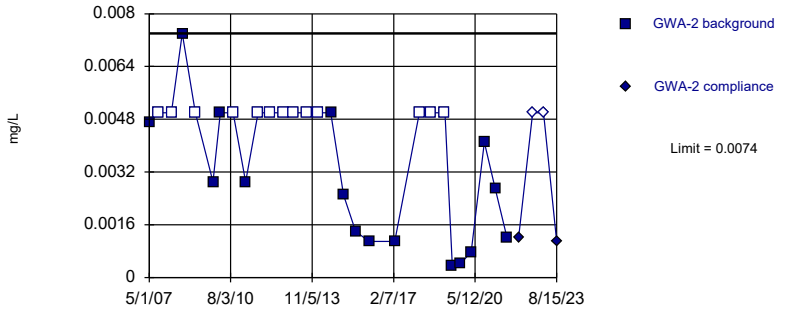
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 96.97% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2).

Constituent: Cobalt Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



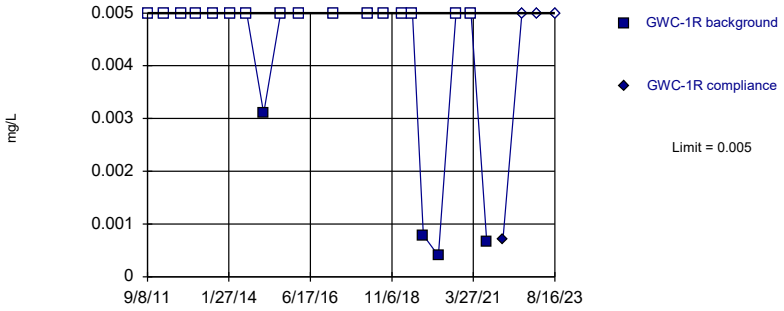
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 44.83% NDs. Well-constituent pair annual alpha = 0.00434. Individual comparison alpha = 0.002172 (1 of 2).

Constituent: Copper Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



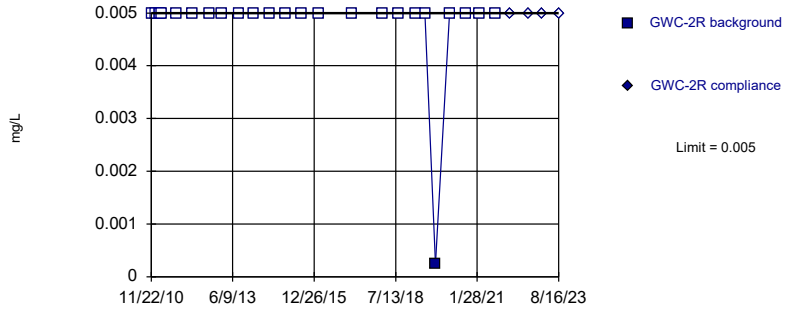
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Copper Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



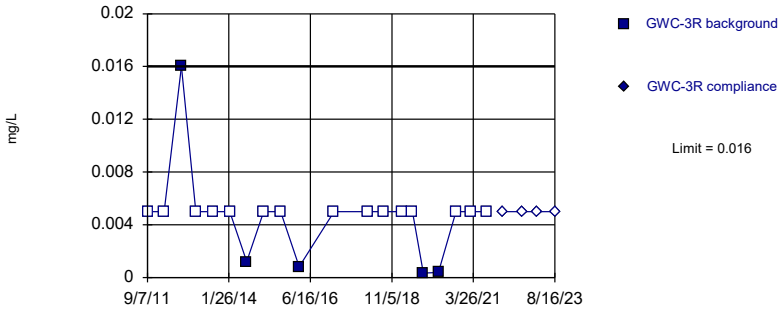
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 96% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

Constituent: Copper Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



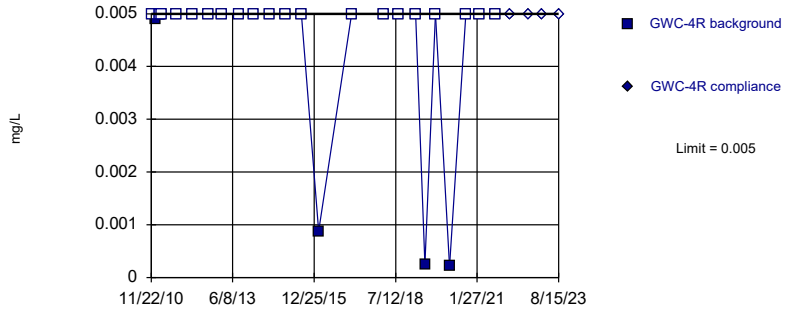
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Copper Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 84% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

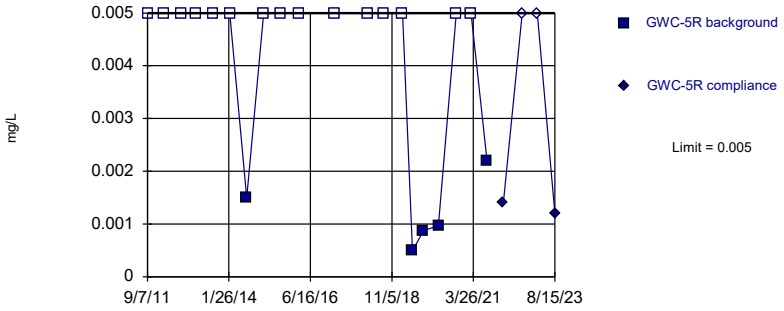
Constituent: Copper Analysis Run 10/24/2023 7:55 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Copper Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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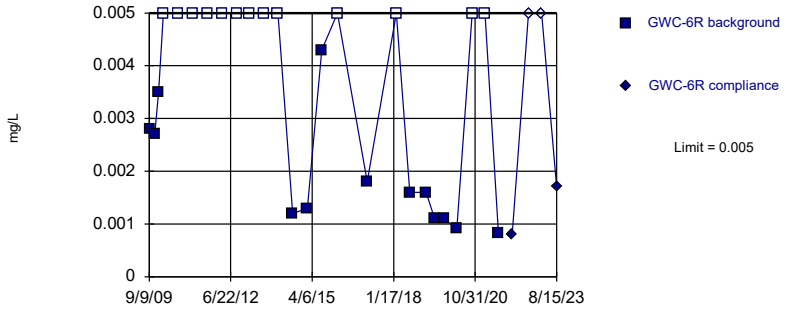
Hollow symbols indicate censored values.

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 26 background values. 50% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Copper Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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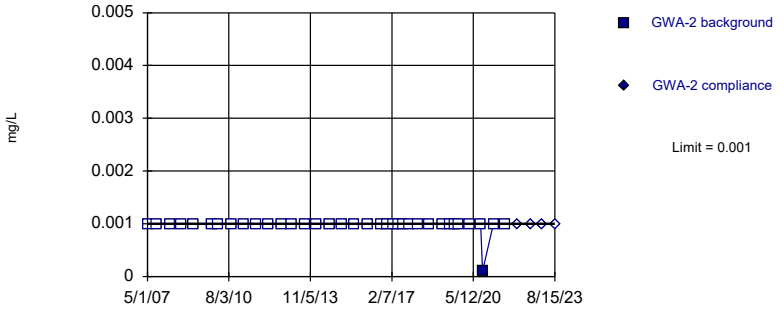
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 97.22% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

Constituent: Lead Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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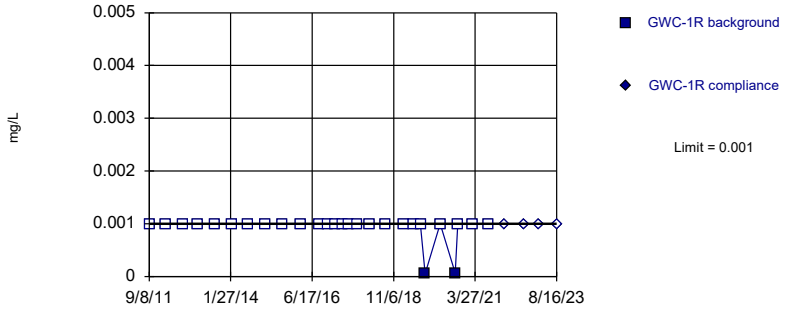
Hollow symbols indicate censored values.

Within Limit

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. 92.59% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

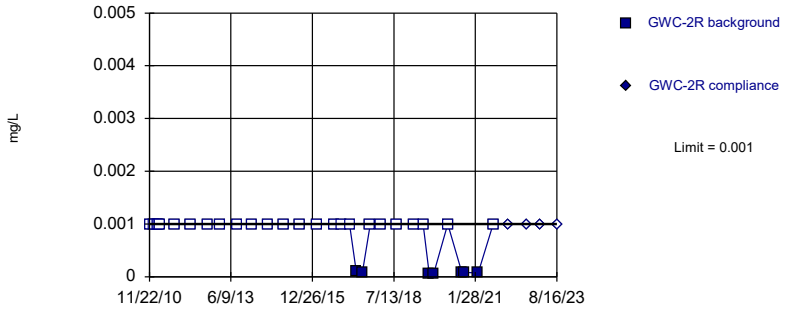
Constituent: Lead Analysis Run 10/24/2023 7:55 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



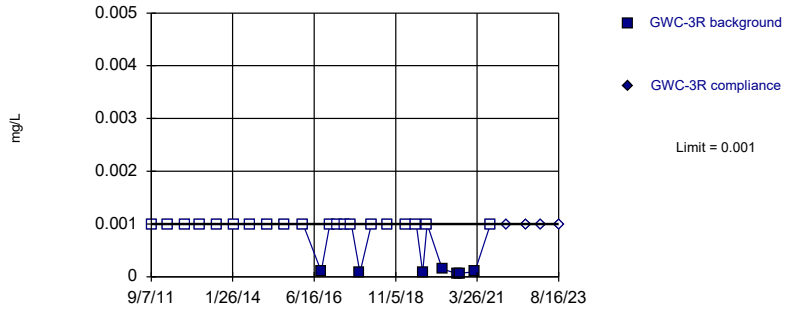
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



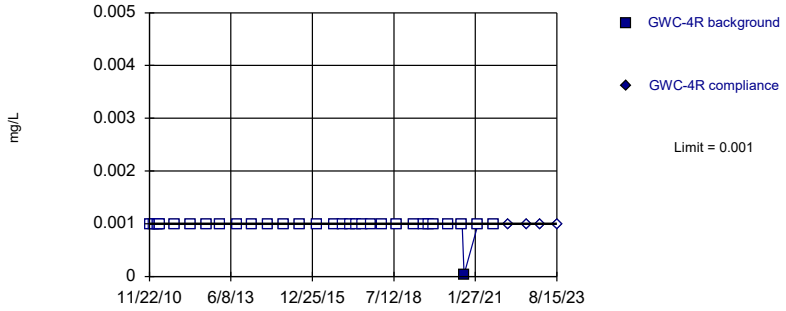
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Lead Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



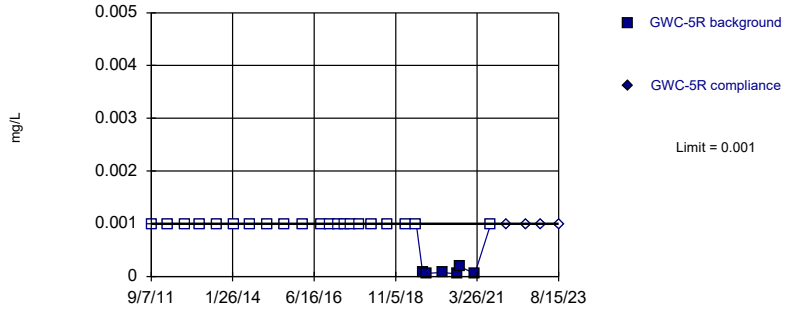
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

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. 77.78% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

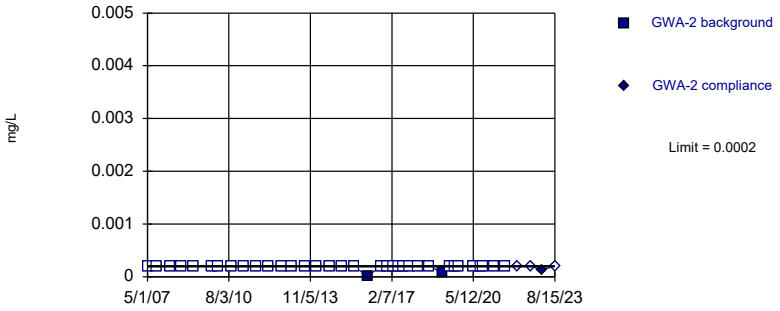
Constituent: Lead Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 36 background values. 94.44% NDs. Well-constituent pair annual alpha = 0.002856. Individual comparison alpha = 0.001429 (1 of 2).

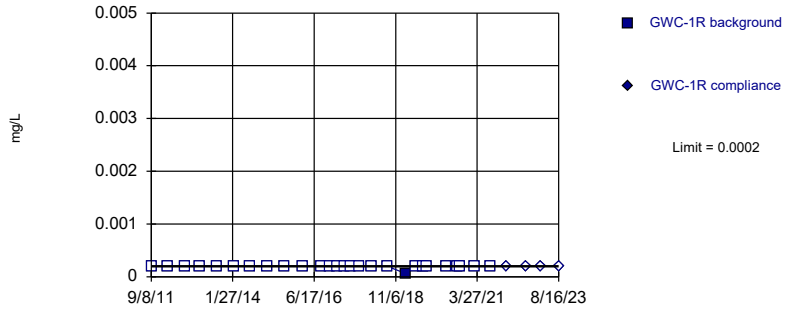
Constituent: Mercury Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

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).

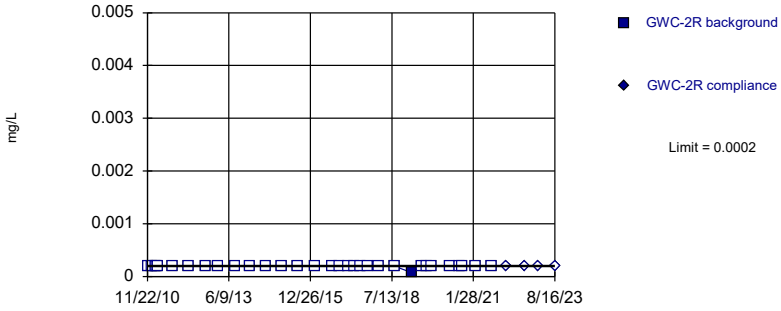
Constituent: Mercury Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

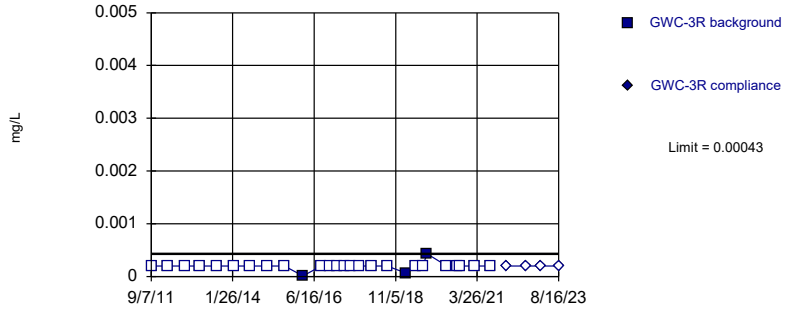
Constituent: Mercury Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



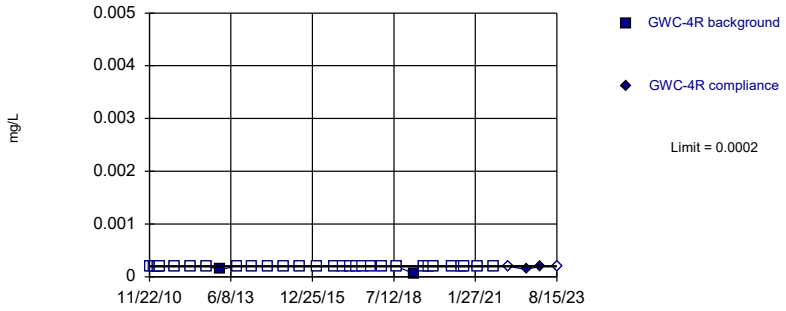
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Mercury Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



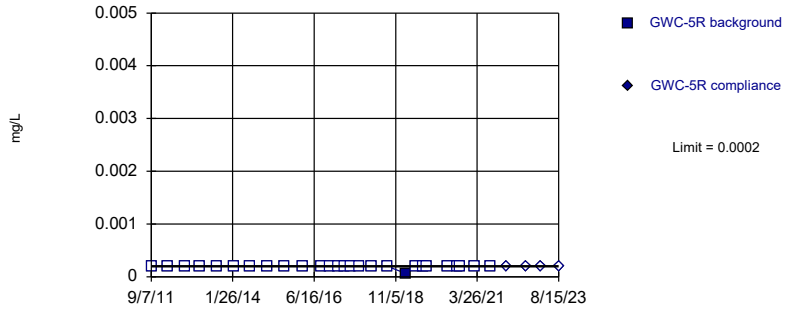
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



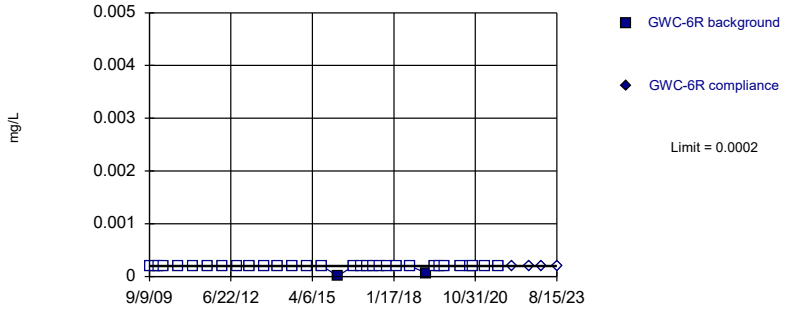
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 96.3% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Mercury Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



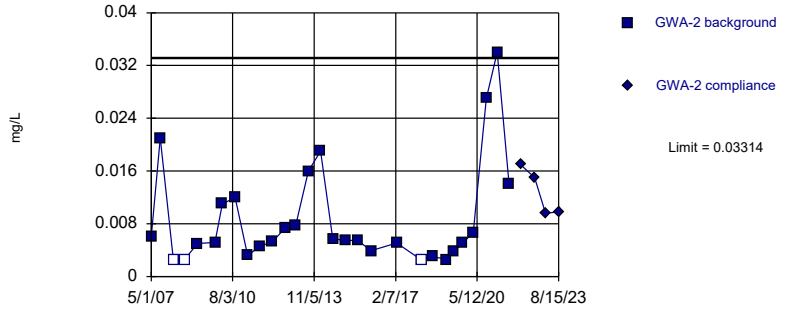
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 93.94% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2).

Constituent: Mercury Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-5.033, Std. Dev.=0.7342, n=29, 10.34% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9234, critical = 0.898. Kappa = 2.215 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

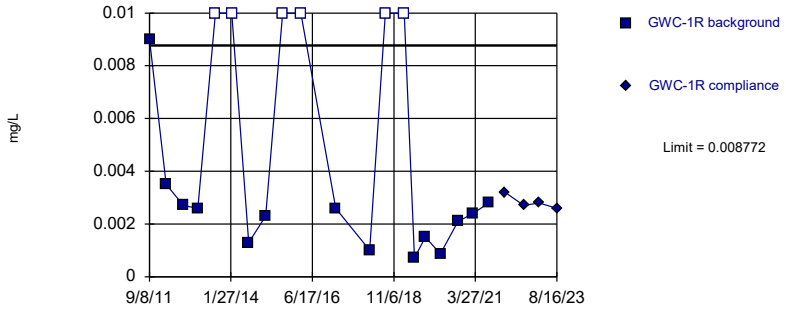
Constituent: Nickel Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . 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=-6.236, Std. Dev.=0.6381, n=20, 30% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8747, critical = 0.868. Kappa = 2.35 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

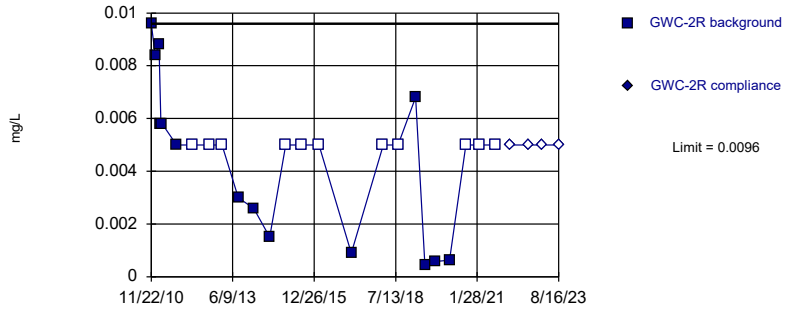
Constituent: Nickel Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . 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 25 background values. 44% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

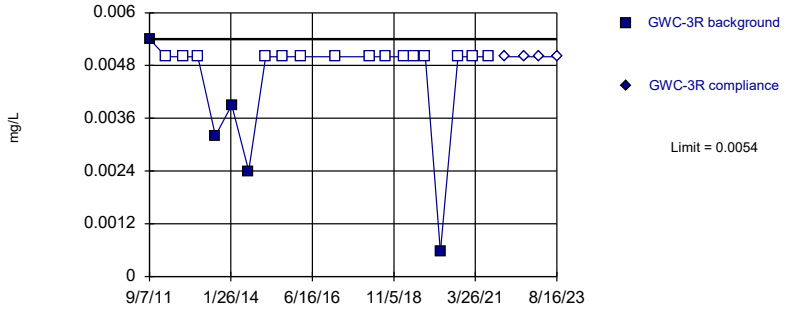
Constituent: Nickel Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

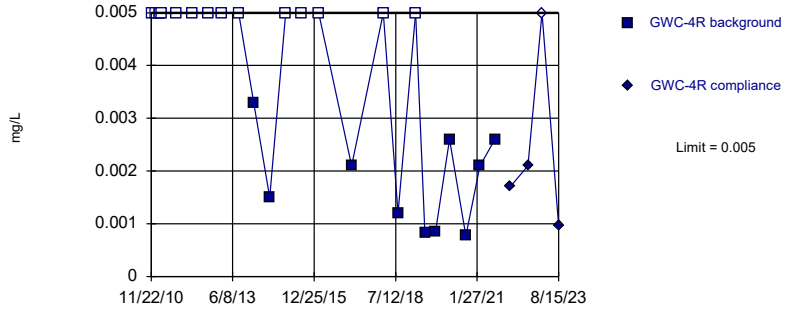
Constituent: Nickel Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



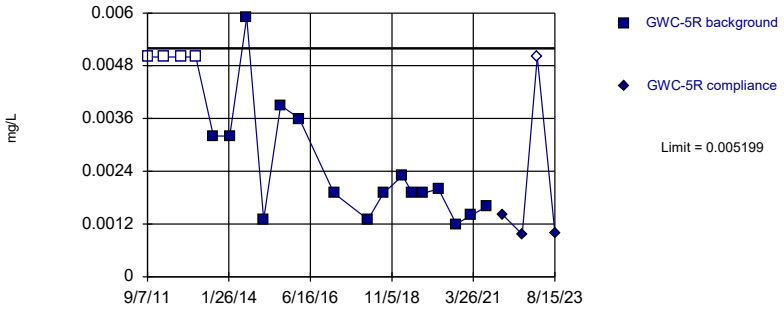
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 60% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

Constituent: Nickel Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



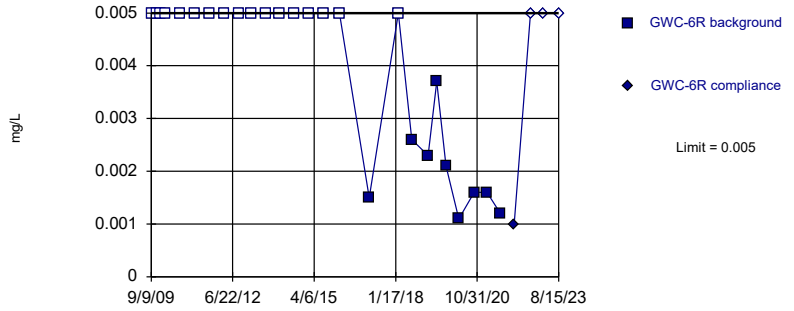
Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.0448, Std. Dev.=0.01162, n=20, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8913, critical = 0.868. Kappa = 2.35 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Nickel Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



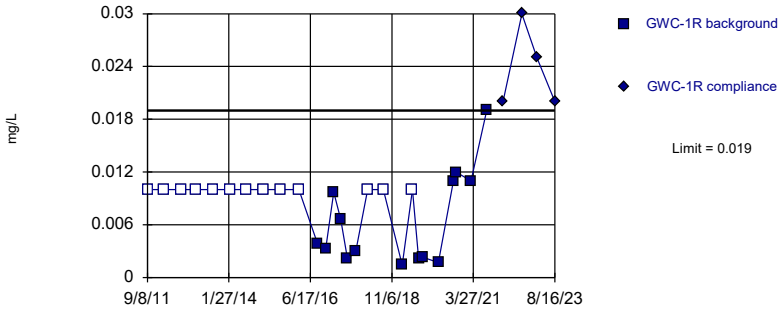
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 65.38% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Nickel Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Exceeds Limit

Prediction Limit

Intrawell Non-parametric



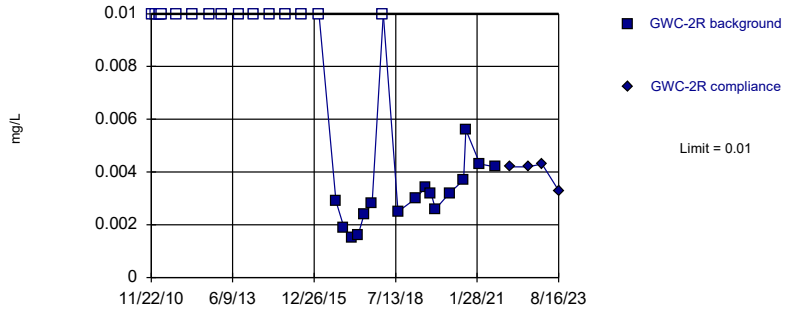
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 48.15% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Selenium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 50% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

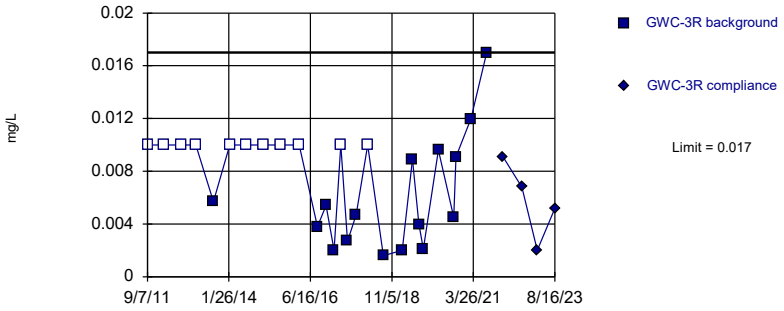
Constituent: Selenium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . 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 27 background values. 40.74% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Selenium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

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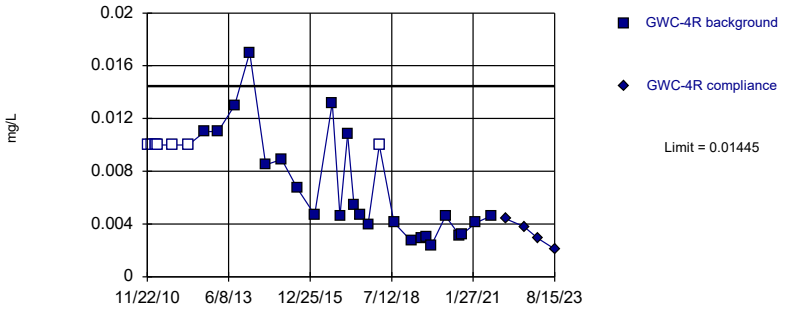
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.07177, Std. Dev.=0.02213, n=32, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9096, critical = 0.904. Kappa = 2.189 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Selenium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

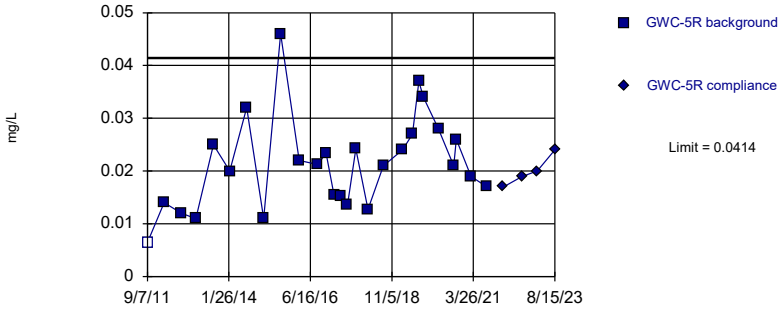
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02145, Std. Dev.=0.008917, n=27, 3.704% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9579, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Selenium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

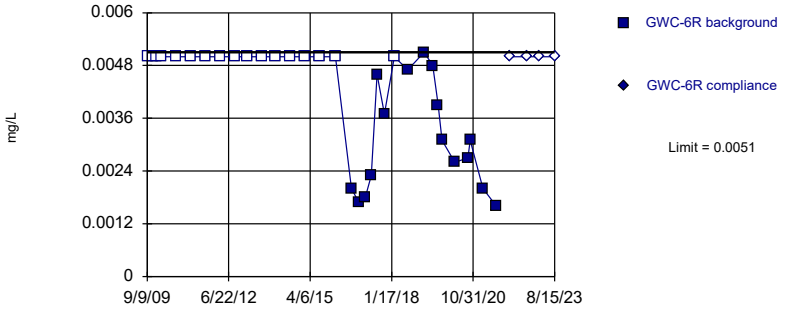
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 33 background values. 51.52% NDs. Well-constituent pair annual alpha = 0.003399. Individual comparison alpha = 0.001701 (1 of 2).

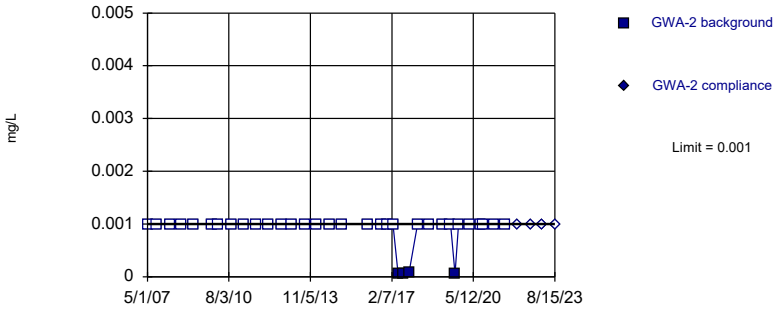
Constituent: Selenium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



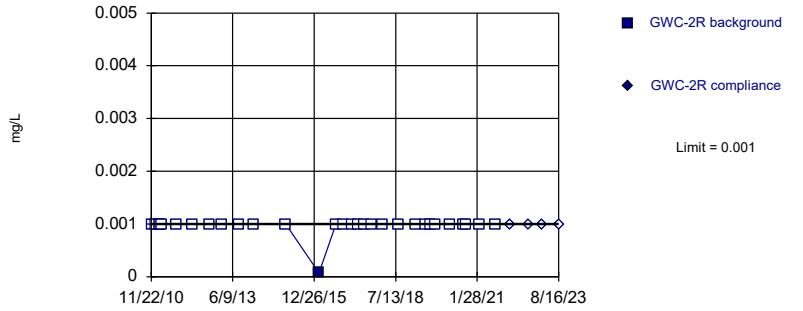
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 35 background values. 88.57% NDs. Well-constituent pair annual alpha = 0.002991. Individual comparison alpha = 0.001497 (1 of 2).

Constituent: Thallium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



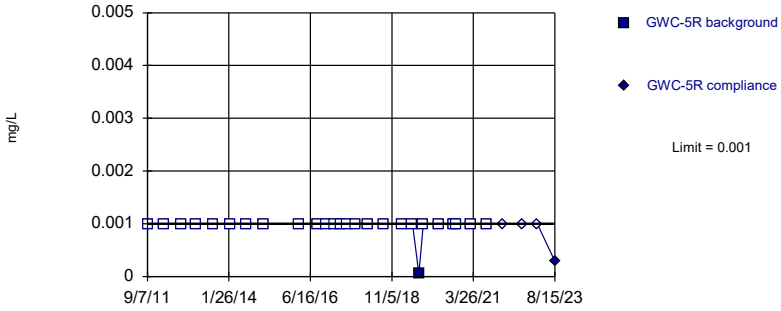
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Thallium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



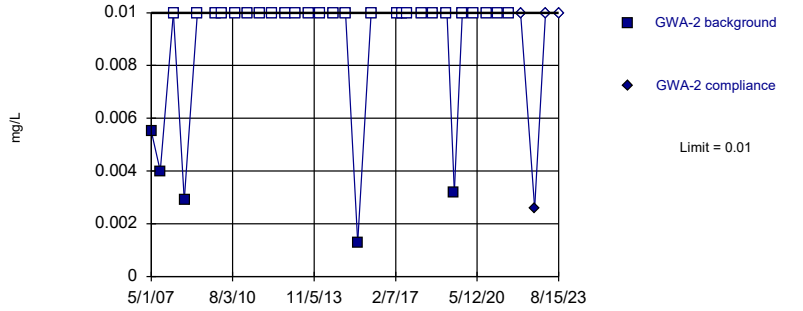
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Thallium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 83.87% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

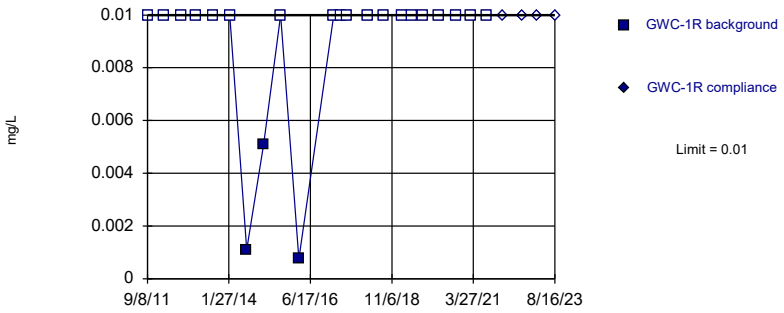
Constituent: Vanadium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Vanadium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

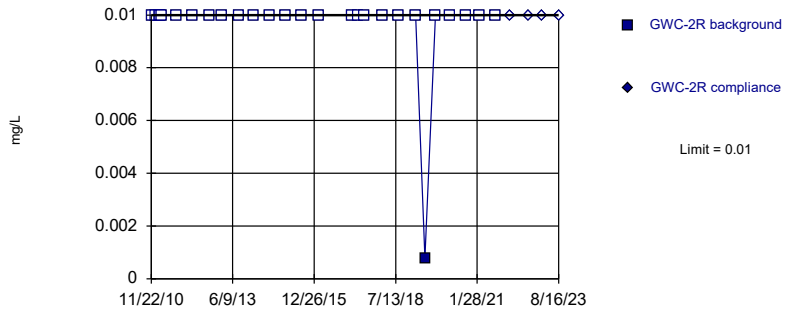
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

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: Vanadium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

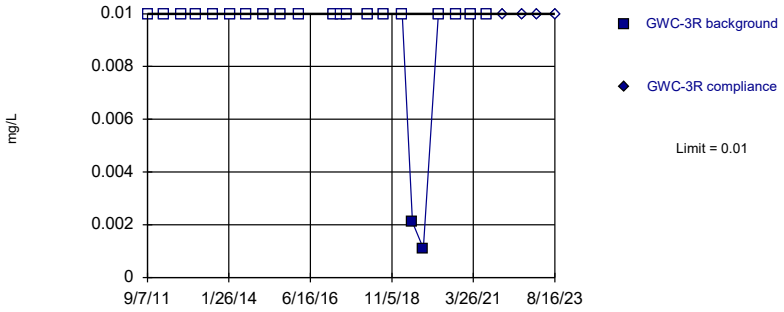
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Vanadium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

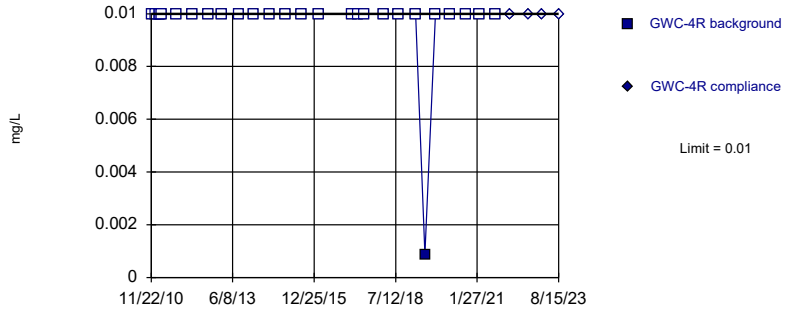
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

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).

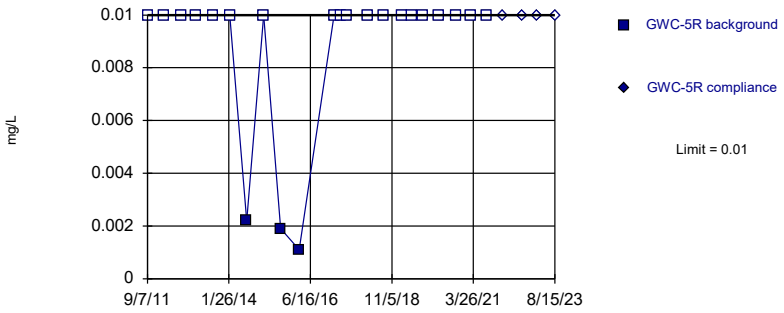
Constituent: Vanadium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



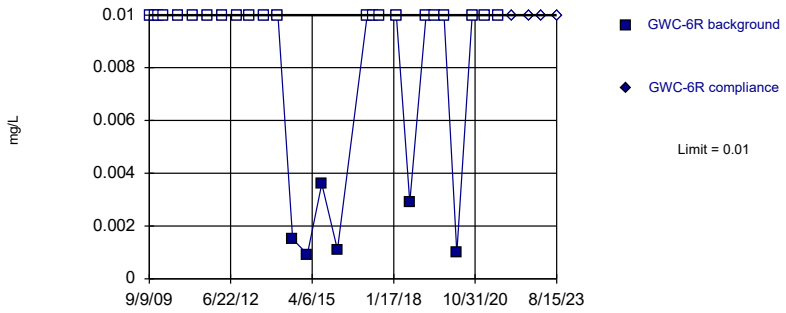
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 86.36% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Constituent: Vanadium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



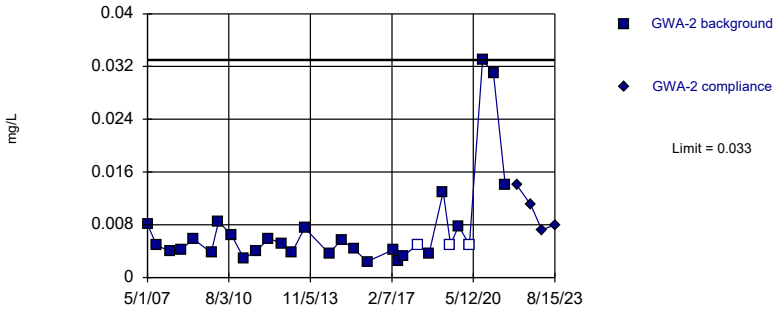
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2).

Constituent: Vanadium Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



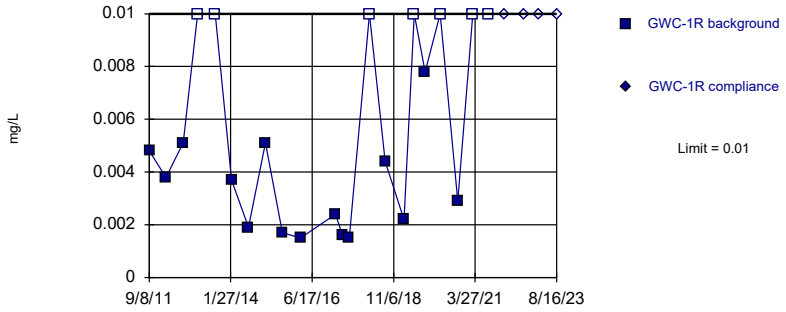
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 10% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Zinc Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . 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 22 background values. 31.82% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

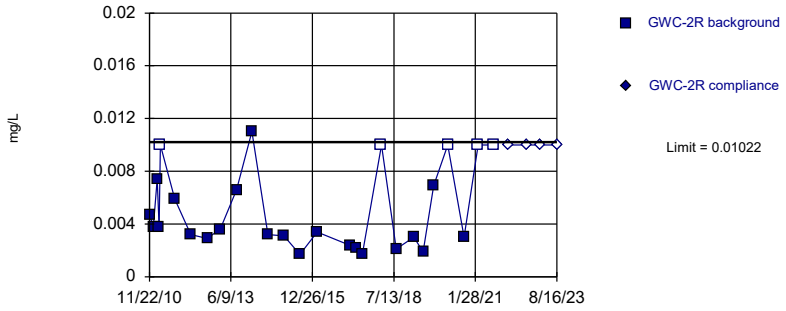
Constituent: Zinc Analysis Run 10/24/2023 7:56 AM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.718, Std. Dev.=0.507, n=27, 18.52% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9098, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Zinc Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

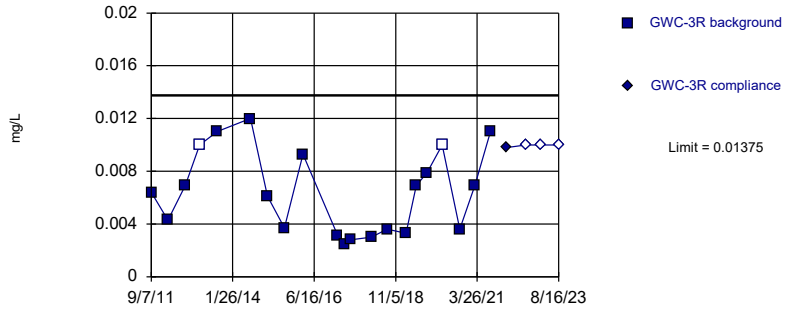
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.006395, Std. Dev.=0.003152, n=21, 9.524% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9027, critical = 0.873. Kappa = 2.332 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Zinc Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

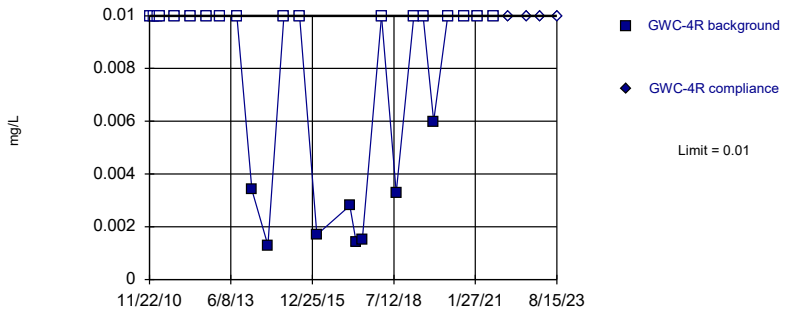
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Zinc Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

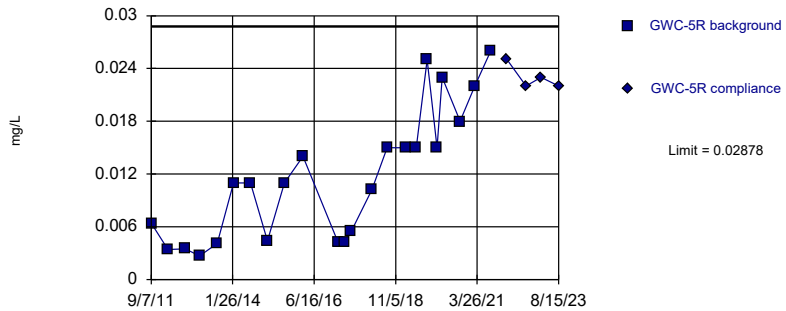
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.01173, Std. Dev.=0.007426, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, 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 10/24/2023 7:56 AM View: Appendix I & II

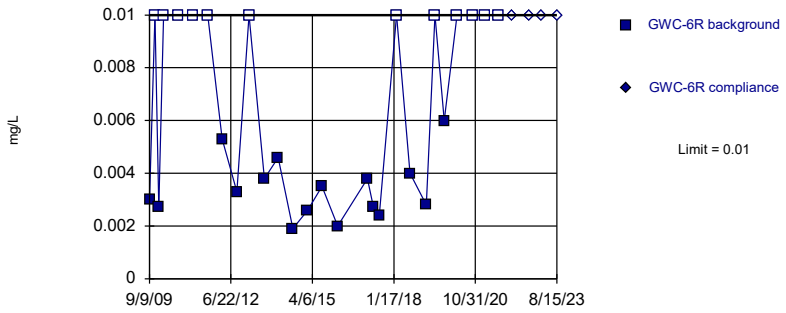
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 28 background values. 42.86% NDs. Well-constituent pair annual alpha = 0.004669. Individual comparison alpha = 0.002337 (1 of 2).

Constituent: Zinc Analysis Run 10/24/2023 7:56 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

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)	
3/2/2021	<0.003	
8/20/2021	<0.003	
2/8/2022		<0.003
8/30/2022		<0.003
2/7/2023		<0.003
8/15/2023		<0.003

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<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)	
3/1/2021	<0.003	
8/18/2021	<0.003	
2/9/2022		<0.003
8/31/2022		<0.003
2/8/2023		<0.003
8/16/2023		<0.003

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0014 (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)	
3/1/2021	<0.003	
8/18/2021	<0.003	
2/8/2022		0.0017 (J)
8/30/2022		0.00094 (J)
2/8/2023		<0.003
8/15/2023		<0.003

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.003	
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)	
3/2/2021	<0.003	
8/18/2021	<0.003	
2/9/2022		<0.003
8/30/2022		<0.003
2/7/2023		<0.003
8/15/2023		<0.003

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	<0.005	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/12/2013	<0.005	
2/5/2014	<0.005	
8/5/2014	<0.005	
2/4/2015	<0.005	
8/3/2015	<0.005	
2/16/2016	<0.005	
8/31/2016	<0.005	
11/28/2016	<0.005	
2/22/2017	<0.005	
5/8/2017	<0.005	
7/17/2017	<0.005	
10/16/2017	<0.005	
2/19/2018	<0.005	
8/6/2018	<0.005	
2/25/2019	<0.005	
6/12/2019	0.00038 (J)	
8/19/2019	0.00095 (J)	
10/8/2019	<0.005	
3/17/2020	<0.005	
8/26/2020	<0.005	
9/22/2020	<0.005	
3/2/2021	<0.005	
8/20/2021	<0.005	
2/8/2022		0.0033 (J)
8/30/2022		0.0024 (J)
2/7/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
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	
2/2/2015	<0.005	
8/4/2015	<0.005 (D)	
2/16/2016	<0.005	
8/31/2016	<0.005	
11/29/2016	<0.005	
2/23/2017	<0.005	
5/9/2017	0.0005 (J)	
7/18/2017	<0.005	
10/17/2017	0.0009 (J)	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019	<0.005	
6/13/2019	<0.005	
8/20/2019	0.00044 (J)	
10/9/2019	<0.005	
3/17/2020	<0.005	
8/27/2020	0.0011 (J)	
9/22/2020	<0.005	
3/1/2021	0.0022 (J)	
8/18/2021	0.0016 (J)	
2/8/2022		0.0026 (J)
8/30/2022		0.0035 (J)
2/7/2023		0.0047 (J)
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.005	
1/4/2011	<0.005	
2/17/2011	<0.005	
3/11/2011	<0.005	
3/28/2011	<0.005	
9/7/2011	<0.005	
3/6/2012	<0.005	
9/11/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/2/2015	<0.005	
8/4/2015	<0.005	
2/17/2016	<0.005	
8/31/2016	<0.005	
11/28/2016	<0.005	
2/22/2017	<0.005	
5/10/2017	<0.005	
7/18/2017	<0.005	
10/17/2017	<0.005	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019	<0.005	
6/12/2019	<0.005	
8/20/2019	0.00075 (J)	
10/9/2019	<0.005	
3/18/2020	<0.005	
8/28/2020	<0.005	
9/22/2020	<0.005	
3/1/2021	0.0011 (J)	
8/18/2021	<0.005	
2/9/2022		<0.005
8/31/2022		<0.005
2/8/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0016 (J)	
8/21/2019	0.00061 (J)	
10/10/2019	<0.005	
3/17/2020	0.0016 (J)	
8/28/2020	<0.005	
9/22/2020	<0.005	
3/2/2021	0.0017 (J)	
8/18/2021	0.0028 (J)	
2/8/2022		0.0015 (J)
8/30/2022		<0.005
2/8/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.005	
2/17/2011	<0.005	
3/11/2011	<0.005	
3/28/2011	<0.005	
9/7/2011	<0.005	
3/4/2012	<0.005	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/14/2013	<0.005	
2/4/2014	<0.005	
8/4/2014	<0.005	
2/2/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
9/1/2016	<0.005	
11/30/2016	<0.005	
2/24/2017	<0.005	
5/10/2017	<0.005	
7/18/2017	<0.005	
10/17/2017	<0.005	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019	<0.005	
6/12/2019	0.00037 (J)	
8/19/2019	0.00059 (J)	
10/10/2019	<0.005	
3/18/2020	<0.005	
8/28/2020	<0.005	
9/22/2020	<0.005	
3/1/2021	<0.005	
8/18/2021	<0.005	
2/8/2022		0.0013 (J)
8/30/2022		<0.005
2/8/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0011 (J)	
7/17/2017	0.0013 (J)	
10/16/2017	0.0011 (J)	
2/21/2018	0.00091 (J)	
8/7/2018	0.0021 (J)	
2/26/2019	0.00069 (J)	
6/13/2019	0.0012 (J)	
8/21/2019	0.00094 (J)	
10/9/2019	0.0012 (J)	
3/18/2020	0.0008 (J)	
8/27/2020	0.0016 (J)	
9/23/2020	0.00092 (J)	
3/2/2021	0.0024 (J)	
8/18/2021	0.0021 (J)	
2/9/2022		0.0034 (J)
8/30/2022		0.0035 (J)
2/7/2023		0.0054
8/15/2023		0.0053

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
9/1/2016	<0.005	
11/29/2016	<0.005	
2/23/2017	<0.005	
5/10/2017	0.0007 (J)	
7/18/2017	0.001 (J)	
10/18/2017	0.0011 (J)	
2/19/2018	<0.005	
8/6/2018	0.0023 (J)	
2/25/2019	0.00073 (J)	
6/13/2019	0.00068 (J)	
8/20/2019	0.00072 (J)	
10/8/2019	0.00056 (J)	
3/17/2020	<0.005	
8/27/2020	0.0011 (J)	
9/23/2020	<0.005	
3/3/2021	<0.005	
8/18/2021	<0.005	
2/8/2022		<0.005
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/20/2021	0.036	
2/8/2022		0.037
8/30/2022		0.031
2/7/2023		0.034
8/15/2023		0.03

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.076	
2/8/2022		0.066
8/30/2022		0.058
2/7/2023		0.051
8/16/2023		0.042

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.033	
2/9/2022		0.038
8/31/2022		0.026
2/8/2023		0.027
8/16/2023		0.026

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.014	
2/8/2022		0.013
8/30/2022		0.01
2/8/2023		0.0089
8/16/2023		0.0096

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.04	
2/8/2022		0.031
8/30/2022		0.022
2/8/2023		0.034
8/15/2023		0.022

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.013	
2/9/2022		0.011
8/30/2022		0.01
2/7/2023		0.011
8/15/2023		0.01

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.035	
2/8/2022		0.03
8/30/2022		0.028
2/7/2023		0.032
8/15/2023		0.028

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
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	7.5E-05 (J)	
2/2/2015	0.00023 (J)	
8/4/2015	<0.0005 (D)	
2/16/2016	<0.0005	
8/31/2016	0.0001 (J)	
11/29/2016	<0.0005	
2/23/2017	<0.0005	
5/9/2017	8E-05 (J)	
7/18/2017	<0.0005	
10/17/2017	0.0001 (J)	
2/21/2018	<0.0005	
8/7/2018	7.4E-05 (J)	
2/26/2019	7.5E-05 (J)	
6/13/2019	<0.0005	
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)	
8/18/2021	0.0003 (J)	
2/8/2022		0.00032 (J)
8/30/2022		0.00037 (J)
2/7/2023		0.00037 (J)
8/16/2023		0.00033 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
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	
3/6/2012	<0.0005	
9/11/2012	<0.0005	
2/6/2013	<0.0005	
8/13/2013	<0.0005	
2/4/2014	<0.0005	
8/5/2014	<0.0005	
2/2/2015	<0.0005	
8/4/2015	<0.0005	
2/17/2016	<0.0005	
8/31/2016	<0.0005	
11/28/2016	<0.0005	
2/22/2017	<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	7E-05 (J)	
2/26/2019	5.3E-05 (J)	
6/12/2019	<0.0005	
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)	
8/18/2021	0.00022 (J)	
2/9/2022		0.00023 (J)
8/31/2022		0.00023 (J)
2/8/2023		0.00025 (J)
8/16/2023		0.00021 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.0005	
3/5/2012	<0.0005	
9/5/2012	<0.0005	
2/6/2013	<0.0005	
8/13/2013	<0.0005	
2/5/2014	<0.0005	
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	<0.0005	
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	
8/18/2021	0.0011	
2/8/2022		0.001
8/30/2022		0.00056
2/8/2023		0.00033 (J)
8/16/2023		0.0006

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.0005	
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	5.8E-05 (J)	
3/1/2021	6E-05 (J)	
8/18/2021	0.00011 (J)	
2/8/2022		8.5E-05 (J)
8/30/2022		7.2E-05 (J)
2/8/2023		0.00013 (J)
8/15/2023		<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.0005	
3/5/2012	<0.0005	
9/5/2012	<0.0005	
2/5/2013	<0.0005	
8/14/2013	<0.0005	
2/5/2014	<0.0005	
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	<0.0005	
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	
8/18/2021	0.0033	
2/9/2022		0.0036
8/30/2022		0.0032
2/7/2023		0.0025
8/15/2023		0.0033

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
3/10/2011	<0.0005	
9/8/2011	<0.0005	
3/5/2012	<0.0005	
9/10/2012	<0.0005	
2/6/2013	<0.0005	
8/12/2013	<0.0005	
2/5/2014	<0.0005	
8/5/2014	<0.0005	
2/4/2015	<0.0005	
8/3/2015	<0.0005	
2/16/2016	<0.0005	
8/31/2016	<0.0005	
11/28/2016	<0.0005	
2/22/2017	<0.0005	
5/8/2017	<0.0005	
7/17/2017	<0.0005	
10/16/2017	<0.0005	
2/19/2018	<0.0005	
8/6/2018	<0.0005	
2/25/2019	<0.0005	
6/12/2019	<0.0005	
8/19/2019	<0.0005	
10/8/2019	<0.0005	
3/17/2020	<0.0005	
8/26/2020	<0.0005	
9/22/2020	<0.0005	
3/2/2021	<0.0005	
8/20/2021	<0.0005	
2/8/2022		<0.0005
8/30/2022		<0.0005
2/7/2023		0.00012 (J)
8/15/2023		<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.00017 (J)	
2/8/2022		0.00019 (J)
8/30/2022		0.00026 (J)
2/7/2023		0.0002 (J)
8/16/2023		0.00019 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
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	
3/6/2012	<0.0005	
9/11/2012	<0.0005	
2/6/2013	<0.0005	
8/13/2013	<0.0005	
2/4/2014	<0.0005	
8/5/2014	<0.0005	
2/2/2015	<0.0005	
8/4/2015	<0.0005	
2/17/2016	<0.0005	
8/31/2016	0.0001 (J)	
11/28/2016	0.0001 (J)	
2/22/2017	<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	
8/20/2019	<0.0005	
10/9/2019	<0.0005	
3/18/2020	<0.0005	
8/28/2020	0.00015 (J)	
9/22/2020	0.00016 (J)	
3/1/2021	0.00016 (J)	
8/18/2021	0.00016 (J)	
2/9/2022		<0.0005
8/31/2022		0.00012 (J)
2/8/2023		<0.0005
8/16/2023		0.00012 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.0005	
3/5/2012	<0.0005	
9/5/2012	<0.0005	
2/6/2013	<0.0005	
8/13/2013	<0.0005	
2/5/2014	<0.0005	
8/4/2014	0.00034 (J)	
2/3/2015	<0.0005	
8/3/2015	<0.0005 (D)	
2/16/2016	0.00025 (J)	
8/31/2016	<0.0005	
11/30/2016	<0.0005	
2/23/2017	<0.0005	
5/9/2017	<0.0005	
7/18/2017	<0.0005	
10/18/2017	<0.0005	
2/21/2018	<0.0005	
8/7/2018	<0.0005	
2/26/2019	0.00011 (J)	
6/13/2019	0.00021 (J)	
8/21/2019	<0.0005	
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)	
8/18/2021	0.00022 (J)	
2/8/2022		0.00018 (J)
8/30/2022		0.00016 (J)
2/8/2023		<0.0005
8/16/2023		0.00013 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.0005	
2/8/2022		<0.0005
8/30/2022		0.00011 (J)
2/8/2023		<0.0005
8/15/2023		<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.001	
2/9/2022		0.001
8/30/2022		0.00098
2/7/2023		0.0013
8/15/2023		0.0011

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	<0.005	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/12/2013	<0.005	
2/5/2014	0.0059	
8/5/2014	<0.005	
2/4/2015	<0.005	
8/3/2015	0.0011 (J)	
2/16/2016	<0.005	
8/31/2016	<0.005	
11/28/2016	<0.005	
2/22/2017	<0.005	
5/8/2017	<0.005	
7/17/2017	<0.005	
10/16/2017	<0.005	
2/19/2018	<0.005	
8/6/2018	<0.005	
2/25/2019	<0.005	
6/12/2019	<0.005	
8/19/2019	<0.005	
10/8/2019	<0.005	
3/17/2020	<0.005	
8/26/2020	<0.005	
9/22/2020	<0.005	
3/2/2021	<0.005	
8/20/2021	<0.005	
2/8/2022		<0.005
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0028	
8/4/2015	<0.01 (D)	
2/16/2016	<0.01	
8/31/2016	0.0012 (J)	
11/29/2016	0.0009 (J)	
2/23/2017	0.001 (J)	
5/9/2017	0.0011 (J)	
7/18/2017	0.0008 (J)	
10/17/2017	0.001 (J)	
2/21/2018	<0.01	
8/7/2018	<0.01	
2/26/2019	<0.01	
6/13/2019	0.0009 (J)	
8/20/2019	0.0011 (J)	
10/9/2019	0.0012 (J)	
3/17/2020	0.001 (J)	
8/27/2020	0.0013 (J)	
9/22/2020	0.0012 (J)	
3/1/2021	0.0012 (J)	
8/18/2021	0.0015 (J)	
2/8/2022		0.002 (J)
8/30/2022		0.0015 (J)
2/7/2023		0.002 (J)
8/16/2023		0.0016 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.005	
1/4/2011	<0.005	
2/17/2011	<0.005	
3/11/2011	<0.005	
3/28/2011	<0.005	
9/7/2011	<0.005	
3/6/2012	<0.005	
9/11/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	0.0017	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/2/2015	<0.005	
8/4/2015	<0.005	
2/17/2016	<0.005	
8/31/2016	<0.005	
11/28/2016	<0.005	
2/22/2017	<0.005	
5/10/2017	0.0008 (J)	
7/18/2017	<0.005	
10/17/2017	<0.005	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019	<0.005	
6/12/2019	<0.005	
8/20/2019	<0.005	
10/9/2019	0.00059 (J)	
3/18/2020	0.0004 (J)	
8/28/2020	0.00057 (J)	
9/22/2020	<0.005	
3/1/2021	<0.005	
8/18/2021	<0.005	
2/9/2022		<0.005
8/31/2022		<0.005
2/8/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0019	
2/5/2014	0.0023	
8/4/2014	0.002	
2/3/2015	0.0014	
8/3/2015	0.0012 (JD)	
2/16/2016	0.0017	
8/31/2016	0.0013 (J)	
11/30/2016	0.001 (J)	
2/23/2017	0.0012 (J)	
5/9/2017	0.0016 (J)	
7/18/2017	0.0009 (J)	
10/18/2017	0.001 (J)	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019	<0.005	
6/13/2019	0.00073 (J)	
8/21/2019	0.001 (J)	
10/10/2019	0.0014 (J)	
3/17/2020	0.0013 (J)	
8/28/2020	0.00088 (J)	
9/22/2020	0.0011 (J)	
3/2/2021	0.001 (J)	
8/18/2021	<0.005	
2/8/2022		0.0011 (J)
8/30/2022		<0.005
2/8/2023		0.0017 (J)
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0062	
2/17/2011	<0.005	
3/11/2011	<0.005	
3/28/2011	<0.005	
9/7/2011	<0.005	
3/4/2012	<0.005	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/14/2013	<0.005	
2/4/2014	<0.005	
8/4/2014	<0.005	
2/2/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
9/1/2016	<0.005	
11/30/2016	0.0013 (J)	
2/24/2017	<0.005	
5/10/2017	0.0007 (J)	
7/18/2017	0.0011 (J)	
10/17/2017	<0.005	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019	<0.005	
6/12/2019	<0.005	
8/19/2019	0.00051 (J)	
10/10/2019	0.00057 (J)	
3/18/2020	<0.005	
8/28/2020	<0.005	
9/22/2020	<0.005	
3/1/2021	<0.005	
8/18/2021	<0.005	
2/8/2022		<0.005
8/30/2022		<0.005
2/8/2023		0.0012 (J)
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/5/2013	<0.01	
8/14/2013	0.0016	
2/5/2014	0.0018	
8/4/2014	0.0029	
2/3/2015	0.0017	
8/3/2015	0.0028 (D)	
2/16/2016	0.0028	
9/1/2016	0.0021 (J)	
12/1/2016	0.0017 (J)	
2/24/2017	0.0018 (J)	
5/10/2017	0.0024 (J)	
7/17/2017	0.0017 (J)	
10/16/2017	0.0023 (J)	
2/21/2018	<0.01	
8/7/2018	0.0024 (J)	
2/26/2019	0.0019 (J)	
6/13/2019	0.0018 (J)	
8/21/2019	0.0024 (J)	
10/9/2019	0.0024 (J)	
3/18/2020	0.0023 (J)	
8/27/2020	0.0022 (J)	
9/23/2020	0.002 (J)	
3/2/2021	0.0021 (J)	
8/18/2021	0.0023 (J)	
2/9/2022		0.0022 (J)
8/30/2022		0.0019 (J)
2/7/2023		0.0028 (J)
8/15/2023		0.0018 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0018	
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)	
9/1/2016	0.0015 (J)	
11/29/2016	0.0014 (J)	
2/23/2017	0.0017 (J)	
5/10/2017	0.0015 (J)	
7/18/2017	0.0012 (J)	
10/18/2017	0.0012 (J)	
2/19/2018	<0.01	
8/6/2018	<0.01	
2/25/2019	<0.01	
6/13/2019	0.00089 (J)	
8/20/2019	0.0017 (J)	
10/8/2019	0.0014 (J)	
3/17/2020	0.0013 (J)	
8/27/2020	0.0012 (J)	
9/23/2020	0.0015 (J)	
3/3/2021	0.0014 (J)	
8/18/2021	0.0015 (J)	
2/8/2022		0.0017 (J)
8/30/2022		0.0016 (J)
2/7/2023		0.0025 (J)
8/15/2023		0.0021 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/20/2021	0.074 (o)	
2/8/2022		0.072 (o)
8/30/2022		0.075 (o)
2/7/2023		0.034
8/15/2023		0.031

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.0014 (J)	
2/8/2022		0.0019 (J)
8/30/2022		0.00087 (J)
2/7/2023		0.00086 (J)
8/16/2023		0.00063 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.00066 (J)	
2/9/2022		0.00085 (J)
8/31/2022		0.0036 (J)
2/8/2023		0.00052 (J)
8/16/2023		0.011

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.01	
2/8/2022		0.0074
8/30/2022		0.0021 (J)
2/8/2023		0.00085 (J)
8/16/2023		0.0032 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.0027 (J)	
2/8/2022		0.0034 (J)
8/30/2022		0.002 (J)
2/8/2023		0.0006 (J)
8/15/2023		0.002 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.00053 (J)	
2/9/2022		0.00064 (J)
8/30/2022		0.00077 (J)
2/7/2023		0.00085 (J)
8/15/2023		0.0012 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.005	
2/8/2022		<0.005
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
3/10/2011	0.0029	
9/8/2011	<0.005	
3/5/2012	<0.005	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/12/2013	<0.005	
2/5/2014	<0.005	
8/5/2014	0.005	
2/4/2015	0.0025 (J)	
8/3/2015	0.0014 (J)	
2/16/2016	0.0011 (J)	
2/22/2017	0.0011 (J)	
2/19/2018	<0.005	
8/6/2018	<0.005	
2/25/2019	<0.005	
6/12/2019	0.00034 (J)	
10/8/2019	0.00041 (J)	
3/17/2020	0.00078 (J)	
9/22/2020	0.0041 (J)	
3/2/2021	0.0027 (J)	
8/20/2021	0.0012 (J)	
2/8/2022		0.0012 (J)
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		0.0011 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
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	
2/2/2015	0.0031 (J)	
8/4/2015	<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	
10/9/2019	0.00079 (J)	
3/17/2020	0.0004 (J)	
9/22/2020	<0.005	
3/1/2021	<0.005	
8/18/2021	0.00067 (J)	
2/8/2022		0.00072 (J)
8/30/2022		<0.005
2/7/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.005	
1/4/2011	<0.005	
2/17/2011	<0.005	
3/11/2011	<0.005	
3/28/2011	<0.005	
9/7/2011	<0.005	
3/6/2012	<0.005	
9/11/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/2/2015	<0.005	
8/4/2015	<0.005	
2/17/2016	<0.005	
2/22/2017	<0.005	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019	<0.005	
6/12/2019	<0.005	
10/9/2019	0.00024 (J)	
3/18/2020	<0.005	
9/22/2020	<0.005	
3/1/2021	<0.005	
8/18/2021	<0.005	
2/9/2022		<0.005
8/31/2022		<0.005
2/8/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.016	
2/6/2013	<0.005	
8/13/2013	<0.005	
2/5/2014	<0.005	
8/4/2014	0.0012 (J)	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	0.00082 (J)	
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	0.00033 (J)	
3/17/2020	0.00039 (J)	
9/22/2020	<0.005	
3/2/2021	<0.005	
8/18/2021	<0.005	
2/8/2022		<0.005
8/30/2022		<0.005
2/8/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0049	
2/17/2011	<0.005	
3/11/2011	<0.005	
3/28/2011	<0.005	
9/7/2011	<0.005	
3/4/2012	<0.005	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/14/2013	<0.005	
2/4/2014	<0.005	
8/4/2014	<0.005	
2/2/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	0.00088 (J)	
2/24/2017	<0.005	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019	<0.005	
6/12/2019	0.00025 (J)	
10/10/2019	<0.005	
3/18/2020	0.00021 (J)	
9/22/2020	<0.005	
3/1/2021	<0.005	
8/18/2021	<0.005	
2/8/2022		<0.005
8/30/2022		<0.005
2/8/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0015 (J)	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
2/24/2017	<0.005	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019	<0.005	
6/13/2019	0.00049 (J)	
10/9/2019	0.00087 (J)	
3/18/2020	0.00097 (J)	
9/23/2020	<0.005	
3/2/2021	<0.005	
8/18/2021	0.0022 (J)	
2/9/2022		0.0014 (J)
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		0.0012 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	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	
8/18/2021	0.00083 (J)	
2/8/2022		0.0008 (J)
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		0.0017 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
3/10/2011	<0.001	
9/8/2011	<0.001	
3/5/2012	<0.001	
9/10/2012	<0.001	
2/6/2013	<0.001	
8/12/2013	<0.001	
2/5/2014	<0.001	
8/5/2014	<0.001	
2/4/2015	<0.001	
8/3/2015	<0.001	
2/16/2016	<0.001	
8/31/2016	<0.001	
11/28/2016	<0.001	
2/22/2017	<0.001	
5/8/2017	<0.001	
7/17/2017	<0.001	
10/16/2017	<0.001	
2/19/2018	<0.001	
8/6/2018	<0.001	
2/25/2019	<0.001	
6/12/2019	<0.001	
8/19/2019	<0.001	
10/8/2019	<0.001	
3/17/2020	<0.001	
8/26/2020	<0.001	
9/22/2020	0.0001 (J)	
3/2/2021	<0.001	
8/20/2021	<0.001	
2/8/2022		<0.001
8/30/2022		<0.001
2/7/2023		<0.001
8/15/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
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	
2/2/2015	<0.001	
8/4/2015	<0.001 (D)	
2/16/2016	<0.001	
8/31/2016	<0.001	
11/29/2016	<0.001	
2/23/2017	<0.001	
5/9/2017	<0.001	
7/18/2017	<0.001	
10/17/2017	<0.001	
2/21/2018	<0.001	
8/7/2018	<0.001	
2/26/2019	<0.001	
6/13/2019	<0.001	
8/20/2019	<0.001	
10/9/2019	5.2E-05 (J)	
3/17/2020	<0.001	
8/27/2020	6.7E-05 (J)	
9/22/2020	<0.001	
3/1/2021	<0.001	
8/18/2021	<0.001	
2/8/2022		<0.001
8/30/2022		<0.001
2/7/2023		<0.001
8/16/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.001	
1/4/2011	<0.001	
2/17/2011	<0.001	
3/11/2011	<0.001	
3/28/2011	<0.001	
9/7/2011	<0.001	
3/6/2012	<0.001	
9/11/2012	<0.001	
2/6/2013	<0.001	
8/13/2013	<0.001	
2/4/2014	<0.001	
8/5/2014	<0.001	
2/2/2015	<0.001	
8/4/2015	<0.001	
2/17/2016	<0.001	
8/31/2016	<0.001	
11/28/2016	<0.001	
2/22/2017	<0.001	
5/10/2017	0.0001 (J)	
7/18/2017	7E-05 (J)	
10/17/2017	<0.001	
2/20/2018	<0.001	
8/8/2018	<0.001	
2/26/2019	<0.001	
6/12/2019	<0.001	
8/20/2019	6.1E-05 (J)	
10/9/2019	5.7E-05 (J)	
3/18/2020	<0.001	
8/28/2020	8.4E-05 (J)	
9/22/2020	8.2E-05 (J)	
3/1/2021	7E-05 (J)	
8/18/2021	<0.001	
2/9/2022		<0.001
8/31/2022		<0.001
2/8/2023		<0.001
8/16/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.001	
3/5/2012	<0.001	
9/5/2012	<0.001	
2/6/2013	<0.001	
8/13/2013	<0.001	
2/5/2014	<0.001	
8/4/2014	<0.001	
2/3/2015	<0.001	
8/3/2015	<0.001 (D)	
2/16/2016	<0.001	
8/31/2016	0.0001 (J)	
11/30/2016	<0.001	
2/23/2017	<0.001	
5/9/2017	<0.001	
7/18/2017	<0.001	
10/18/2017	8E-05 (J)	
2/21/2018	<0.001	
8/7/2018	<0.001	
2/26/2019	<0.001	
6/13/2019	<0.001	
8/21/2019	8.2E-05 (J)	
10/10/2019	<0.001	
3/17/2020	0.00015 (J)	
8/28/2020	5.4E-05 (J)	
9/22/2020	6.4E-05 (J)	
3/2/2021	9.6E-05 (J)	
8/18/2021	<0.001	
2/8/2022		<0.001
8/30/2022		<0.001
2/8/2023		<0.001
8/16/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.001	
1/4/2011	<0.001	
2/17/2011	<0.001	
3/11/2011	<0.001	
3/28/2011	<0.001	
9/7/2011	<0.001	
3/4/2012	<0.001	
9/10/2012	<0.001	
2/6/2013	<0.001	
8/14/2013	<0.001	
2/4/2014	<0.001	
8/4/2014	<0.001	
2/2/2015	<0.001	
8/3/2015	<0.001 (D)	
2/16/2016	<0.001	
9/1/2016	<0.001	
11/30/2016	<0.001	
2/24/2017	<0.001	
5/10/2017	<0.001	
7/18/2017	<0.001	
10/17/2017	<0.001	
2/20/2018	<0.001	
8/8/2018	<0.001	
2/26/2019	<0.001	
6/12/2019	<0.001	
8/19/2019	<0.001	
10/10/2019	<0.001	
3/18/2020	<0.001	
8/28/2020	<0.001	
9/22/2020	4.1E-05 (J)	
3/1/2021	<0.001	
8/18/2021	<0.001	
2/8/2022		<0.001
8/30/2022		<0.001
2/8/2023		<0.001
8/15/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.001	
2/3/2015	<0.001	
8/3/2015	<0.001 (D)	
2/16/2016	<0.001	
9/1/2016	<0.001	
12/1/2016	<0.001	
2/24/2017	<0.001	
5/10/2017	<0.001	
7/17/2017	<0.001	
10/16/2017	<0.001	
2/21/2018	<0.001	
8/7/2018	<0.001	
2/26/2019	<0.001	
6/13/2019	<0.001	
8/21/2019	7E-05 (J)	
10/9/2019	5.9E-05 (J)	
3/18/2020	7.9E-05 (J)	
8/27/2020	4.9E-05 (J)	
9/23/2020	0.00019 (J)	
3/2/2021	5.4E-05 (J)	
8/18/2021	<0.001	
2/9/2022		<0.001
8/30/2022		<0.001
2/7/2023		<0.001
8/15/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
11/18/2009	<0.0002	
3/3/2010	<0.0002	
9/8/2010	<0.0002	
3/10/2011	<0.0002	
9/8/2011	<0.0002	
3/5/2012	<0.0002	
9/10/2012	<0.0002	
2/6/2013	<0.0002	
8/12/2013	<0.0002	
2/5/2014	<0.0002	
8/5/2014	<0.0002	
2/4/2015	<0.0002	
8/3/2015	<0.0002	
2/16/2016	1.36E-05 (J)	
8/31/2016	<0.0002	
11/28/2016	<0.0002	
2/22/2017	<0.0002	
5/8/2017	<0.0002	
7/17/2017	<0.0002	
10/16/2017	<0.0002	
2/19/2018	<0.0002	
8/6/2018	<0.0002	
2/25/2019	7.4E-05 (J)	
6/12/2019	<0.0002	
8/19/2019	<0.0002	
10/8/2019	<0.0002	
5/6/2020	<0.0002	
8/26/2020	<0.0002	
9/22/2020	<0.0002	
3/2/2021	<0.0002	
8/20/2021	<0.0002	
2/8/2022		<0.0002
8/30/2022		<0.0002
2/7/2023		0.00013 (J)
8/15/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	<0.0002	
3/5/2012	<0.0002	
9/5/2012	<0.0002	
2/5/2013	<0.0002	
8/13/2013	<0.0002	
2/4/2014	<0.0002	
8/5/2014	<0.0002	
2/2/2015	<0.0002	
8/4/2015	<0.0002 (D)	
2/16/2016	<0.0002	
8/31/2016	<0.0002	
11/29/2016	<0.0002	
2/23/2017	<0.0002	
5/9/2017	<0.0002	
7/18/2017	<0.0002	
10/17/2017	<0.0002	
2/21/2018	<0.0002	
8/7/2018	<0.0002	
2/26/2019	5.9E-05 (J)	
6/13/2019	<0.0002	
8/20/2019	<0.0002	
10/9/2019	<0.0002	
5/6/2020	<0.0002	
8/27/2020	<0.0002	
9/22/2020	<0.0002	
3/1/2021	<0.0002	
8/18/2021	<0.0002	
2/8/2022		<0.0002
8/30/2022		<0.0002
2/7/2023		<0.0002
8/16/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.0002	
1/4/2011	<0.0002	
2/17/2011	<0.0002	
3/11/2011	<0.0002	
3/28/2011	<0.0002	
9/7/2011	<0.0002	
3/6/2012	<0.0002	
9/11/2012	<0.0002	
2/6/2013	<0.0002	
8/13/2013	<0.0002	
2/4/2014	<0.0002	
8/5/2014	<0.0002	
2/2/2015	<0.0002	
8/4/2015	<0.0002	
2/17/2016	<0.0002	
8/31/2016	<0.0002	
11/28/2016	<0.0002	
2/22/2017	<0.0002	
5/10/2017	<0.0002	
7/18/2017	<0.0002	
10/17/2017	<0.0002	
2/20/2018	<0.0002	
8/8/2018	<0.0002	
2/26/2019	7.1E-05 (J)	
6/12/2019	<0.0002	
8/20/2019	<0.0002	
10/9/2019	<0.0002	
5/7/2020	<0.0002	
8/28/2020	<0.0002	
9/22/2020	<0.0002	
3/1/2021	<0.0002	
8/18/2021	<0.0002	
2/9/2022		<0.0002
8/31/2022		<0.0002
2/8/2023		<0.0002
8/16/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.0002	
3/5/2012	<0.0002	
9/5/2012	<0.0002	
2/6/2013	<0.0002	
8/13/2013	<0.0002	
2/5/2014	<0.0002	
8/4/2014	<0.0002	
2/3/2015	<0.0002	
8/3/2015	<0.0002 (D)	
2/16/2016	1.34E-05 (J)	
8/31/2016	<0.0002	
11/30/2016	<0.0002	
2/23/2017	<0.0002	
5/9/2017	<0.0002	
7/18/2017	<0.0002	
10/18/2017	<0.0002	
2/21/2018	<0.0002	
8/7/2018	<0.0002	
2/26/2019	6.4E-05 (J)	
6/13/2019	<0.0002	
8/21/2019	<0.0002	
10/10/2019	0.00043 (J)	
5/7/2020	<0.0002	
8/28/2020	<0.0002	
9/22/2020	<0.0002	
3/2/2021	<0.0002	
8/18/2021	<0.0002	
2/8/2022		<0.0002
8/30/2022		<0.0002
2/8/2023		<0.0002
8/16/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.0002	
1/4/2011	<0.0002	
2/17/2011	<0.0002	
3/11/2011	<0.0002	
3/28/2011	<0.0002	
9/7/2011	<0.0002	
3/4/2012	<0.0002	
9/10/2012	<0.0002	
2/6/2013	0.00014	
8/14/2013	<0.0002	
2/4/2014	<0.0002	
8/4/2014	<0.0002	
2/2/2015	<0.0002	
8/3/2015	<0.0002 (D)	
2/16/2016	<0.0002	
9/1/2016	<0.0002	
11/30/2016	<0.0002	
2/24/2017	<0.0002	
5/10/2017	<0.0002	
7/18/2017	<0.0002	
10/17/2017	<0.0002	
2/20/2018	<0.0002	
8/8/2018	<0.0002	
2/26/2019	5.8E-05 (J)	
6/12/2019	<0.0002	
8/19/2019	<0.0002	
10/10/2019	<0.0002	
5/7/2020	<0.0002	
8/28/2020	<0.0002	
9/22/2020	<0.0002	
3/1/2021	<0.0002	
8/18/2021	<0.0002	
2/8/2022		<0.0002
8/30/2022		0.00014 (J)
2/8/2023		0.0002 (J)
8/15/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.0002	
3/5/2012	<0.0002	
9/5/2012	<0.0002	
2/5/2013	<0.0002	
8/14/2013	<0.0002	
2/5/2014	<0.0002	
8/4/2014	<0.0002	
2/3/2015	<0.0002	
8/3/2015	<0.0002 (D)	
2/16/2016	<0.0002	
9/1/2016	<0.0002	
12/1/2016	<0.0002	
2/24/2017	<0.0002	
5/10/2017	<0.0002	
7/17/2017	<0.0002	
10/16/2017	<0.0002	
2/21/2018	<0.0002	
8/7/2018	<0.0002	
2/26/2019	6E-05 (J)	
6/13/2019	<0.0002	
8/21/2019	<0.0002	
10/9/2019	<0.0002	
5/7/2020	<0.0002	
8/27/2020	<0.0002	
9/23/2020	<0.0002	
3/2/2021	<0.0002	
8/18/2021	<0.0002	
2/9/2022		<0.0002
8/30/2022		<0.0002
2/7/2023		<0.0002
8/15/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	<0.0002	
11/18/2009	<0.0002	
1/5/2010	<0.0002	
3/3/2010	<0.0002	
9/7/2010	<0.0002	
3/10/2011	<0.0002	
9/8/2011	<0.0002	
3/5/2012	<0.0002	
9/5/2012	<0.0002	
2/5/2013	<0.0002	
8/13/2013	<0.0002	
2/4/2014	<0.0002	
8/5/2014	<0.0002	
2/3/2015	<0.0002	
8/4/2015	<0.0002	
2/16/2016	1.13E-05 (J)	
9/1/2016	<0.0002	
11/29/2016	<0.0002	
2/23/2017	<0.0002	
5/10/2017	<0.0002	
7/18/2017	<0.0002	
10/18/2017	<0.0002	
2/19/2018	<0.0002	
8/6/2018	<0.0002	
2/25/2019	6.7E-05 (J)	
6/13/2019	<0.0002	
8/20/2019	<0.0002	
10/8/2019	<0.0002	
5/6/2020	<0.0002	
8/27/2020	<0.0002	
9/23/2020	<0.0002	
3/3/2021	<0.0002	
8/18/2021	<0.0002	
2/8/2022		<0.0002
8/30/2022		<0.0002
2/7/2023		<0.0002
8/15/2023		<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/20/2021	0.014	
2/8/2022		0.017
8/30/2022		0.015
2/7/2023		0.0096
8/15/2023		0.0098

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.0028 (J)	
2/8/2022		0.0032 (J)
8/30/2022		0.0027 (J)
2/7/2023		0.0028 (J)
8/16/2023		0.0026 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.005	
2/9/2022		<0.005
8/31/2022		<0.005
2/8/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.005	
2/8/2022		<0.005
8/30/2022		<0.005
2/8/2023		<0.005
8/16/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.005	
2/17/2011	<0.005	
3/11/2011	<0.005	
3/28/2011	<0.005	
9/7/2011	<0.005	
3/4/2012	<0.005	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/14/2013	<0.005	
2/4/2014	0.0033	
8/4/2014	0.0015 (J)	
2/2/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
2/24/2017	0.0021 (J)	
2/20/2018	<0.005	
8/8/2018	0.0012 (J)	
2/26/2019	<0.005	
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)	
8/18/2021	0.0026 (J)	
2/8/2022		0.0017 (J)
8/30/2022		0.0021 (J)
2/8/2023		<0.005
8/15/2023		0.00096 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0032	
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)	
8/18/2021	0.0016 (J)	
2/9/2022		0.0014 (J)
8/30/2022		0.00097 (J)
2/7/2023		<0.005
8/15/2023		0.001 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.0012 (J)	
2/8/2022		0.001 (J)
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.019	
2/8/2022		0.02
8/30/2022		0.03
2/7/2023		0.025
8/16/2023		0.02

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.0042 (J)	
2/9/2022		0.0042 (J)
8/31/2022		0.0042 (J)
2/8/2023		0.0043 (J)
8/16/2023		0.0033 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.017	
2/8/2022		0.0091
8/30/2022		0.0068
2/8/2023		0.002 (J)
8/16/2023		0.0052

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.0046 (J)	
2/8/2022		0.0044 (J)
8/30/2022		0.0038 (J)
2/8/2023		0.0029 (J)
8/15/2023		0.0021 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.017	
2/9/2022		0.017
8/30/2022		0.019
2/7/2023		0.02
8/15/2023		0.024

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
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	<0.005	
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)	
8/18/2021	0.0016 (J)	
2/8/2022		<0.005
8/30/2022		<0.005
2/7/2023		<0.005
8/15/2023		<0.005

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
3/10/2011	<0.001	
9/8/2011	<0.001	
3/5/2012	<0.001	
9/10/2012	<0.001	
2/6/2013	<0.001	
8/12/2013	<0.001	
2/5/2014	<0.001	
8/5/2014	<0.001	
2/4/2015	<0.001	
2/16/2016	<0.001	
8/31/2016	<0.001	
11/28/2016	<0.001	
2/22/2017	<0.001	
5/8/2017	6E-05 (J)	
7/17/2017	6E-05 (J)	
10/16/2017	7E-05 (J)	
2/19/2018	<0.001	
8/6/2018	<0.001	
2/25/2019	<0.001	
6/12/2019	<0.001	
8/19/2019	5.5E-05 (J)	
10/8/2019	<0.001	
3/17/2020	<0.001	
8/26/2020	<0.001	
9/22/2020	<0.001	
3/2/2021	<0.001	
8/20/2021	<0.001	
2/8/2022		<0.001
8/30/2022		<0.001
2/7/2023		<0.001
8/15/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.001	
1/4/2011	<0.001	
2/17/2011	<0.001	
3/11/2011	<0.001	
3/28/2011	<0.001	
9/7/2011	<0.001	
3/6/2012	<0.001	
9/11/2012	<0.001	
2/6/2013	<0.001	
8/13/2013	<0.001	
2/4/2014	<0.001	
2/2/2015	<0.001	
2/17/2016	7E-05 (J)	
8/31/2016	<0.001	
11/28/2016	<0.001	
2/22/2017	<0.001	
5/10/2017	<0.001	
7/18/2017	<0.001	
10/17/2017	<0.001	
2/20/2018	<0.001	
8/8/2018	<0.001	
2/26/2019	<0.001	
6/12/2019	<0.001	
8/20/2019	<0.001	
10/9/2019	<0.001	
3/18/2020	<0.001	
8/28/2020	<0.001	
9/22/2020	<0.001	
3/1/2021	<0.001	
8/18/2021	<0.001	
2/9/2022		<0.001
8/31/2022		<0.001
2/8/2023		<0.001
8/16/2023		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.001	
2/3/2015	<0.001	
2/16/2016	<0.001	
9/1/2016	<0.001	
12/1/2016	<0.001	
2/24/2017	<0.001	
5/10/2017	<0.001	
7/17/2017	<0.001	
10/16/2017	<0.001	
2/21/2018	<0.001	
8/7/2018	<0.001	
2/26/2019	<0.001	
6/13/2019	<0.001	
8/21/2019	5.3E-05 (J)	
10/9/2019	<0.001	
3/18/2020	<0.001	
8/27/2020	<0.001	
9/23/2020	<0.001	
3/2/2021	<0.001	
8/18/2021	<0.001	
2/9/2022		<0.001
8/30/2022		<0.001
2/7/2023		<0.001
8/15/2023		0.00029 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
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	
11/18/2009	<0.01	
3/3/2010	<0.01	
9/8/2010	<0.01	
3/10/2011	<0.01	
9/8/2011	<0.01	
3/5/2012	<0.01	
9/10/2012	<0.01	
2/6/2013	<0.01	
8/12/2013	<0.01	
2/5/2014	<0.01	
8/5/2014	<0.01	
2/4/2015	<0.01	
8/3/2015	0.0013 (J)	
2/16/2016	<0.01	
2/22/2017	<0.01	
5/8/2017	<0.01	
7/17/2017	<0.01	
2/19/2018	<0.01	
8/6/2018	<0.01	
2/25/2019	<0.01	
6/12/2019	0.0032 (J)	
10/8/2019	<0.01	
3/17/2020	<0.01	
9/22/2020	<0.01	
3/2/2021	<0.01	
8/20/2021	<0.01	
2/8/2022		<0.01
8/30/2022		0.0026 (J)
2/7/2023		<0.01
8/15/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0011 (J)	
2/2/2015	0.0051	
8/4/2015	<0.01 (D)	
2/16/2016	0.00075 (J)	
2/23/2017	<0.01	
5/9/2017	<0.01	
7/18/2017	<0.01	
2/21/2018	<0.01	
8/7/2018	<0.01	
2/26/2019	<0.01	
6/13/2019	<0.01	
10/9/2019	<0.01	
3/17/2020	<0.01	
9/22/2020	<0.01	
3/1/2021	<0.01	
8/18/2021	<0.01	
2/8/2022		<0.01
8/30/2022		<0.01
2/7/2023		<0.01
8/16/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
2/22/2017	<0.01	
5/10/2017	<0.01	
7/18/2017	<0.01	
2/20/2018	<0.01	
8/8/2018	<0.01	
2/26/2019	<0.01	
6/12/2019	0.00079 (J)	
10/9/2019	<0.01	
3/18/2020	<0.01	
9/22/2020	<0.01	
3/1/2021	<0.01	
8/18/2021	<0.01	
2/9/2022		<0.01
8/31/2022		<0.01
2/8/2023		<0.01
8/16/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.01	
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	
2/23/2017	<0.01	
5/9/2017	<0.01	
7/18/2017	<0.01	
2/21/2018	<0.01	
8/7/2018	<0.01	
2/26/2019	<0.01	
6/13/2019	0.0021 (J)	
10/10/2019	0.0011 (J)	
3/17/2020	<0.01	
9/22/2020	<0.01	
3/2/2021	<0.01	
8/18/2021	<0.01	
2/8/2022		<0.01
8/30/2022		<0.01
2/8/2023		<0.01
8/16/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	<0.01	
8/4/2014	<0.01	
2/2/2015	<0.01	
8/3/2015	<0.01 (D)	
2/16/2016	<0.01	
2/24/2017	<0.01	
5/10/2017	<0.01	
7/18/2017	<0.01	
2/20/2018	<0.01	
8/8/2018	<0.01	
2/26/2019	<0.01	
6/12/2019	0.00088 (J)	
10/10/2019	<0.01	
3/18/2020	<0.01	
9/22/2020	<0.01	
3/1/2021	<0.01	
8/18/2021	<0.01	
2/8/2022		<0.01
8/30/2022		<0.01
2/8/2023		<0.01
8/15/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 10/24/2023 8:06 AM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/5/2013	<0.01	
8/14/2013	<0.01	
2/5/2014	<0.01	
8/4/2014	0.0022 (J)	
2/3/2015	<0.01	
8/3/2015	0.0019 (JD)	
2/16/2016	0.0011 (J)	
2/24/2017	<0.01	
5/10/2017	<0.01	
7/17/2017	<0.01	
2/21/2018	<0.01	
8/7/2018	<0.01	
2/26/2019	<0.01	
6/13/2019	<0.01	
10/9/2019	<0.01	
3/18/2020	<0.01	
9/23/2020	<0.01	
3/2/2021	<0.01	
8/18/2021	<0.01	
2/9/2022		<0.01
8/30/2022		<0.01
2/7/2023		<0.01
8/15/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 10/24/2023 8:06 AM 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	0.0015 (J)	
2/3/2015	0.00093 (J)	
8/4/2015	0.0036 (J)	
2/16/2016	0.0011 (J)	
2/23/2017	<0.01	
5/10/2017	<0.01	
7/18/2017	<0.01	
2/19/2018	<0.01	
8/6/2018	0.0029 (J)	
2/25/2019	<0.01	
6/13/2019	<0.01	
10/8/2019	<0.01	
3/17/2020	0.00098 (J)	
9/23/2020	<0.01	
3/3/2021	<0.01	
8/18/2021	<0.01	
2/8/2022		<0.01
8/30/2022		<0.01
2/7/2023		<0.01
8/15/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/20/2021	0.014	
2/8/2022		0.014
8/30/2022		0.011
2/7/2023		0.0072 (J)
8/15/2023		0.008 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.01	
2/8/2022		<0.01
8/30/2022		<0.01
2/7/2023		<0.01
8/16/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.01	
2/9/2022		<0.01
8/31/2022		<0.01
2/8/2023		<0.01
8/16/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 10/24/2023 8:06 AM 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)	
8/18/2021	0.011	
2/8/2022		0.0098 (J)
8/30/2022		<0.01
2/8/2023		<0.01
8/16/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.01	
2/8/2022		<0.01
8/30/2022		<0.01
2/8/2023		<0.01
8/15/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	0.026	
2/9/2022		0.025
8/30/2022		0.022
2/7/2023		0.023
8/15/2023		0.022

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 10/24/2023 8:06 AM 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	
8/18/2021	<0.01	
2/8/2022		<0.01
8/30/2022		<0.01
2/7/2023		<0.01
8/15/2023		<0.01

ND substitution: RL or RL/2 if <15% NDs.

FIGURE E.

Appendix III Intrawell Prediction Limits - Significant Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:50 AM

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**	**6.968**	**5.399**	**8/15/2023**	**5.3**	**Yes**	**30**	**6.184**	**0.3941**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:50 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	0.187	n/a	8/15/2023	0.065J	No	17	0.09947	0.04015	5.882	None	No	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-1R	0.1	n/a	8/16/2023	0.1ND	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-2R	0.58	n/a	8/16/2023	0.1ND	No	17	n/a	n/a	70.59	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-3R	0.4247	n/a	8/16/2023	0.087J	No	17	-2.596	0.7975	41.18	Kaplan-Meier	ln(x)	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-4R	0.15	n/a	8/15/2023	0.1ND	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-5R	0.37	n/a	8/15/2023	0.056J	No	17	n/a	n/a	52.94	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-6R	0.28	n/a	8/15/2023	0.1ND	No	17	n/a	n/a	76.47	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
pH (S.U.)	**GWA-2**	**6.968**	**5.399**	**8/15/2023**	**5.3**	**Yes**	**30**	**6.184**	**0.3941**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	GWC-1R	6.8	4.49	8/16/2023	5.08	No	18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-2R	6.8	4.35	8/16/2023	4.89	No	25	n/a	n/a	0	n/a	n/a	0.005664	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-3R	5.572	4.528	8/16/2023	4.64	No	18	25.78	2.447	0	None	x^2	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-4R	6.16	5.07	8/15/2023	5.74	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-5R	5.568	4.599	8/15/2023	4.66	No	19	5.084	0.2272	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-6R	6.79	5.2	8/15/2023	5.4	No	28	n/a	n/a	0	n/a	n/a	0.004674	NP Intra (normality) 1 of 2

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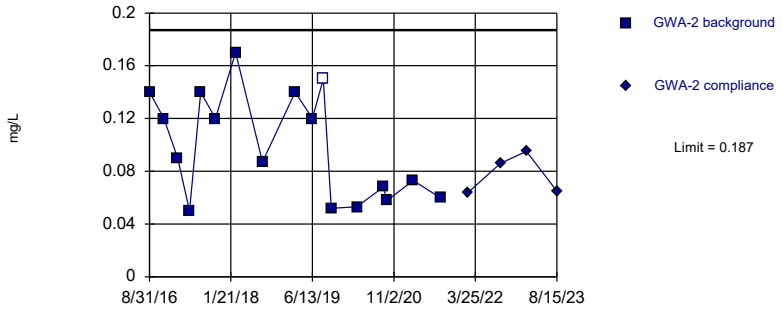
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.09947, Std. Dev.=0.04015, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9033, critical = 0.851. Kappa = 2.181 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride Analysis Run 10/19/2023 11:48 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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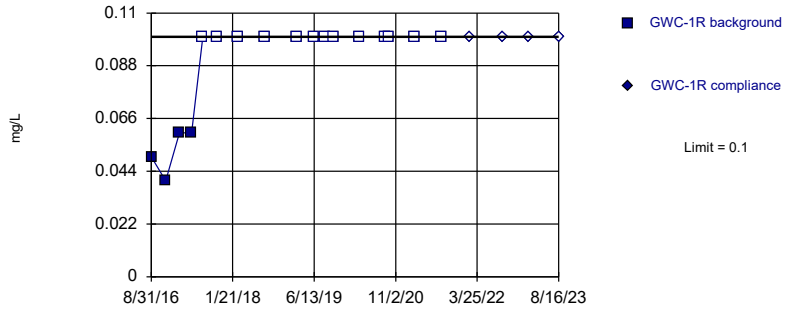
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride Analysis Run 10/19/2023 11:48 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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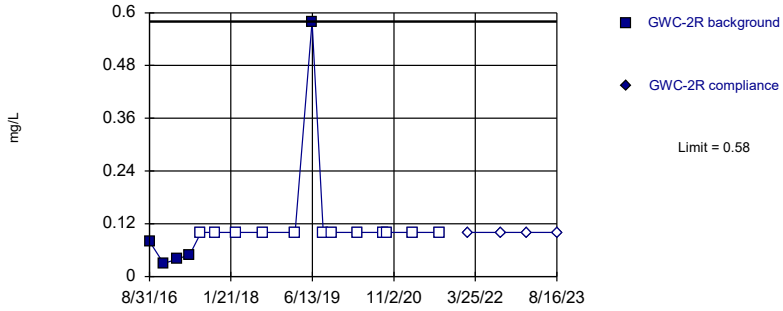
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 70.59% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride Analysis Run 10/19/2023 11:48 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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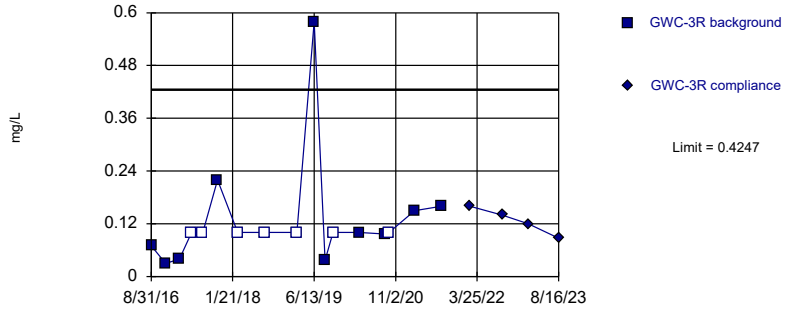
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-2.596, Std. Dev.=0.7975, n=17, 41.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8757, critical = 0.851. Kappa = 2.181 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride Analysis Run 10/19/2023 11:48 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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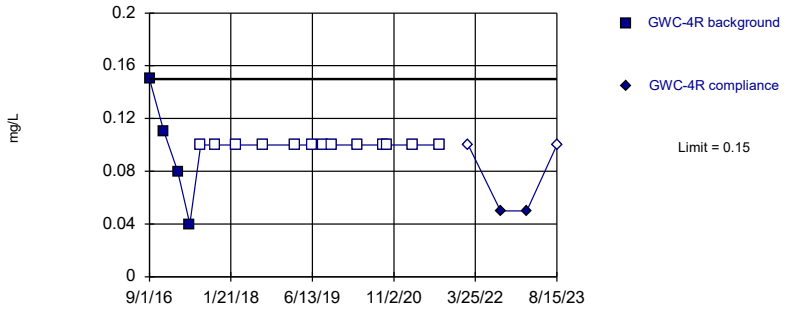
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride Analysis Run 10/19/2023 11:48 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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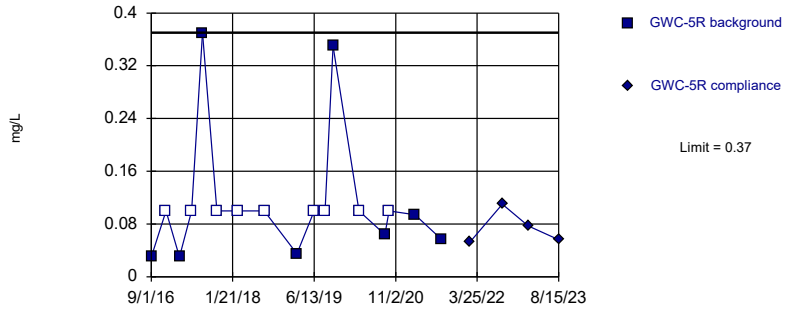
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride Analysis Run 10/19/2023 11:48 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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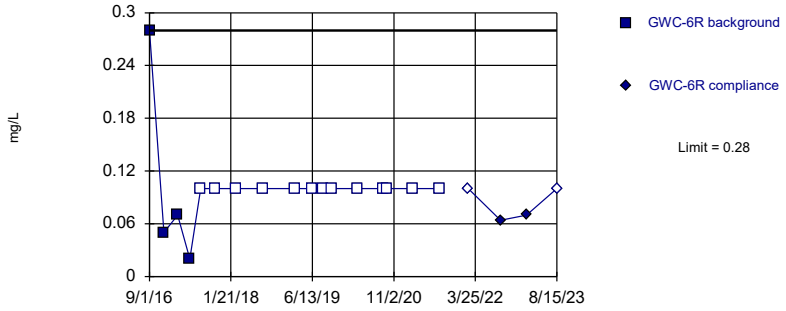
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 76.47% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Fluoride Analysis Run 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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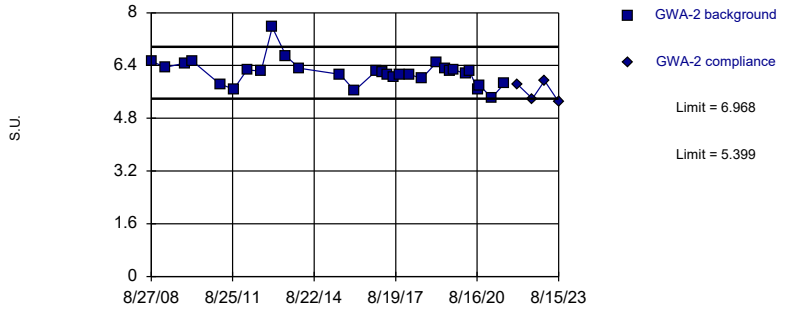
Exceeds Limits

Prediction Limit

Intrawell Parametric



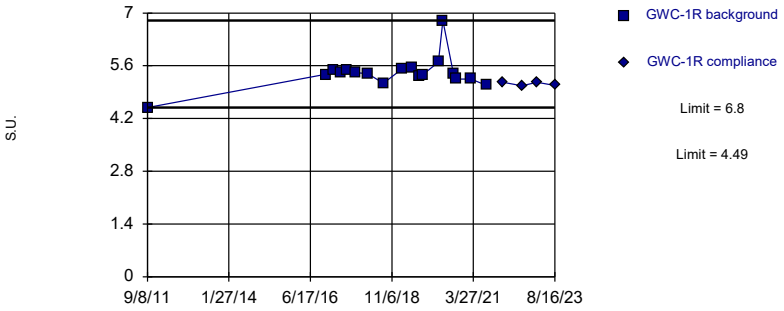
Background Data Summary: Mean=6.184, Std. Dev.=0.3941, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9085, critical = 0.9. Kappa = 1.991 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates 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 18 background values. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01075 (1 of 2).

Constituent: pH Analysis Run 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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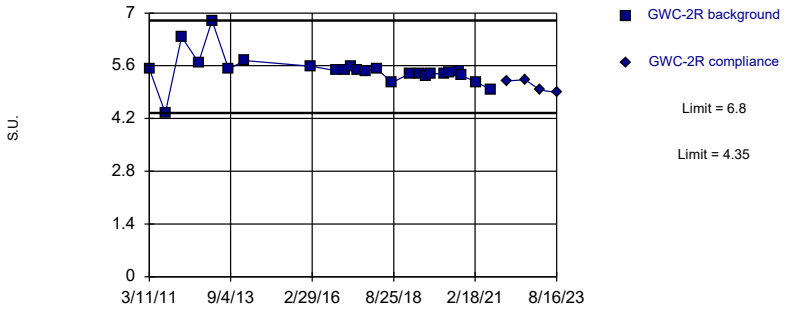
Within Limits

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 25 background values. Well-constituent pair annual alpha = 0.01131. Individual comparison alpha = 0.005664 (1 of 2).

Constituent: pH Analysis Run 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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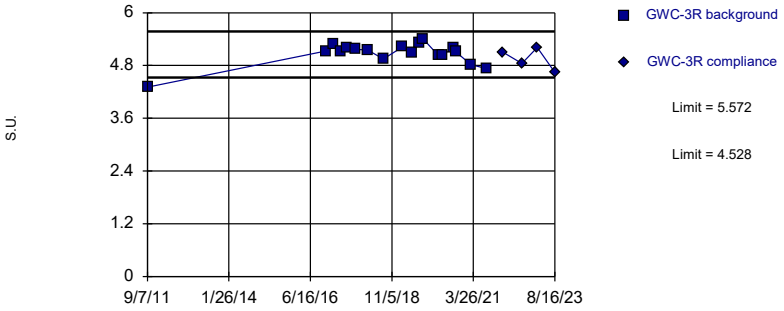
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=25.78, Std. Dev.=2.447, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8717, critical = 0.858. Kappa = 2.157 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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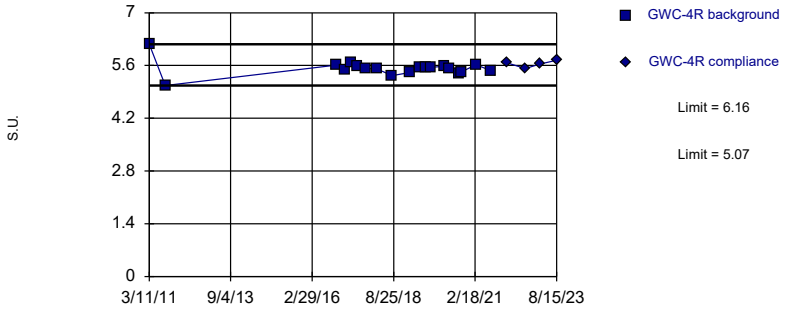
Within Limits

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 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH Analysis Run 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

Within Limits

Prediction Limit

Intrawell Parametric

Background Data Summary: Mean=5.084, Std. Dev.=0.2272, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9657, 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 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

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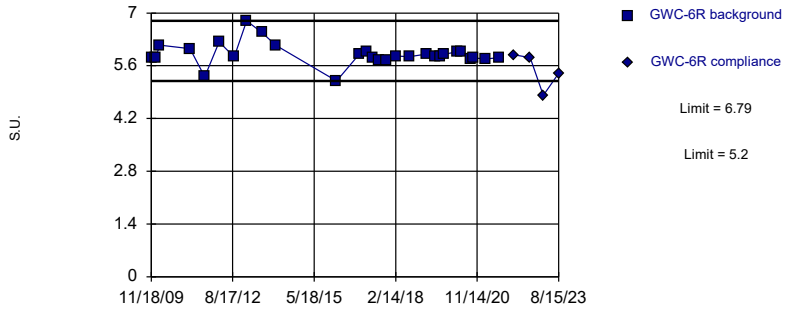
Within Limits

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 28 background values. Well-constituent pair annual alpha = 0.009338. Individual comparison alpha = 0.004674 (1 of 2).

Constituent: pH Analysis Run 10/19/2023 11:49 AM View: Appendix III - Intrawell
Plant Yates Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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)	
8/20/2021	0.06 (J)	
2/8/2022		0.064 (J)
8/30/2022		0.086 (J)
2/7/2023		0.095 (J)
8/15/2023		0.065 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	<0.1	
2/8/2022		<0.1
8/30/2022		<0.1
2/7/2023		<0.1
8/16/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	<0.1	
2/9/2022		<0.1
8/31/2022		<0.1
2/8/2023		<0.1
8/16/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	0.16	
2/8/2022		0.16
8/30/2022		0.14
2/8/2023		0.12
8/16/2023		0.087 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	<0.1	
2/8/2022		<0.1
8/30/2022		0.05 (J)
2/8/2023		0.05 (J)
8/15/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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)	
8/18/2021	0.056 (J)	
2/9/2022		0.053 (J)
8/30/2022		0.11
2/7/2023		0.077 (J)
8/15/2023		0.056 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	<0.1	
2/8/2022		<0.1
8/30/2022		0.064 (J)
2/7/2023		0.07 (J)
8/15/2023		<0.1

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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)	
8/20/2021	5.86	
2/8/2022		5.83
8/30/2022		5.39
2/7/2023		5.94
8/15/2023		5.3

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	5.08	
2/8/2022		5.16
8/30/2022		5.07
2/7/2023		5.16
8/16/2023		5.08

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	4.96	
2/9/2022		5.2
8/31/2022		5.23
2/8/2023		4.96
8/16/2023		4.89

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	4.73	
2/8/2022		5.1
8/30/2022		4.85
2/8/2023		5.21
8/16/2023		4.64

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	5.46	
2/8/2022		5.67
8/30/2022		5.52
2/8/2023		5.64
8/15/2023		5.74

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	4.76	
2/9/2022		4.82
8/30/2022		4.86
2/7/2023		4.62
8/15/2023		4.66

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/19/2023 11:50 AM View: Appendix III - Intrawell

Plant Yates 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	
8/18/2021	5.82	
2/8/2022		5.89
8/30/2022		5.82
2/7/2023		4.81
8/15/2023		5.4

FIGURE F.

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:54 AM

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	8/15/2023	1.9	Yes	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GWC-1R	37	n/a	8/16/2023	156	Yes	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2R	37	n/a	8/16/2023	44	Yes	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5R	37	n/a	8/15/2023	145	Yes	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4R	12	n/a	8/15/2023	72.7	Yes	388	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	8/16/2023	722	Yes	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2R	160	n/a	8/16/2023	239	Yes	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5R	160	n/a	8/15/2023	802	Yes	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	GWC-1R	228.9	n/a	8/16/2023	1270	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-2R	228.9	n/a	8/16/2023	450	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-4R	228.9	n/a	8/15/2023	395	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-5R	228.9	n/a	8/15/2023	1520	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-6R	228.9	n/a	8/15/2023	254	Yes	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 11:54 AM

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	8/16/2023	0.019J	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	GWC-2R	0.16	n/a	8/16/2023	0.12	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	GWC-3R	0.16	n/a	8/16/2023	0.04ND	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GWC-4R**	**0.16**	**n/a**	**8/15/2023**	**1.9**	**Yes**	**388**	**n/a**	**n/a**	**51.03**	**n/a**	**n/a**	**0.0000492**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GWC-5R	0.16	n/a	8/15/2023	0.038J	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Boron (mg/L)	GWC-6R	0.16	n/a	8/15/2023	0.04ND	No	388	n/a	n/a	51.03	n/a	n/a	0.0000492	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GWC-1R**	**37**	**n/a**	**8/16/2023**	**156**	**Yes**	**388**	**n/a**	**n/a**	**0.7732**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-2R**	**37**	**n/a**	**8/16/2023**	**44**	**Yes**	**388**	**n/a**	**n/a**	**0.7732**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GWC-3R	37	n/a	8/16/2023	20.5	No	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4R	37	n/a	8/15/2023	34.6	No	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-5R**	**37**	**n/a**	**8/15/2023**	**145**	**Yes**	**388**	**n/a**	**n/a**	**0.7732**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GWC-6R	37	n/a	8/15/2023	28	No	388	n/a	n/a	0.7732	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1R	12	n/a	8/16/2023	5.3	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2R	12	n/a	8/16/2023	7	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-3R	12	n/a	8/16/2023	3.4	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GWC-4R**	**12**	**n/a**	**8/15/2023**	**72.7**	**Yes**	**388**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-5R	12	n/a	8/15/2023	1.9	No	388	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6R	12	n/a	8/15/2023	10.4	No	388	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**	**8/16/2023**	**722**	**Yes**	**388**	**n/a**	**n/a**	**5.928**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-2R**	**160**	**n/a**	**8/16/2023**	**239**	**Yes**	**388**	**n/a**	**n/a**	**5.928**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GWC-3R	160	n/a	8/16/2023	84.1	No	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4R	160	n/a	8/15/2023	78.6	No	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-5R**	**160**	**n/a**	**8/15/2023**	**802**	**Yes**	**388**	**n/a**	**n/a**	**5.928**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GWC-6R	160	n/a	8/15/2023	80.1	No	388	n/a	n/a	5.928	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	**GWC-1R**	**228.9**	**n/a**	**8/16/2023**	**1270**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-2R**	**228.9**	**n/a**	**8/16/2023**	**450**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	GWC-3R	228.9	n/a	8/16/2023	140	No	388	4.653	0.8034	0.5155	None	x^(1/3)	0.001254	Param Inter 1 of 2
TDS (mg/L)	**GWC-4R**	**228.9**	**n/a**	**8/15/2023**	**395**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-5R**	**228.9**	**n/a**	**8/15/2023**	**1520**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-6R**	**228.9**	**n/a**	**8/15/2023**	**254**	**Yes**	**388**	**4.653**	**0.8034**	**0.5155**	**None**	**x^(1/3)**	**0.001254**	**Param Inter 1 of 2**

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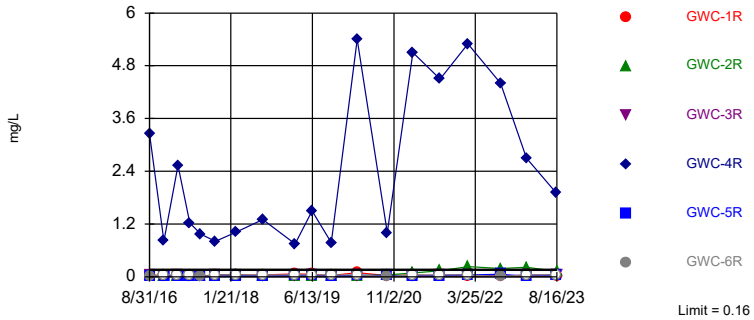
Hollow symbols indicate censored values.

Exceeds Limit: GWC-4R

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 388 background values. 51.03% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 6 points to limit.

Constituent: Boron Analysis Run 10/19/2023 11:53 AM View: Appendix III - Interwell
Plant Yates Data: Yates Gypsum Landfill

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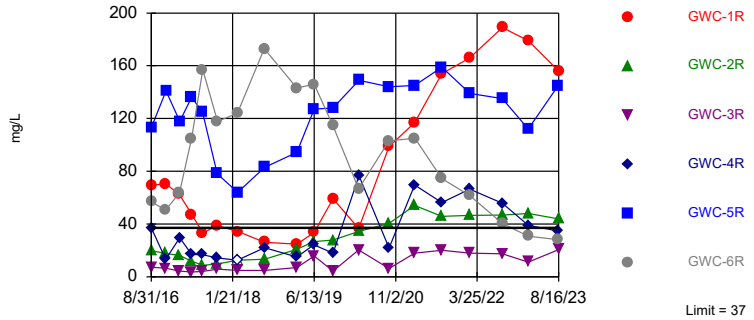
Hollow symbols indicate censored values.

Exceeds Limit: GWC-1R, GWC-2R, GWC-5R

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 388 background values. 0.7732% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 6 points to limit.

Constituent: Calcium Analysis Run 10/19/2023 11:53 AM View: Appendix III - Interwell
Plant Yates Data: Yates Gypsum Landfill

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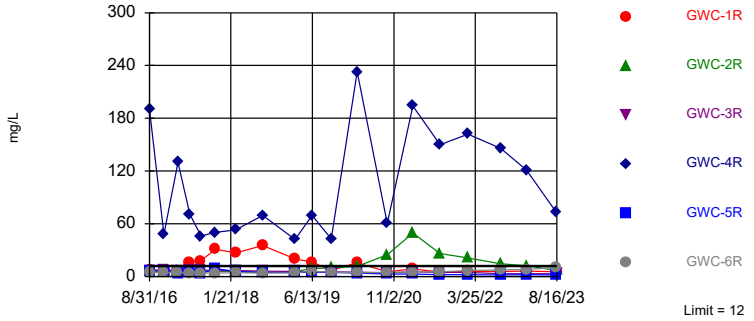
Exceeds Limit: GWC-4R

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 388 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 10/19/2023 11:53 AM View: Appendix III - Interwell
Plant Yates Data: Yates Gypsum Landfill

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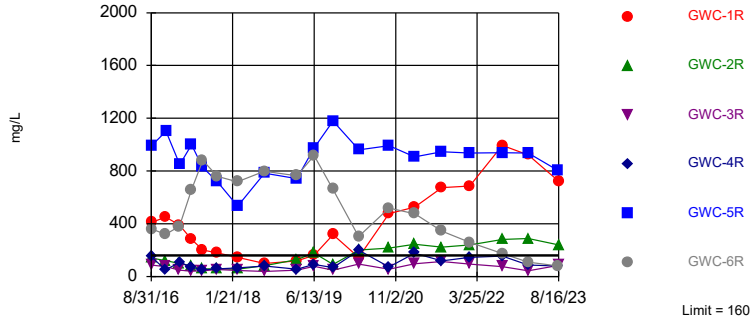
Exceeds Limit: GWC-1R, GWC-2R, GWC-5R

Prediction Limit

Interwell Non-parametric



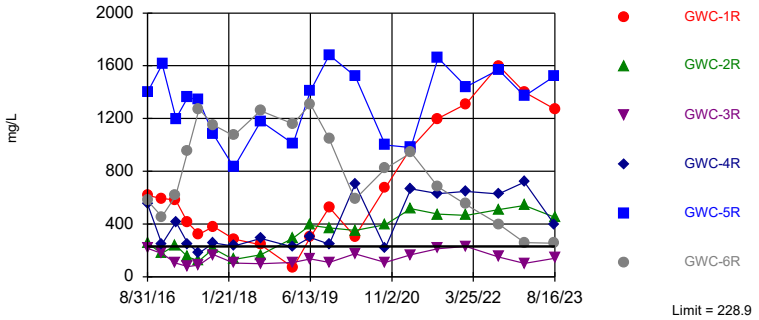
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 388 background values. 5.928% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 6 points to limit.

Constituent: Sulfate Analysis Run 10/19/2023 11:53 AM View: Appendix III - Interwell
Plant Yates 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 cube root transformation): Mean=4.653, Std. Dev.=0.8034, n=388, 0.5155% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.05, 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 10/19/2023 11:53 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (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)	0.0097 (J)		0.0052 (J)	<0.04	0.0047 (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					0.0071 (J)	0.01 (J)	<0.04
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							0.0076 (J)	<0.04	
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							0.0089 (J)	<0.04	
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							0.0061 (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)				0.0079 (J)	<0.04	
6/28/2017		<0.04			<0.04				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (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)				0.0094 (J)	<0.04	
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					0.004 (J)			<0.04	0.0045 (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							0.01 (J)	0.0057 (J)	0.005 (J)
10/1/2018	0.021 (J)	<0.04	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							0.0076 (J)	0.0044 (J)	0.0055 (J)
6/12/2019									
6/13/2019									
9/24/2019	0.0064 (J)		0.0055 (J)				0.01 (J)	0.0049 (J)	
9/25/2019		<0.04		0.018 (J)	0.0054 (J)	<0.04			<0.04
9/26/2019									
10/8/2019									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (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)			0.0073 (J)	0.0052 (J)			
3/24/2020							0.011 (J)	0.0068 (J)	
3/25/2020									0.011 (J)
9/22/2020							0.0079 (J)	0.0053 (J)	<0.04
9/23/2020	<0.04	0.0073 (J)	<0.04		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)			0.0068 (J)	0.011 (J)	
3/3/2021	<0.04	<0.04	<0.04		<0.04				0.0056 (J)
3/4/2021									
8/18/2021									
8/19/2021	<0.04		<0.04	0.018 (J)	<0.04	<0.04			
8/20/2021									
8/26/2021							0.009 (J)	<0.04	<0.04
8/27/2021		<0.04							
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	<0.04	<0.04	<0.04		0.01 (J)				
2/10/2022				0.02 (J)			0.011 (J)	<0.04	
2/11/2022						<0.04			<0.04
8/30/2022	<0.04						0.0098 (J)	<0.04	
8/31/2022		<0.04	<0.04	0.015 (J)	<0.04	<0.04			<0.04
2/7/2023	<0.04		<0.04				<0.04		
2/8/2023		<0.04		0.015 (J)	<0.04	<0.04			
2/9/2023								<0.04	<0.04
8/15/2023	<0.04		0.0094 (J)	0.017 (J)	<0.04		<0.04	<0.04	<0.04
8/16/2023		<0.04				<0.04			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
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)	0.0305 (J)	0.0315 (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								0.0206 (J)	0.0095 (J)
11/29/2016									
11/30/2016							0.0089 (J)		
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								0.0192 (J)	<0.04
2/23/2017							<0.04		
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							0.0077 (J)		
5/10/2017								0.0179 (J)	
5/26/2017									
6/27/2017									
6/28/2017	<0.04	0.0079 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
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							0.0073 (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								0.0168 (J)	
10/18/2017							<0.04		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									<0.04
2/20/2018								<0.04	
2/21/2018							0.0399 (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)		
8/8/2018								0.017 (J)	
9/19/2018						0.012 (J)			
9/24/2018									
9/25/2018	0.0046 (J)	0.007 (J)	0.0054 (J)	<0.04	0.0096 (J)				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									<0.04
2/26/2019							0.0053 (J)	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								0.013 (J)	<0.04
6/13/2019							<0.04		
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

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
10/9/2019								0.018 (J)	
10/10/2019							0.0061 (J)		
3/17/2020						0.023 (J)	0.0099 (J)		0.0051 (J)
3/18/2020								0.026 (J)	
3/19/2020									
3/24/2020	0.0054 (J)	0.01 (J)	0.016 (J)	<0.04	0.0092 (J)				
3/25/2020									
9/22/2020						0.0076 (J)	0.0066 (J)	0.046 (J)	0.0079 (J)
9/23/2020	0.021 (J)	0.006 (J)			0.0066 (J)				
9/24/2020			0.013 (J)	0.0094 (J)					
9/25/2020									
3/1/2021						0.013 (J)		0.087	
3/2/2021							0.0071 (J)		<0.04
3/3/2021	<0.04	0.0094 (J)		<0.04	0.01 (J)				
3/4/2021			0.0079 (J)						
8/18/2021							<0.04	0.14	
8/19/2021						0.011 (J)			
8/20/2021									<0.04
8/26/2021		<0.04							
8/27/2021	<0.04			<0.04	0.011 (J)				
9/1/2021			<0.04						
9/3/2021									
2/8/2022						0.015 (J)	<0.04		<0.04
2/9/2022	<0.04	<0.04	<0.04	<0.04	0.0098 (J)			0.23	
2/10/2022									
2/11/2022									
8/30/2022	<0.04	0.014 (J)	0.012 (J)		0.013 (J)		0.014 (J)		<0.04
8/31/2022				<0.04		0.0091 (J)		0.19	
2/7/2023	<0.04	<0.04	<0.04	<0.04	0.014 (J)				<0.04
2/8/2023						0.011 (J)	<0.04	0.22	
2/9/2023									
8/15/2023	<0.04	<0.04	0.046 (J)	<0.04	<0.04	<0.04			<0.04
8/16/2023							<0.04	0.12	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	0.0553 (J)						
9/1/2016		3.25	0.0191 (J)	0.0108 (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	0.0149 (J)			<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	0.0082 (J)			<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	0.0097 (J)						
5/10/2017		1.22	0.0068 (J)	<0.04			
5/26/2017					<0.04		
6/27/2017							
6/28/2017					<0.04		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	0.0123 (J)	0.97		0.0061 (J)			
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	0.0513	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	0.0378 (J)		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	0.043		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	0.062	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	0.057		0.03 (J)	<0.04			
9/24/2019					0.0076 (J)		
9/25/2019							
9/26/2019							
10/8/2019				<0.04			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	0.029 (J)		0.013 (J)			0.017 (J)	0.079
10/10/2019		0.78					
3/17/2020	0.092 (J)			<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	0.025 (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							
3/1/2021	0.046	5.1					
3/2/2021			0.023 (J)				
3/3/2021				<0.04	<0.04		
3/4/2021						0.033 (J)	0.078
8/18/2021	0.029 (J)	4.5	0.021 (J)	<0.04			
8/19/2021							
8/20/2021							
8/26/2021						0.095	
8/27/2021					<0.04		
9/1/2021							
9/3/2021							0.077
2/8/2022	0.021 (J)	5.3		<0.04		0.13	0.074
2/9/2022			0.043		<0.04		
2/10/2022							
2/11/2022							
8/30/2022	0.015 (J)	4.4	0.058	0.0092 (J)	<0.04		
8/31/2022						0.14	0.062
2/7/2023	0.015 (J)		0.017 (J)	<0.04	<0.04	0.13	
2/8/2023		2.7					0.057
2/9/2023							
8/15/2023		1.9	0.038 (J)	<0.04	<0.04	0.15 (J)	0.052 (J)
8/16/2023	0.019 (J)						

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	12	21	2.5						
6/2/2016				1.3	28	1.3	33	2.4	8.8
6/6/2016									
6/7/2016									
7/25/2016		20.3	2.16			1.17			
7/26/2016	11			1.24	24.5		32.3	2.12	7.69
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					31	2.18	8.49
9/15/2016				1.17	27				
9/16/2016									
9/19/2016						1.05			
11/1/2016	11	18.4			25.6	1.14			
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	11.2	20.3			27.5				
1/12/2017							35.7	2.37	
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							32.7	2.34	
3/8/2017				1.21					
4/26/2017		25.6		1.14	30.4	1.03			
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				36.5	2.13	
6/28/2017		23.9			29.8				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (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				30.9	2.15	
10/4/2017		22.1			29.7	1.09			
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					29.1			2.3	8.2
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							25.8	2.3	9.5 (J)
10/1/2018	15.1	19.7	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)			30.1	1.3			
4/2/2019									
4/3/2019							24.7 (J)	2.8	8.4
6/12/2019									
6/13/2019									
9/24/2019	15.8		2.3				25.8	2.5	
9/25/2019		22.4		1.1	29.5	1.1			9.5
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			2.1	1.1					
3/19/2020	15	21.9			31.5	1.2			
3/24/2020							26.1	2.5	
3/25/2020									10.5
9/22/2020							27.2	2.6	9.6
9/23/2020	14.1	23.6	1.8		28.6				
9/24/2020						1.1			
9/25/2020				1.3					
3/1/2021						1.2			
3/2/2021				1.2			1.6	2.6	
3/3/2021	14.1	20.6	1.8		29.8				7.7
3/4/2021									
8/18/2021									
8/19/2021	14.2		2	1.2	28.1	1.2			
8/20/2021									
8/26/2021							25.2	2.5	7.6
8/27/2021		24.7							
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	14.9	23.7	2.1		30.3				
2/10/2022				1.3			24.8	2.5	
2/11/2022						1.5			7.5
8/30/2022	14.9						24.8	2.5	
8/31/2022		23.5	1.9	1.3	28.7	1.3			8.9
2/7/2023	15		2.2				26.6		
2/8/2023		23.3		1.5	28.9	1.3			
2/9/2023								2.8	9.6
8/15/2023	13.5		1.8	1.3	27.4		25	2.6	7.8
8/16/2023		24.9				1.4			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	6.2	1.4							
6/7/2016			3.7	2.3	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							7.23	19.9	9.31
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.5			1.97				
9/19/2016	4.76		3.17	1.97					
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								17.7 (B)	9.47 (B)
11/29/2016									
11/30/2016							6.43 (B)		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	4.74	1.25			2.28				
1/12/2017									
1/13/2017			4.98	2.45					
1/16/2017									
2/21/2017									
2/22/2017								16.2	10.4
2/23/2017							4.25		
2/24/2017						16.1			
3/1/2017	5.37	1.26							
3/2/2017					2.15				
3/3/2017									
3/6/2017			6.28	2.48					
3/7/2017									
3/8/2017									
4/26/2017	4.28	1.05	6.65	2.3					
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		
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 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/29/2017			6.04	2.54	2.02				
6/30/2017									
7/11/2017						14.3			
7/17/2017									14.1
7/18/2017							4.16	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								9.77	
10/18/2017							5.67		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									<25
2/20/2018								<25	
2/21/2018							4.76		
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		
8/8/2018								13.4 (J)	
9/19/2018						11.1 (J)			
9/24/2018									
9/25/2018	4.6	1	10.4 (J)	2.3	2.1				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									12.7 (J)
2/26/2019							7.1	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								26.6	18.9
6/13/2019							15.7		
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 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
10/9/2019								27.8	
10/10/2019							4.3		
3/17/2020						14.8	20.3		24.3
3/18/2020								34.5	
3/19/2020									
3/24/2020	5.3	1	6	2.6	2.7				
3/25/2020									
9/22/2020						10.1	6.2	40.5	31
9/23/2020	5.2	0.91 (J)			2.6				
9/24/2020			7.8	2.6					
9/25/2020									
3/1/2021						10.3		54.1	
3/2/2021							17.9		34.2
3/3/2021	5.2	0.96 (J)		2.4	2.5				
3/4/2021			8.7						
8/18/2021							20.2	45.8	
8/19/2021						9.6			
8/20/2021									26.5
8/26/2021		0.98 (J)							
8/27/2021	5.1			2.4	2.7				
9/1/2021			9.5						
9/3/2021									
2/8/2022						9.4	17.9		25.6
2/9/2022	5.1	0.87 (J)	9.8	2.3	2.8			46.6	
2/10/2022									
2/11/2022									
8/30/2022	5.7	0.77 (J)	7.3		3		17.5		23.5
8/31/2022				2.4		9.6		46.9	
2/7/2023	5.5	0.79 (J)	7.5	2.4	2.9				22.3
2/8/2023						9.2	11.2	48	
2/9/2023									
8/15/2023	5.1	0.8 (J)	6.1	2.2	2.9	9.6			20.3
8/16/2023							20.5	44	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	69.4						
9/1/2016		37.1	113	56.8			
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	70.6 (B)			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	62.4			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	47.4						
5/10/2017		17	136	105			
5/26/2017					26.2		
6/27/2017							
6/28/2017					26.1		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	33.2	16.8		157			
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	38.7	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	34.3		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	26.2		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	24.7 (J)	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	33.8		127	146			
9/24/2019					26.4		
9/25/2019							
9/26/2019							
10/8/2019				115			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	59.1		128			2.4	4.9
10/10/2019		18					
3/17/2020	36.7			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	98.8	21.8					
9/23/2020			144	103	26.3		
9/24/2020						3.7	4.4
9/25/2020							
3/1/2021	117	69.5					
3/2/2021			145				
3/3/2021				105	25.6		
3/4/2021						8.2	4.6
8/18/2021	154	56.2	159	74.5			
8/19/2021							
8/20/2021							
8/26/2021						14.1	
8/27/2021					22.6		
9/1/2021							
9/3/2021							5.6
2/8/2022	166	66.5		61.5		15.2	6
2/9/2022			139		23.4		
2/10/2022							
2/11/2022							
8/30/2022	189	55.8	135	40.6	25.4		
8/31/2022						16.3	6.2
2/7/2023	179		112	30.8	25.6	16.1	
2/8/2023		39					5.9
2/9/2023							
8/15/2023		34.6	145	28	23.2	17.2	5.3
8/16/2023	156						

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	1.3	1.3	1.6						
6/2/2016				4.1	1.4	1.9	7.2	4.3	3.7
6/6/2016									
6/7/2016									
7/25/2016		1.3	1.4			1.7			
7/26/2016	1.2			4	1.6		6.6	4.4	3.6
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					6.6	3.8	3.4
9/15/2016				4.2	1.5				
9/16/2016									
9/19/2016						1.6			
11/1/2016	1.3	1.4			1.7	1.8			
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							6.8	3.8	
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							6.8	4.5	
3/8/2017				4.2					
4/26/2017		1.1		4.1	1.2	1.7			
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				7	4.3	
6/28/2017		1.2			1.3				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (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				6.5	4.2	
10/4/2017		1.2			1.5	1.8			
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					1.2			4.5	4.4
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	1.2	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			1.2	1.7			
4/2/2019									
4/3/2019							4	4.2	4.3
6/12/2019									
6/13/2019									
9/24/2019	1.1		1.3				3.7	4.5	
9/25/2019		1.1		4.8	1.1	1.6			4.5
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			1.4	5.2					
3/19/2020	1.1	1.1			1.2	1.8			
3/24/2020							3.5	4.3	
3/25/2020									3.9
9/22/2020							3.6	4.2	4.5
9/23/2020	0.99 (J)	1	1.2		1.1				
9/24/2020						1.5			
9/25/2020				5.3					
3/1/2021						1.6			
3/2/2021				4.9			3.2	4.3	
3/3/2021	0.96 (J)	0.99 (J)	1.2		1.1				4.1
3/4/2021									
8/18/2021									
8/19/2021	1.1		1.3	5	1.1	1.6			
8/20/2021									
8/26/2021							3.4	4.3	4.4
8/27/2021		1.1							
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	1	1.1	1.3		1.1				
2/10/2022				4.7			3.2	4.4	
2/11/2022						2.1			4.1
8/30/2022	1.3						3.5	4.4	
8/31/2022		1.3	1.5	4.6	1.3	1.8			4.4
2/7/2023	1.3		1.5				3.3		
2/8/2023		1.1		4.9	1.2	1.6			
2/9/2023								5	4.5
8/15/2023	1.1		1.4	4.1	1.1		3.1	4.1	4.4
8/16/2023		1.1				1.5			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	6.8	6.4							
6/7/2016			2.8	1.9	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							6.7	6.3	4
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		6.1			4.5				
9/19/2016	7		2.4	1.9					
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								6.7	4.2
11/29/2016									
11/30/2016							7.8		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	6.5	6.1			4.7				
1/12/2017									
1/13/2017			2.5	2.3					
1/16/2017									
2/21/2017									
2/22/2017								5.7	3.7
2/23/2017							6.5		
2/24/2017						5.5			
3/1/2017	6.9	6							
3/2/2017					4.8				
3/3/2017									
3/6/2017			2.1	1.9					
3/7/2017									
3/8/2017									
4/26/2017	7	6.5	2.1	2					
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		
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 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/29/2017			2.8	2.6	4.5				
6/30/2017									
7/11/2017						5.8			
7/17/2017									3.8
7/18/2017							7.7	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								6.1	
10/18/2017							6.5		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									4.3
2/20/2018								5.8	
2/21/2018							6.7		
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		
8/8/2018								4.7	
9/19/2018						4			
9/24/2018									
9/25/2018	7.9	7.8	2.2	3.6	5.6				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									4.1
2/26/2019							5.7	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								9.1	4.7
6/13/2019							5		
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 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
10/9/2019								9.8	
10/10/2019							5.3		
3/17/2020						4.1	5.2		4.8
3/18/2020								11.7	
3/19/2020									
3/24/2020	7	6.8	2.8	2.7	5				
3/25/2020									
9/22/2020						4.2	4.2	24.7	4.2
9/23/2020	7.2	7.2			6.6				
9/24/2020			2	2.7					
9/25/2020									
3/1/2021						3.7		49.6	
3/2/2021							5.5		4.1
3/3/2021	7	7.2		2.7	7.1				
3/4/2021			1.8						
8/18/2021							4.6	26.2	
8/19/2021						3.5			
8/20/2021									5.2
8/26/2021		7.3							
8/27/2021	7.4			2.8	8.5				
9/1/2021			1.8						
9/3/2021									
2/8/2022						3.2	4.5		5.7
2/9/2022	7.5	7	1.7	2.8	10.9			21.2	
2/10/2022									
2/11/2022									
8/30/2022	7.9	7	2.4		12		3.1		6.3
8/31/2022				2.9		3.5		14.5	
2/7/2023	7.4	6.4	2.4	2.9	11.4				6.1
2/8/2023						3.5	3.4	12.3	
2/9/2023									
8/15/2023	7.3	6.7	2.3	2.8	11.6	3.5			5.6
8/16/2023							3.4	7	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	7.6						
9/1/2016		190	6.6	4.4			
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	5.8			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	6.2			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	16						
5/10/2017		71	4.5	3.9			
5/26/2017					0.93		
6/27/2017							
6/28/2017					1		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	18	46		4			
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	31	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	27		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	35.4		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	20	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	16.4		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 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	6.9		4.5			2.1	5.1
10/10/2019		42.8					
3/17/2020	15.5			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	5.5	60.2					
9/23/2020			3	4.7	0.88 (J)		
9/24/2020						2.7	5
9/25/2020							
3/1/2021	8.6	194					
3/2/2021			2.9				
3/3/2021				5	0.86 (J)		
3/4/2021						4.9	4.9
8/18/2021	5.2	150	2.3	5.4			
8/19/2021							
8/20/2021							
8/26/2021						7.2	
8/27/2021					0.99 (J)		
9/1/2021							
9/3/2021							5.5
2/8/2022	5.6	162		6.9		7.4	6.2
2/9/2022			2		1 (J)		
2/10/2022							
2/11/2022							
8/30/2022	5.6	146	1.8	7.5	1.2		
8/31/2022						6.7	6.3
2/7/2023	6.2		2.1	7.9	1.1	5.6	
2/8/2023		121					6.9
2/9/2023							
8/15/2023		72.7	1.9	10.4	0.93 (J)	4.5	5.6
8/16/2023	5.3						

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	5	12	4.2						
6/2/2016				6.6	5.8	1.3	20	1.9	8
6/6/2016									
6/7/2016									
7/25/2016		8.4	3.7			1.2			
7/26/2016	5.4			6.1	6.7		20	1.8	7.7
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					19	1.8	7.5
9/15/2016				6.1	6				
9/16/2016									
9/19/2016						1.2			
11/1/2016	3.9	8.9			4.9	1.3			
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	3.7	8.6			4.5				
1/12/2017							19	1.9	
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							20	2.1	
3/8/2017				7					
4/26/2017		11		7	5.1	1.4			
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				18	2.1	
6/28/2017		12			5.4				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (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				16	2.3	
10/4/2017		12			6.2	1.4			
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					6.7			2	8.5
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							7.9	2.3	10.2
10/1/2018	5.6	9.1	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			7.2	0.96 (J)			
4/2/2019									
4/3/2019							7	2.1	8.5
6/12/2019									
6/13/2019									
9/24/2019	5.3		4.3				5.5	2.4	
9/25/2019		13.8		6.6	7	0.81 (J)			8.5
9/26/2019									
10/8/2019									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			5.3	8.1					
3/19/2020	10	12.9			9	1.6			
3/24/2020							5.9	2.1	
3/25/2020									8.8
9/22/2020							5.5	2.1	8.2
9/23/2020	8.1	16.8	3.4		6.9				
9/24/2020						0.69 (J)			
9/25/2020				6.1					
3/1/2021						0.88 (J)			
3/2/2021				6			2.6	2.3	
3/3/2021	9	9.6	4.4		7				7.8
3/4/2021									
8/18/2021									
8/19/2021	8.9		4.9	6.7	7.5	1			
8/20/2021									
8/26/2021							6	2.4	8.5
8/27/2021		18.2							
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	9.3	16	5.1		7.2				
2/10/2022				6.2			4.9	2.4	
2/11/2022						2.8			7.7
8/30/2022	10.2						5.7	2.4	
8/31/2022		13.9	4.8	5.8	6.9	1.1			8
2/7/2023	10.6		6.6				5.2		
2/8/2023		14.7		6.1	7.5	0.96 (J)			
2/9/2023								2.9	8.9
8/15/2023	9.6		4.6	6	6.8		4.8	2.2	7.5
8/16/2023		20.3				0.9 (J)			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	1.2	1.8							
6/7/2016			5.2	<1	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							87	140	29
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.7			4.8				
9/19/2016	1.8		4.8	0.08 (J)					
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								120	36
11/29/2016									
11/30/2016							76		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	<1	1.7			5.2				
1/12/2017									
1/13/2017			4.3	<1					
1/16/2017									
2/21/2017									
2/22/2017								100	43
2/23/2017							47		
2/24/2017						120			
3/1/2017	1.8	<1							
3/2/2017					5				
3/3/2017									
3/6/2017			4.5	<1					
3/7/2017									
3/8/2017									
4/26/2017	1.6	1.9	4.9	<1					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					5				
5/8/2017						120			60
5/9/2017							41		
5/10/2017								80	
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/29/2017			5.5	<1	5.2				
6/30/2017									
7/11/2017						110			
7/17/2017									63
7/18/2017							44	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								59	
10/18/2017							53		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									64.6
2/20/2018								55.9	
2/21/2018							46.7		
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		
8/8/2018								81.1	
9/19/2018						75			
9/24/2018									
9/25/2018	1	1.5	7	0.13 (J)	6.1				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									42.1
2/26/2019							49.3	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								180	83.4
6/13/2019							77.1		
9/24/2019			1						
9/25/2019				<1	5.5				
9/26/2019	0.64 (J)	1							
10/8/2019						52.3			128

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
10/9/2019								91.2	
10/10/2019							48		
3/17/2020						71.6	95.2		98.6
3/18/2020								200	
3/19/2020									
3/24/2020	<1	0.99 (J)	3	<1	5.4				
3/25/2020									
9/22/2020						51.5	55.1	216	145
9/23/2020	0.53 (J)	1.1			5.1				
9/24/2020			3.6	<1					
9/25/2020									
3/1/2021						51.6		244	
3/2/2021							95.5		156
3/3/2021	<1	1		<1	5.2				
3/4/2021			4.5						
8/18/2021							114	223	
8/19/2021						52.6			
8/20/2021									121
8/26/2021		1.2							
8/27/2021	0.59 (J)			<1	5.3				
9/1/2021			5						
9/3/2021									
2/8/2022						50.9	93.5		107
2/9/2022	0.51 (J)	1.1	3.9	<1	4.8			241	
2/10/2022									
2/11/2022									
8/30/2022	0.78 (J)	1.3	3.2		4.7		76		101
8/31/2022				<1		48		280	
2/7/2023	0.78 (J)	1.2	3.8	<1	4.9				82.4
2/8/2023						50.5	43.3	288	
2/9/2023									
8/15/2023	0.51 (J)	0.88 (J)	4.1	<1	4.6	47.7			74.2
8/16/2023							84.1	239	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	410						
9/1/2016		150	990	360			
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	450			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	390			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	280						
5/10/2017		70	1000	660			
5/26/2017					12		
6/27/2017							
6/28/2017					11		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	200	50		880			
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	180	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	146		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	100		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	118	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	163		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 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	318		1180			15	27.9
10/10/2019		68.7					
3/17/2020	145			303			
3/18/2020		199	960				
3/19/2020					12.4		
3/24/2020							25.2
3/25/2020						14.3	
9/22/2020	478	72.1					
9/23/2020			992	518	11.8		
9/24/2020						11.7	22.9
9/25/2020							
3/1/2021	525	177					
3/2/2021			906				
3/3/2021				476	10.6		
3/4/2021						12	21.5
8/18/2021	675	118	946	345			
8/19/2021							
8/20/2021							
8/26/2021						19.2	
8/27/2021					16.7		
9/1/2021							
9/3/2021							21.3
2/8/2022	687	146		260		14.6	17.9
2/9/2022			937		18		
2/10/2022							
2/11/2022							
8/30/2022	994	155	939	174	20.1		
8/31/2022						10.9	17.9
2/7/2023	922		935	110	17.8	9.7	
2/8/2023		87.8					17.5
2/9/2023							
8/15/2023		78.6	802	80.1	17.2	7.6	16.4
8/16/2023	722						

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	120	150	54						
6/2/2016				46	130	36	160	66	96
6/6/2016									
6/7/2016									
7/25/2016		135	48			50			
7/26/2016	94			54	141		177	78	92
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	105		67						
9/14/2016		127					187	73	102
9/15/2016				54	153				
9/16/2016									
9/19/2016						35			
11/1/2016	44	75			92	<25			
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	107	148			159				
1/12/2017							202	86	
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							257	108	
3/8/2017				178					
4/26/2017		92		52	181	55			
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				189	73	
6/28/2017		126			169				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/29/2017									79
6/30/2017				45		42			
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017	119		58				170	89	
10/4/2017		147			141	31			
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					95			142	90
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							144	86	116
10/1/2018	117	138	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)			149	54			
4/2/2019									
4/3/2019							142	83	111
6/12/2019									
6/13/2019									
9/24/2019	124		54				129	79	
9/25/2019		159		64	157	51			117
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWA-4I (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			35	57					
3/19/2020	116	148			146	47			
3/24/2020							139	68	
3/25/2020									146
9/22/2020							104	75	83
9/23/2020	108	155	15		157				
9/24/2020						51			
9/25/2020				54					
3/1/2021						23			
3/2/2021				67			52	67	
3/3/2021	99	111	39		137				80
3/4/2021									
8/18/2021									
8/19/2021	105		44	54	144	50			
8/20/2021									
8/26/2021							123	86	93
8/27/2021		155							
9/1/2021									
9/3/2021									
2/8/2022									
2/9/2022	105	145	57		154				
2/10/2022				56			127	77	
2/11/2022						66			102
8/30/2022	116						148	86	
8/31/2022		137	46	51	141	33			92
2/7/2023	131		121				180		
2/8/2023		145		56	144	43			
2/9/2023								59	124
8/15/2023	121		65	69	231		219	76	99
8/16/2023		148				48			

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/1/2016									
6/2/2016									
6/6/2016	120	58							
6/7/2016			60	38	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							216	257	209
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		35			67				
9/19/2016	92		68	45					
11/1/2016									
11/2/2016				53					
11/3/2016	104	48	61		41				
11/4/2016									
11/14/2016						280			
11/28/2016								177	102
11/29/2016									
11/30/2016							177 (B)		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	133	95			104				
1/12/2017									
1/13/2017			76	46					
1/16/2017									
2/21/2017									
2/22/2017								240	164
2/23/2017							105		
2/24/2017						162			
3/1/2017	119	79							
3/2/2017					77				
3/3/2017									
3/6/2017			167	164					
3/7/2017									
3/8/2017									
4/26/2017	162	36	50	34					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					142				
5/8/2017						194			145
5/9/2017							77		
5/10/2017								149	
5/26/2017									
6/27/2017									
6/28/2017	98	45							

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
6/29/2017			94	68	53				
6/30/2017									
7/11/2017						193			
7/17/2017									185
7/18/2017							89	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								214	
10/18/2017							166		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									173
2/20/2018								131	
2/21/2018							105		
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		
8/8/2018								166	
9/19/2018						186			
9/24/2018									
9/25/2018	109	63	122	73	86				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019									92
2/26/2019							109	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								391	226
6/13/2019							136		
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 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWC-3R	GWC-2R	GWA-2 (bg)
10/9/2019								372	
10/10/2019							109		
3/17/2020						165	175		185
3/18/2020								351	
3/19/2020									
3/24/2020	91	59	117	76	71				
3/25/2020									
9/22/2020						141	110	394	281
9/23/2020	103	81			99				
9/24/2020			113	69					
9/25/2020									
3/1/2021						145		516	
3/2/2021							167		296 (D)
3/3/2021	95	37		53	57				
3/4/2021			110						
8/18/2021							214	474	
8/19/2021						134			
8/20/2021									254
8/26/2021		31							
8/27/2021	112			67	93				
9/1/2021			137						
9/3/2021									
2/8/2022						151	231		283
2/9/2022	103	60	131	72	81			466	
2/10/2022									
2/11/2022									
8/30/2022	100	52	122		81		150		244
8/31/2022				62		116		510	
2/7/2023	96	55	163	89	78				207
2/8/2023						141	101	540	
2/9/2023									
8/15/2023	96	81	126	62	74	186			230
8/16/2023							140	450	

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	616						
9/1/2016		553	1400	578			
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	594			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	581			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	410						
5/10/2017		251	1360	955			
5/26/2017					223		
6/27/2017							
6/28/2017					166		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	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	322	179		1270			
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	381	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	285		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	242		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	69	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	301		1410	1310			
9/24/2019					146		
9/25/2019							
9/26/2019							
10/8/2019				1050			

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 10/19/2023 11:54 AM View: Appendix III - Interwell

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-4R	GWC-5R	GWC-6R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	526		1680			119	98
10/10/2019		247					
3/17/2020	306			588			
3/18/2020		703	1520				
3/19/2020					148		
3/24/2020							84
3/25/2020						158	
9/22/2020	675	217					
9/23/2020			1000	820	161		
9/24/2020						170	77
9/25/2020							
3/1/2021	974	666					
3/2/2021			980				
3/3/2021				942	138		
3/4/2021						168	57
8/18/2021	1200	630	1660	682			
8/19/2021							
8/20/2021							
8/26/2021						249	
8/27/2021					150		
9/1/2021							
9/3/2021							88
2/8/2022	1310	648		549		248	93
2/9/2022			1440		156		
2/10/2022							
2/11/2022							
8/30/2022	1600	628	1570	400	153		
8/31/2022						242	92
2/7/2023	1400		1370	259	159	224	
2/8/2023		718					115
2/9/2023							
8/15/2023		395	1520	254	157	225	83
8/16/2023	1270						

FIGURE G.

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	YGWA-39 (bg)	0.02058	92	68	Yes	18	5.556	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.01353	-106	-68	Yes	18	0	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	2.437	87	74	Yes	19	5.263	n/a	0.01	NP
Calcium (mg/L)	GWC-2R	5.97	113	74	Yes	19	5.263	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.134	143	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.0757	-147	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.4931	94	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.08927	-112	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	0.6806	92	87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-39 (bg)	2.124	86	68	Yes	18	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-1.099	-122	-68	Yes	18	5.556	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-1.349	-113	-87	Yes	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-5I (bg)	0.06491	106	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.2897	101	74	Yes	19	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.6794	162	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-18I (bg)	0.08671	96	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.1049	130	87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.03797	-98	-87	Yes	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.3111	91	68	Yes	18	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.3827	-108	-68	Yes	18	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.6409	-159	-87	Yes	21	0	n/a	0.01	NP
Selenium (mg/L)	YGWA-17S (bg)	0	112	98	Yes	23	73.91	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	12.89	88	74	Yes	19	0	n/a	0.01	NP
Sulfate (mg/L)	GWC-2R	29.48	101	74	Yes	19	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.1191	-112	-87	Yes	21	19.05	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	0.8971	154	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	1.209	91	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-2.62	-107	-68	Yes	18	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.2566	105	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3I (bg)	1.155	119	87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-7.156	-120	-68	Yes	18	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-13.93	-138	-68	Yes	18	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-2.402	-162	-87	Yes	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.08787	138	87	Yes	21	0	n/a	0.01	NP
TDS (mg/L)	GWC-2R	57.54	107	74	Yes	19	0	n/a	0.01	NP
TDS (mg/L)	YGWA-21I (bg)	9.895	91	87	Yes	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-39 (bg)	27.52	85	68	Yes	18	0	n/a	0.01	NP
TDS (mg/L)	YGWA-47 (bg)	-12.84	-95	-68	Yes	18	0	n/a	0.01	NP

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Arsenic (mg/L)	GWA-2 (bg)	0	-100	-223	No	40	90	n/a	0.01	NP
Arsenic (mg/L)	GWC-5R	-0.000143	-106	-152	No	31	41.94	n/a	0.01	NP
Arsenic (mg/L)	YGWA-14S (bg)	0	-17	-105	No	24	95.83	n/a	0.01	NP
Arsenic (mg/L)	YGWA-17S (bg)	0	-21	-98	No	23	91.3	n/a	0.01	NP
Arsenic (mg/L)	YGWA-18I (bg)	0	-14	-105	No	24	87.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-18S (bg)	0	-14	-105	No	24	87.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-1D (bg)	0.0001308	40	105	No	24	33.33	n/a	0.01	NP
Arsenic (mg/L)	YGWA-1I (bg)	0	-21	-105	No	24	91.67	n/a	0.01	NP
Arsenic (mg/L)	YGWA-20S (bg)	0	-17	-105	No	24	95.83	n/a	0.01	NP
Arsenic (mg/L)	YGWA-21I (bg)	-0.0002072	-68	-105	No	24	37.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-2I (bg)	0.0001028	29	105	No	24	25	n/a	0.01	NP
Arsenic (mg/L)	YGWA-30I (bg)	0	-23	-105	No	24	91.67	n/a	0.01	NP
Arsenic (mg/L)	YGWA-39 (bg)	0	-12	-81	No	20	60	n/a	0.01	NP
Arsenic (mg/L)	YGWA-3D (bg)	0	-57	-105	No	24	75	n/a	0.01	NP
Arsenic (mg/L)	YGWA-3I (bg)	0	-25	-105	No	24	75	n/a	0.01	NP
Arsenic (mg/L)	YGWA-40 (bg)	0	-15	-81	No	20	90	n/a	0.01	NP
Arsenic (mg/L)	YGWA-47 (bg)	0	3	74	No	19	84.21	n/a	0.01	NP
Arsenic (mg/L)	YGWA-4I (bg)	0	-11	-105	No	24	91.67	n/a	0.01	NP
Arsenic (mg/L)	YGWA-5D (bg)	0	23	105	No	24	37.5	n/a	0.01	NP
Arsenic (mg/L)	YGWA-5I (bg)	0	-23	-105	No	24	91.67	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	35	74	No	19	68.42	n/a	0.01	NP
Boron (mg/L)	GWC-4R	0.237	41	74	No	19	0	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.0004045	-54	-87	No	21	9.524	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	0.0004386	55	87	No	21	14.29	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-14	-87	No	21	80.95	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	0.0006414	54	87	No	21	28.57	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0.001652	58	87	No	21	42.86	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-13	-87	No	21	71.43	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-5	-87	No	21	90.48	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	0	-28	-87	No	21	57.14	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	2	87	No	21	80.95	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-13	-87	No	21	85.71	n/a	0.01	NP
Boron (mg/L)	**YGWA-39 (bg)**	**0.02058**	**92**	**68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-3D (bg)	0	16	87	No	21	61.9	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-13	-87	No	21	90.48	n/a	0.01	NP
Boron (mg/L)	**YGWA-40 (bg)**	**-0.01353**	**-106**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-47 (bg)	-0.0005874	-51	-68	No	18	5.556	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	13	87	No	21	71.43	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0006284	65	87	No	21	19.05	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-11	-87	No	21	66.67	n/a	0.01	NP
Calcium (mg/L)	**GWA-2 (bg)**	**2.437**	**87**	**74**	**Yes**	**19**	**5.263**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-1R	18.25	67	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	**GWC-2R**	**5.97**	**113**	**74**	**Yes**	**19**	**5.263**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-5R	4.311	54	74	No	19	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	0	18	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.134**	**143**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.05034	39	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.0757**	**-147**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1D (bg)**	**0.4931**	**94**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.08927**	**-112**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.02165	43	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**0.6806**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0	1	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0.02343	63	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-39 (bg)**	**2.124**	**86**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Calcium (mg/L)	YGWA-3D (bg)	0.2668	48	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.5543	85	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.3452	-49	-68	No	18	5.556	n/a	0.01	NP
Calcium (mg/L)	**YGWA-47 (bg)**	**-1.099**	**-122**	**-68**	**Yes**	**18**	**5.556**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-4I (bg)	0.02012	12	87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-1.349**	**-113**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-5I (bg)**	**0.06491**	**106**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GWA-2 (bg)**	**0.2897**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GWC-4R	4.316	31	74	No	19	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.102	55	87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.6794**	**162**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-18I (bg)**	**0.08671**	**96**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18S (bg)	0.1048	63	87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	0	-24	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	0	-25	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.1049**	**130**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.07755	-57	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.01766	-41	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	-0.01564	-40	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.699	68	68	No	18	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.03797**	**-98**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-3I (bg)	-0.02296	-79	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-40 (bg)**	**0.3111**	**91**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.3827**	**-108**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-4I (bg)	0.05782	58	87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.6409**	**-159**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	6	87	No	21	0	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	223	No	40	100	n/a	0.01	NP
Selenium (mg/L)	GWC-1R	0.0001112	87	152	No	31	41.94	n/a	0.01	NP
Selenium (mg/L)	YGWA-14S (bg)	0	39	92	No	22	68.18	n/a	0.01	NP
Selenium (mg/L)	**YGWA-17S (bg)**	**0**	**112**	**98**	**Yes**	**23**	**73.91**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-18I (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-18S (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-1D (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-1I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-20S (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-21I (bg)	0	43	105	No	24	91.67	n/a	0.01	NP
Selenium (mg/L)	YGWA-2I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-30I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-39 (bg)	0	5	81	No	20	95	n/a	0.01	NP
Selenium (mg/L)	YGWA-3D (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-3I (bg)	0	0	92	No	22	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-40 (bg)	0	-14	-81	No	20	45	n/a	0.01	NP
Selenium (mg/L)	YGWA-47 (bg)	0	23	53	No	15	86.67	n/a	0.01	NP
Selenium (mg/L)	YGWA-4I (bg)	0	9	105	No	24	91.67	n/a	0.01	NP
Selenium (mg/L)	YGWA-5D (bg)	0	0	105	No	24	100	n/a	0.01	NP
Selenium (mg/L)	YGWA-5I (bg)	0	21	105	No	24	95.83	n/a	0.01	NP
Sulfate (mg/L)	**GWA-2 (bg)**	**12.89**	**88**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-1R	79.49	61	74	No	19	0	n/a	0.01	NP
Sulfate (mg/L)	**GWC-2R**	**29.48**	**101**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-5R	-8.504	-17	-74	No	19	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-14S (bg)	-0.04669	-29	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0	5	87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-18I (bg)**	**-0.1191**	**-112**	**-87**	**Yes**	**21**	**19.05**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-18S (bg)	-0.112	-71	-87	No	21	9.524	n/a	0.01	NP

Appendix I, II, & III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:00 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Sulfate (mg/L)	**YGWA-1D (bg)**	**0.8971**	**154**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.06392	-13	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	54	87	No	21	71.43	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.1972	-61	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-2I (bg)**	**1.209**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-30I (bg)	-0.03548	-33	-87	No	21	9.524	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-2.62**	**-107**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.2566**	**105**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-3I (bg)**	**1.155**	**119**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-7.156**	**-120**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-13.93**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.0251	16	87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-2.402**	**-162**	**-87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.08787**	**138**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GWA-2 (bg)	14.49	72	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	GWC-1R	137.4	61	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	**GWC-2R**	**57.54**	**107**	**74**	**Yes**	**19**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GWC-4R	30.49	50	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	GWC-5R	20.39	18	74	No	19	0	n/a	0.01	NP
TDS (mg/L)	GWC-6R	-96.36	-55	-74	No	19	0	n/a	0.01	NP
TDS (mg/L)	YGWA-14S (bg)	0.8282	30	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-17S (bg)	2.283	46	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-18I (bg)	-1.363	-33	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-18S (bg)	1.344	26	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-1D (bg)	2.147	46	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-1I (bg)	-0.3083	-7	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-20S (bg)	2.575	48	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	**YGWA-21I (bg)**	**9.895**	**91**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-2I (bg)	-0.5892	-11	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-30I (bg)	1.322	26	87	No	21	9.524	n/a	0.01	NP
TDS (mg/L)	**YGWA-39 (bg)**	**27.52**	**85**	**68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-3D (bg)	1.819	27	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-3I (bg)	1.056	15	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-40 (bg)	-6.016	-59	-68	No	18	0	n/a	0.01	NP
TDS (mg/L)	**YGWA-47 (bg)**	**-12.84**	**-95**	**-68**	**Yes**	**18**	**0**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-4I (bg)	0.6864	14	87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-5D (bg)	-9.186	-72	-87	No	21	0	n/a	0.01	NP
TDS (mg/L)	YGWA-5I (bg)	-0.77	-20	-87	No	21	0	n/a	0.01	NP

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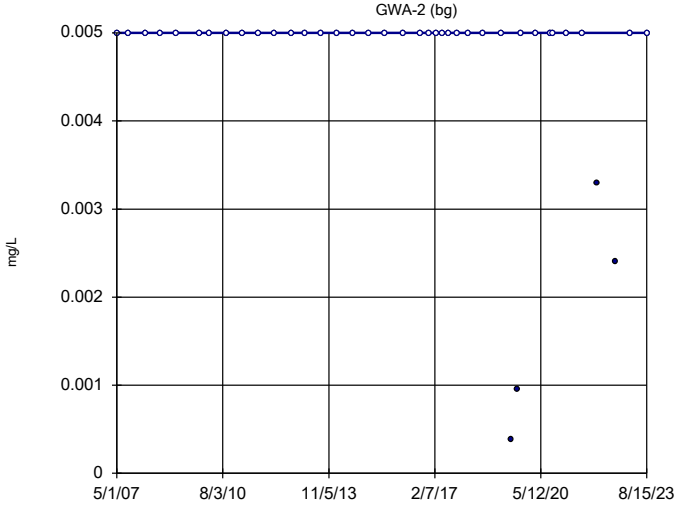
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 40

Slope = 0 units per year.

Mann-Kendall statistic = -100
critical = -223

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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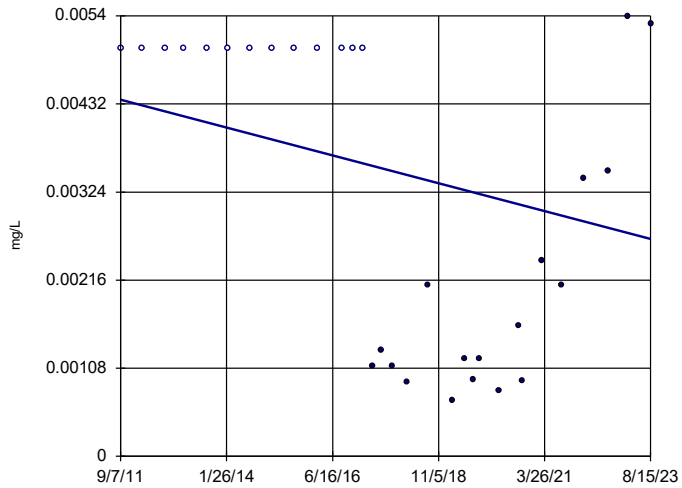
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-5R



n = 31

Slope = -0.000143 units per year.

Mann-Kendall statistic = -106
critical = -152

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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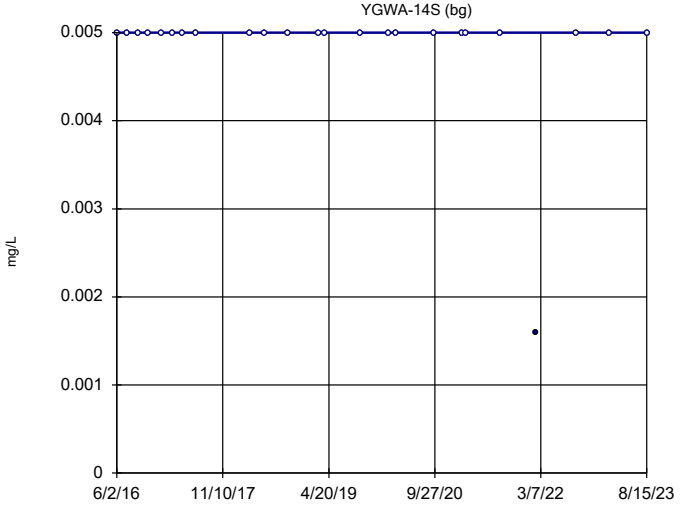
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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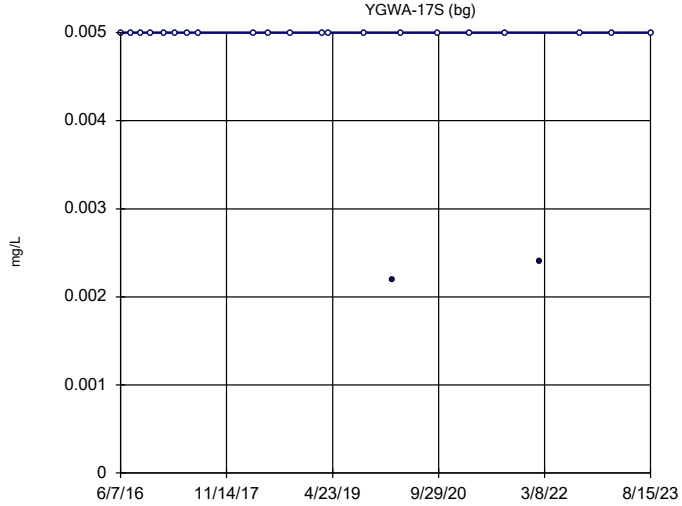
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 23

Slope = 0 units per year.

Mann-Kendall statistic = -21
critical = -98

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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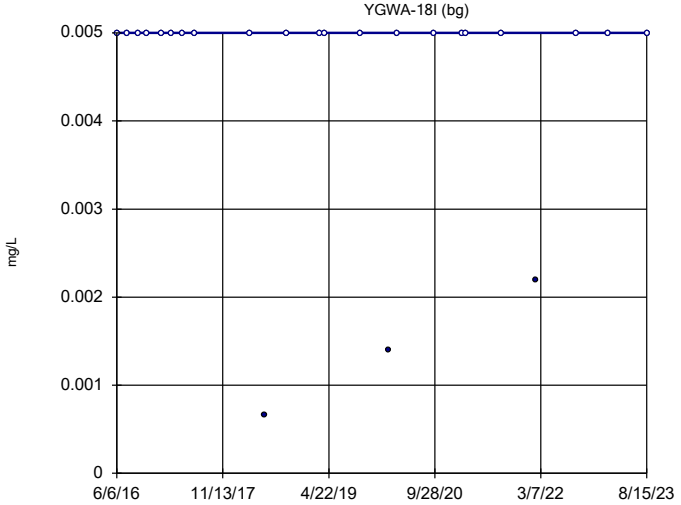
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -14
critical = -105

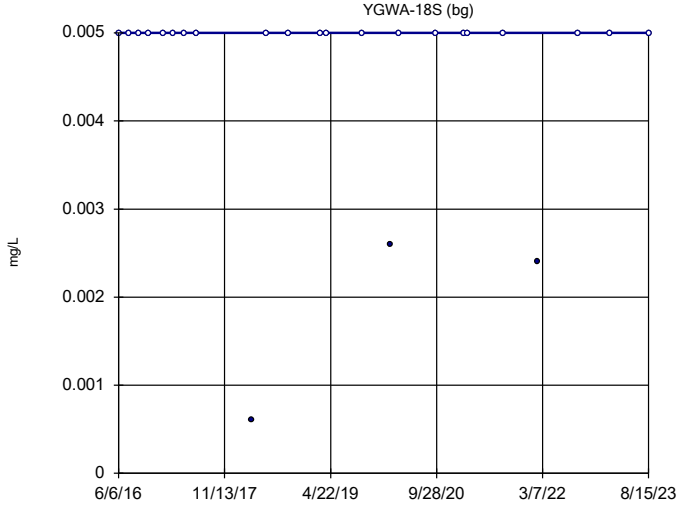
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -14
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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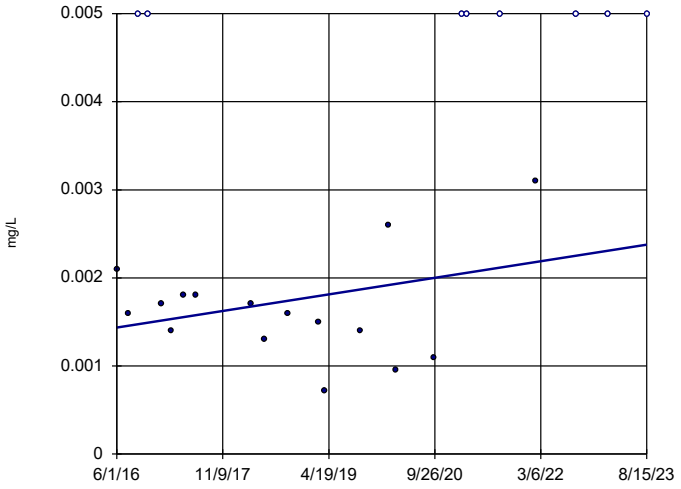
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 24

Slope = 0.0001308 units per year.

Mann-Kendall statistic = 40
critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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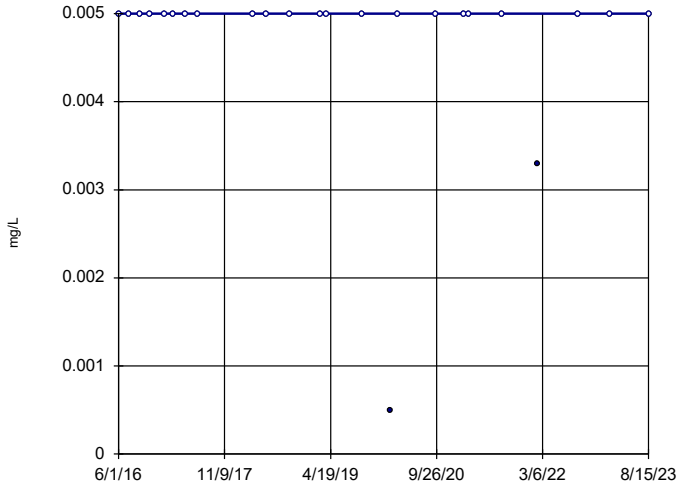
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -21
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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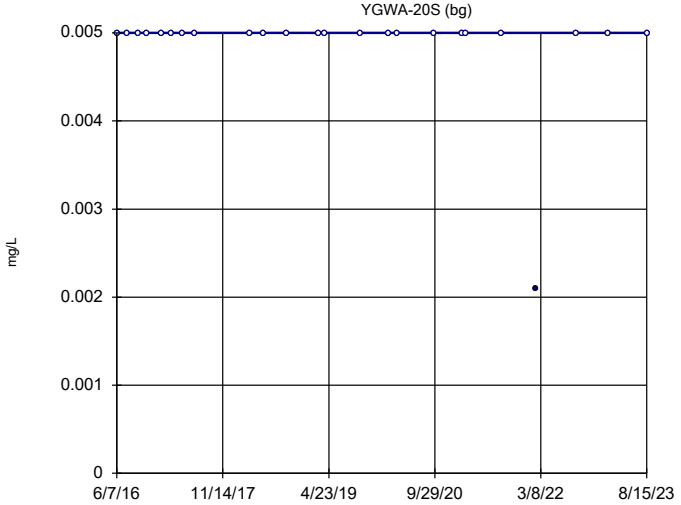
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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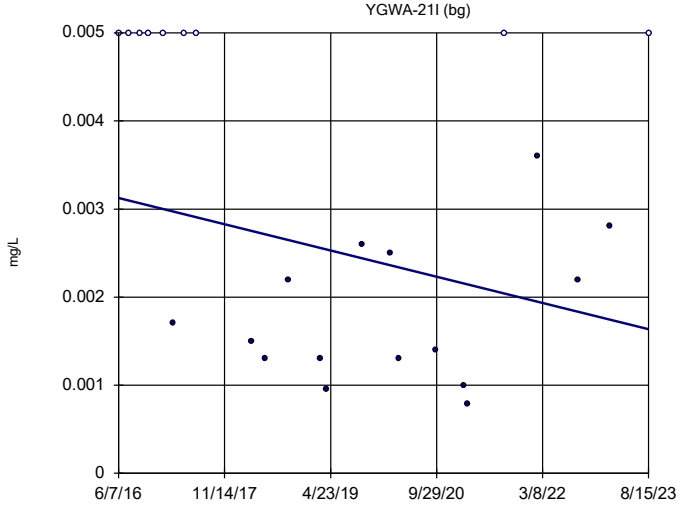
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 24

Slope = -0.0002072 units per year.

Mann-Kendall statistic = -68
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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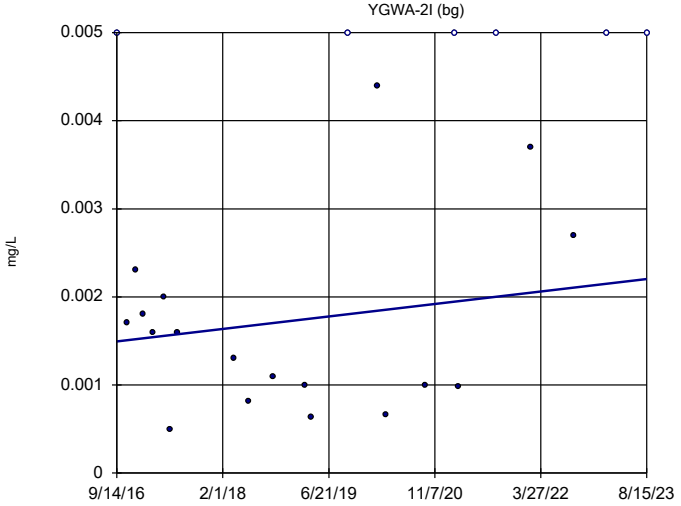
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 24

Slope = 0.0001028 units per year.

Mann-Kendall statistic = 29
critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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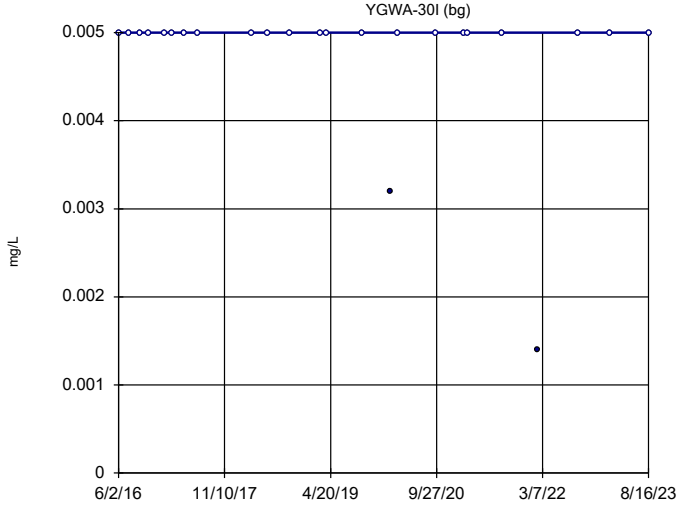
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -23
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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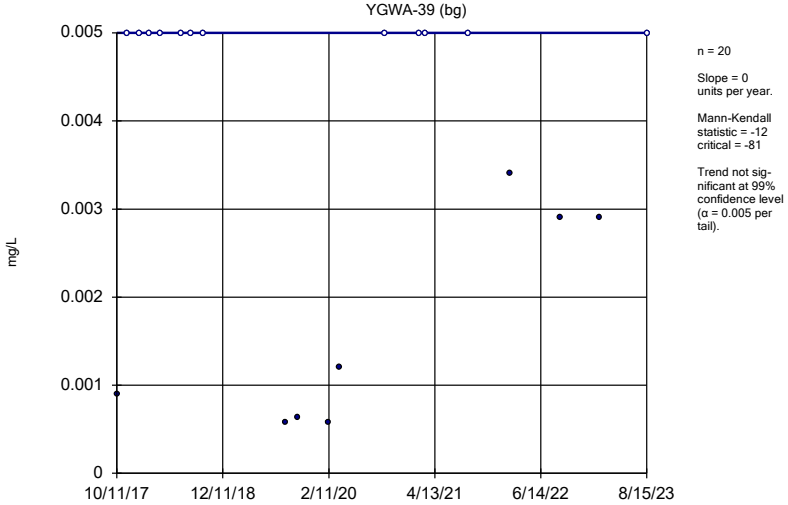
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -12 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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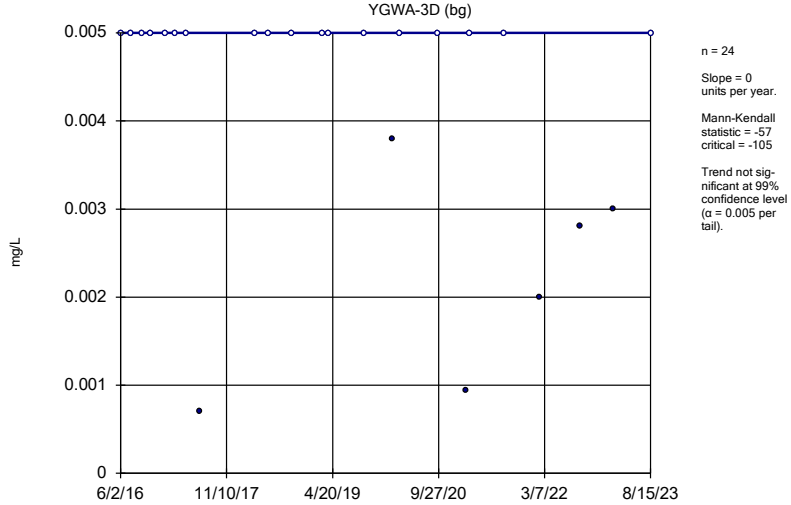
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -57 critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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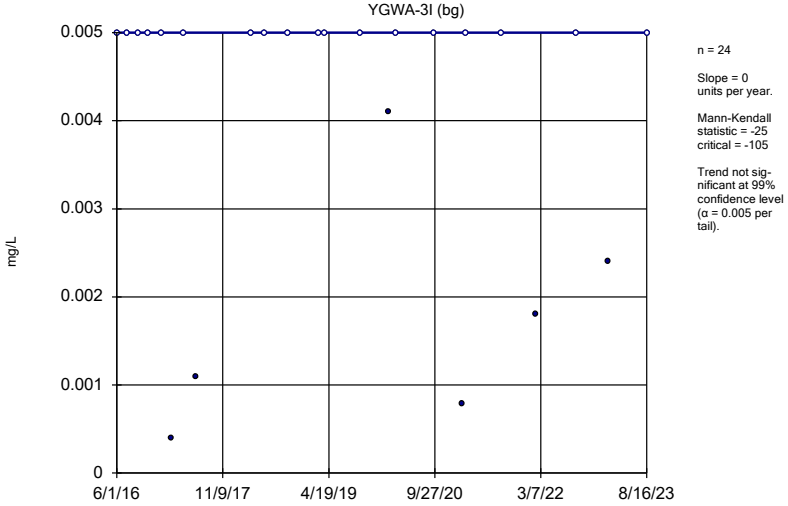
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -25 critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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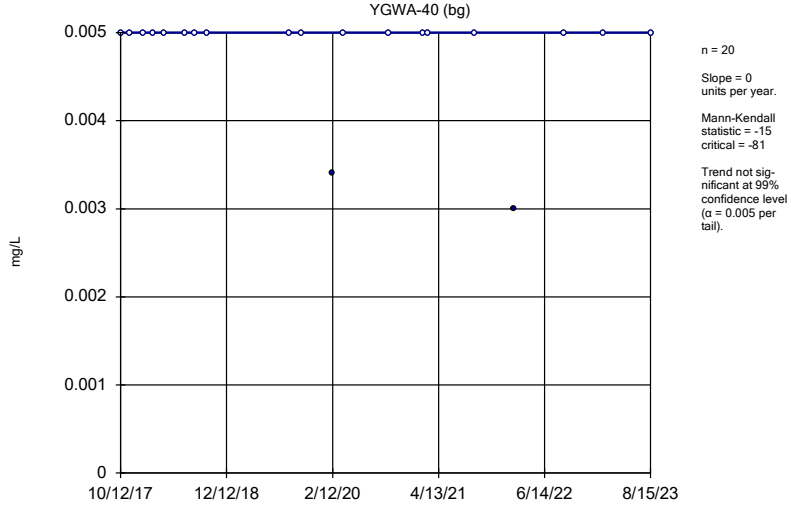
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -15 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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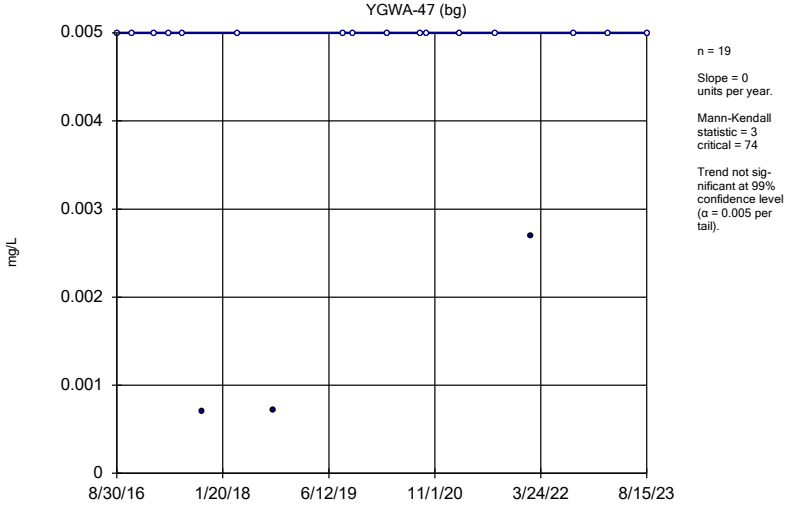
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 3
critical = 74

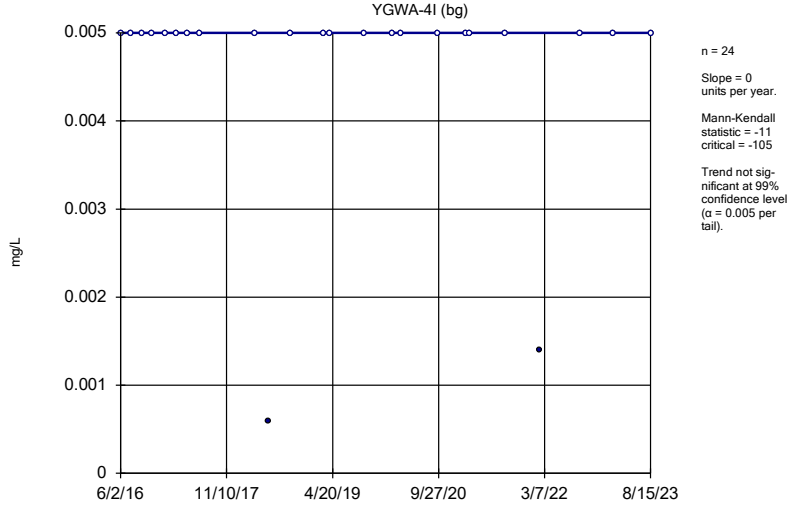
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -105

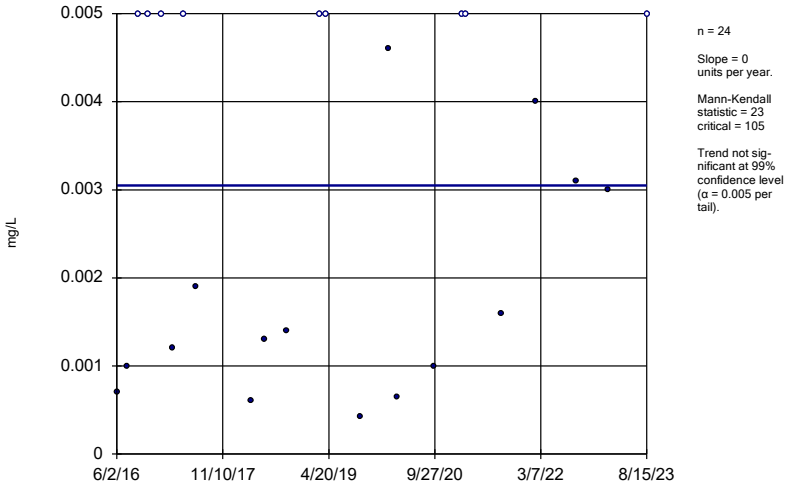
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:56 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 23
critical = 105

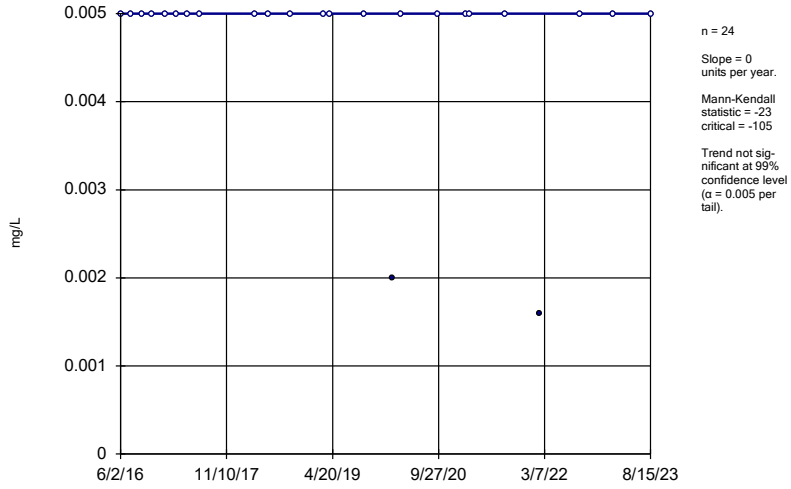
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = -23
critical = -105

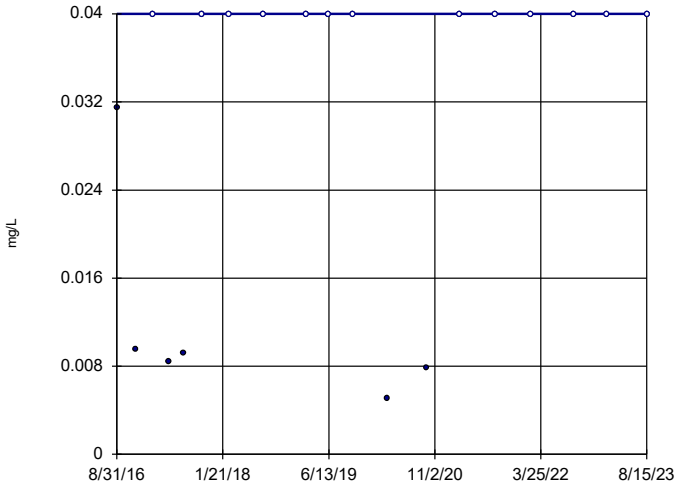
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Arsenic Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 0 units per year.

Mann-Kendall statistic = 35
critical = 74

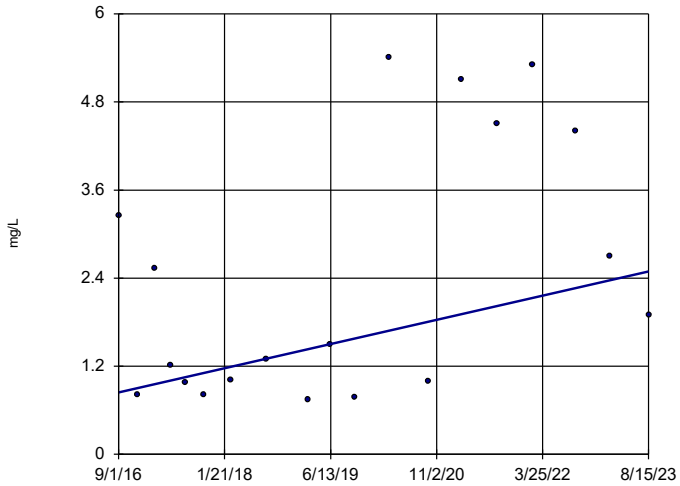
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

GWC-4R



n = 19

Slope = 0.237 units per year.

Mann-Kendall statistic = 41
critical = 74

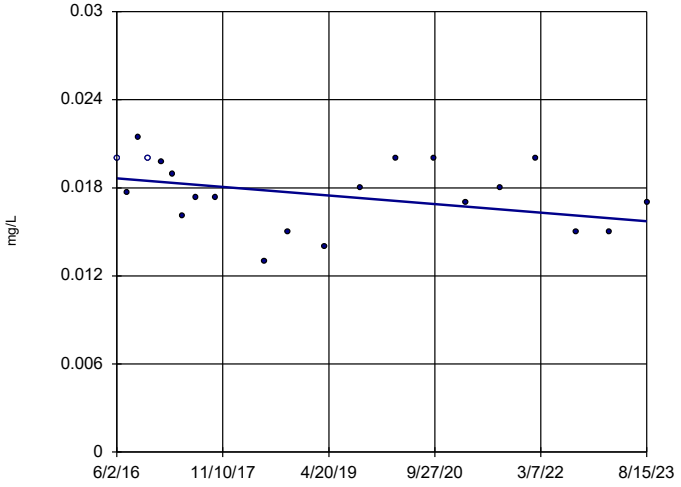
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = -0.0004045 units per year.

Mann-Kendall statistic = -54
critical = -87

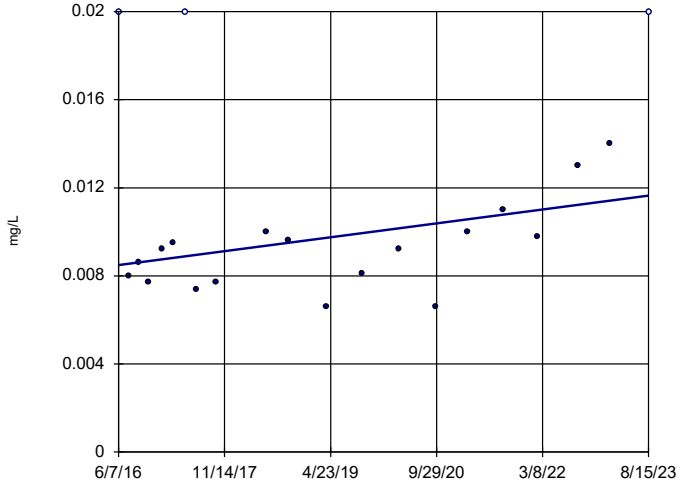
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 0.0004386 units per year.

Mann-Kendall statistic = 55
critical = 87

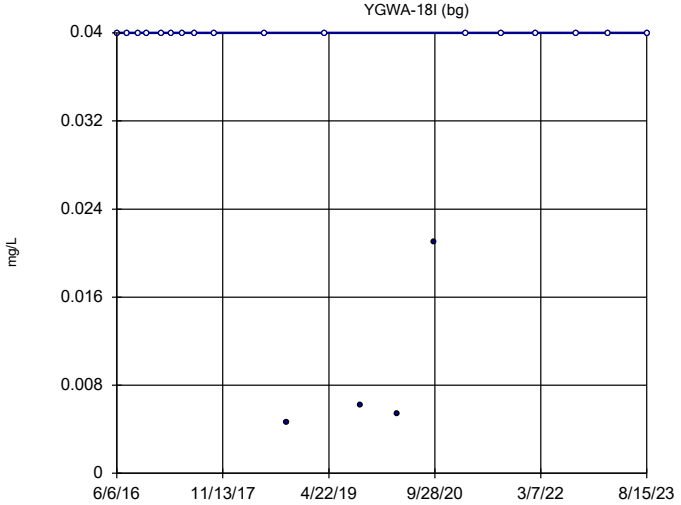
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -14
critical = -87

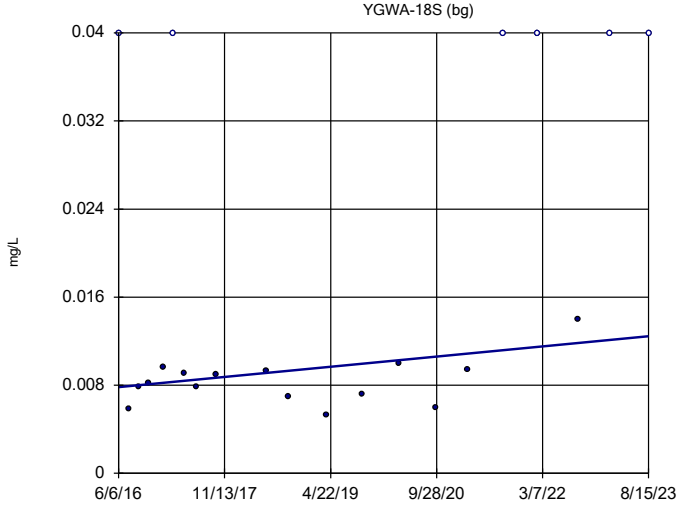
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = 0.0006414 units per year.

Mann-Kendall statistic = 54
critical = 87

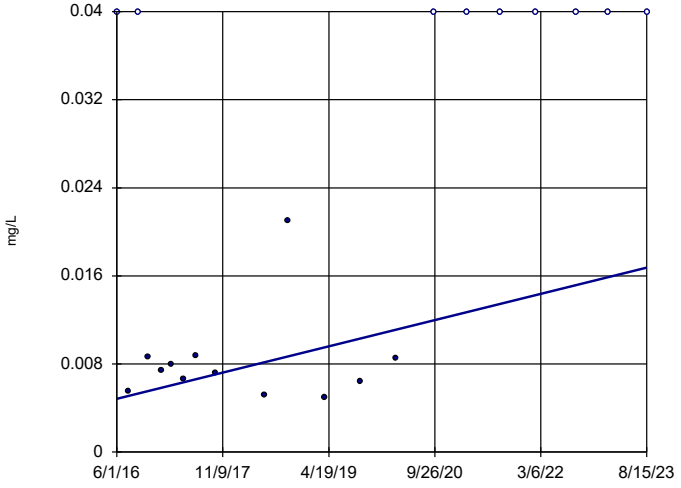
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0.001652 units per year.

Mann-Kendall statistic = 58
critical = 87

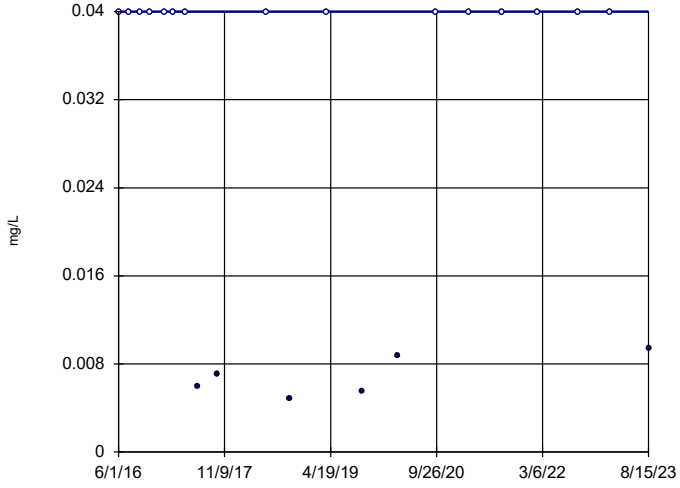
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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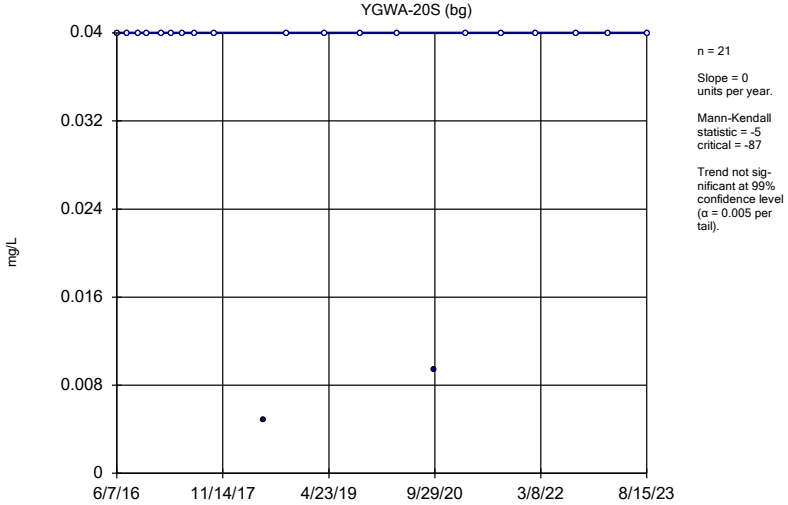
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -5
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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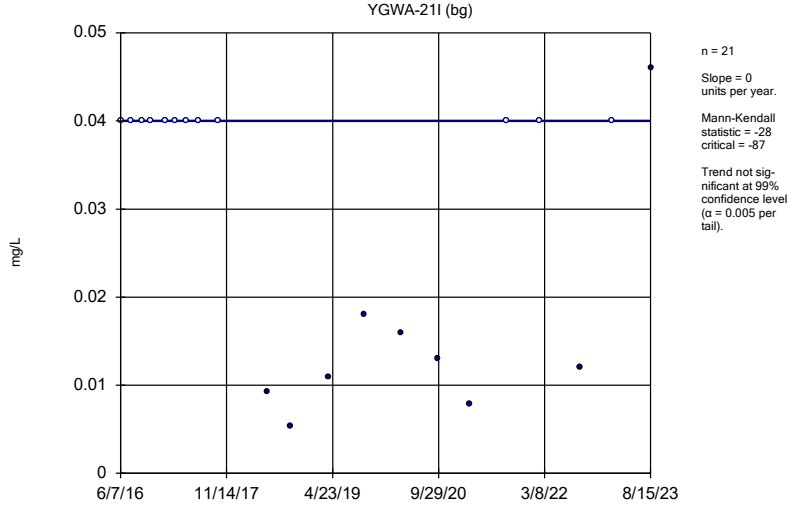
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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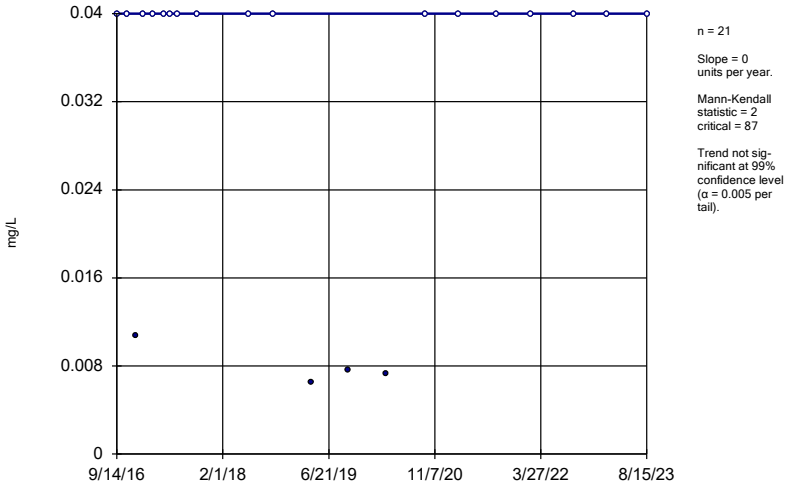
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 2
critical = 87

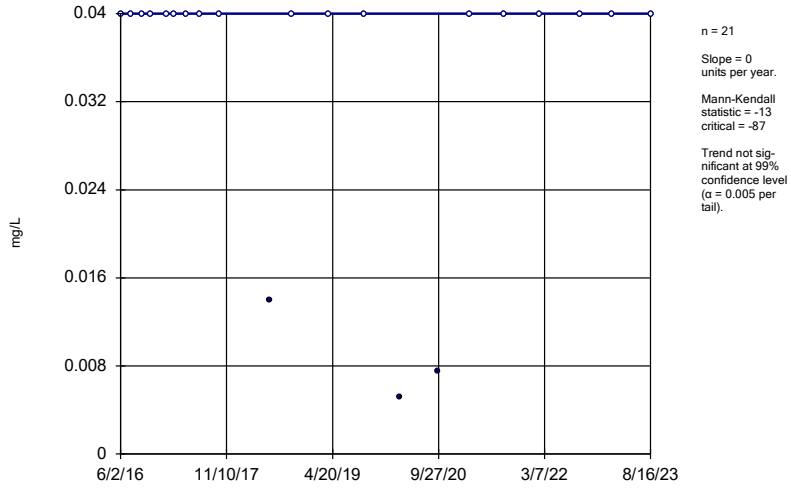
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -87

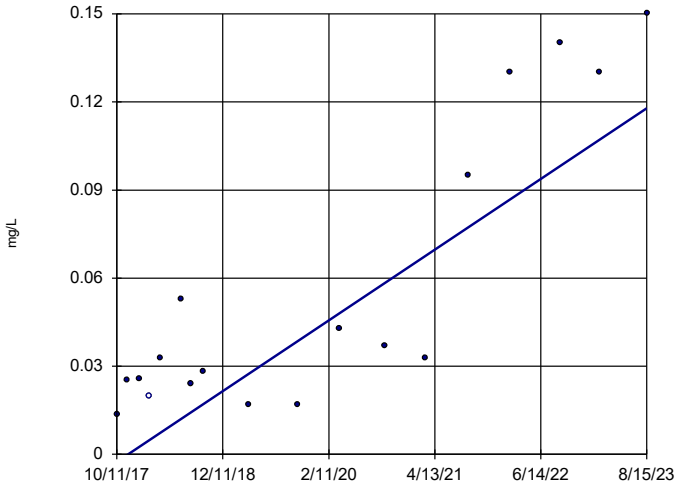
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 0.02058 units per year.

Mann-Kendall statistic = 92
critical = 68

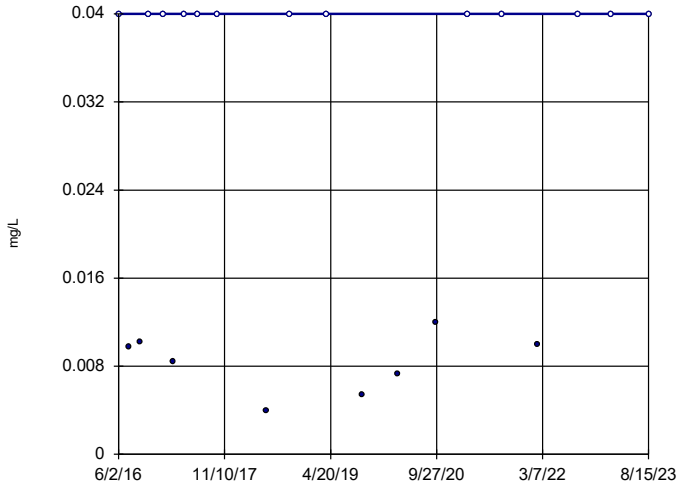
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 16
critical = 87

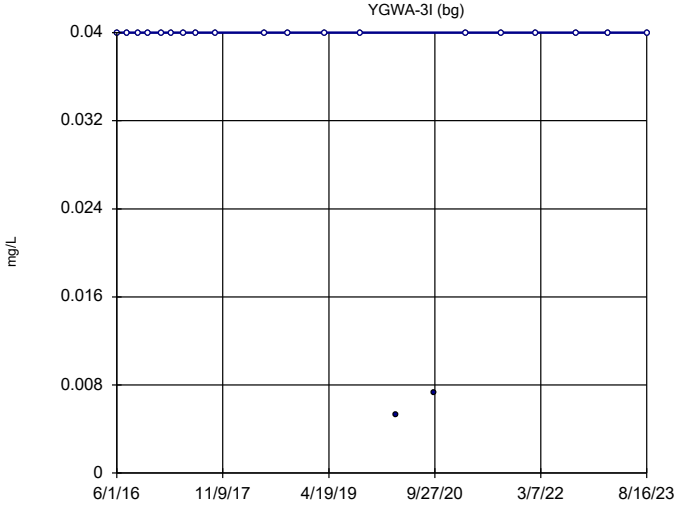
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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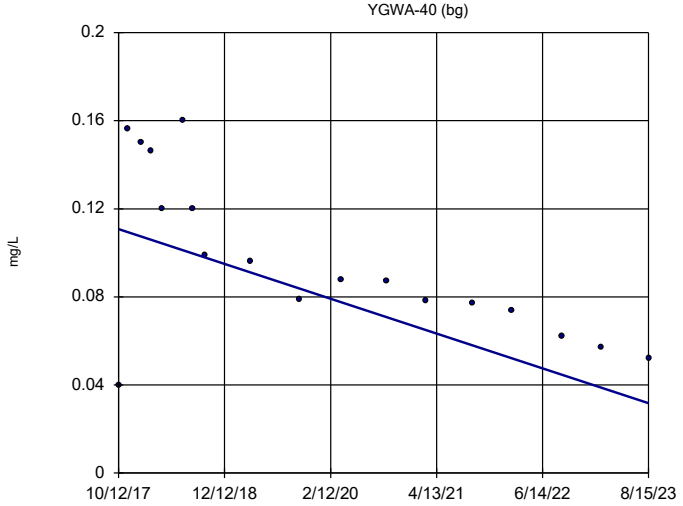
Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -0.01353 units per year.

Mann-Kendall statistic = -106
critical = -68

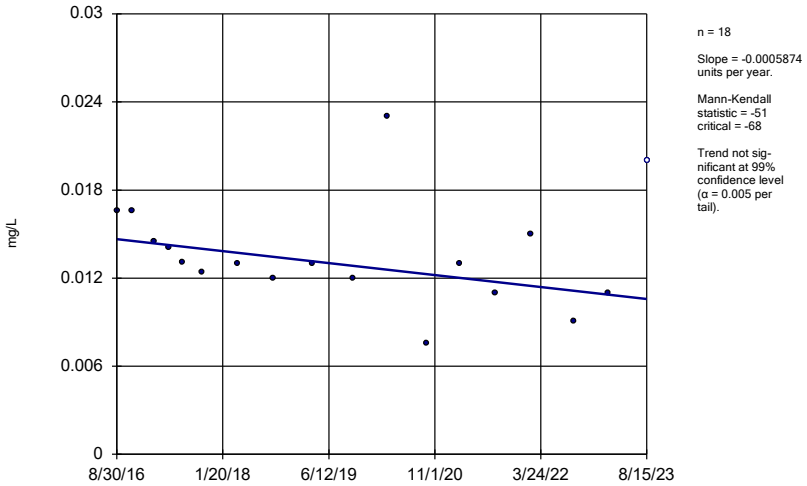
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -0.0005874 units per year.

Mann-Kendall statistic = -51
critical = -68

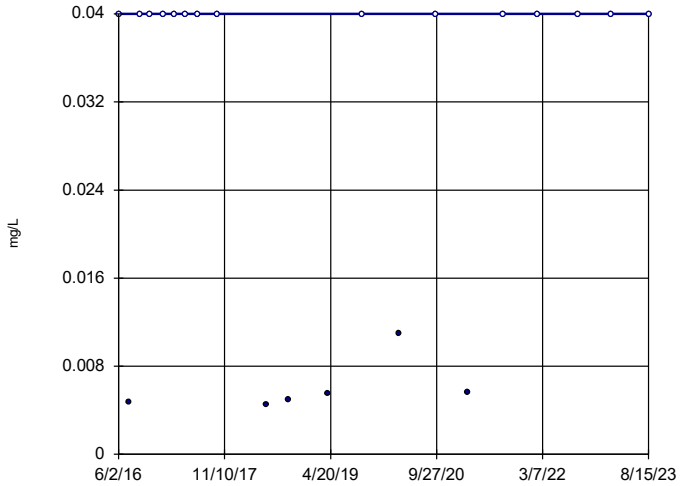
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 13
critical = 87

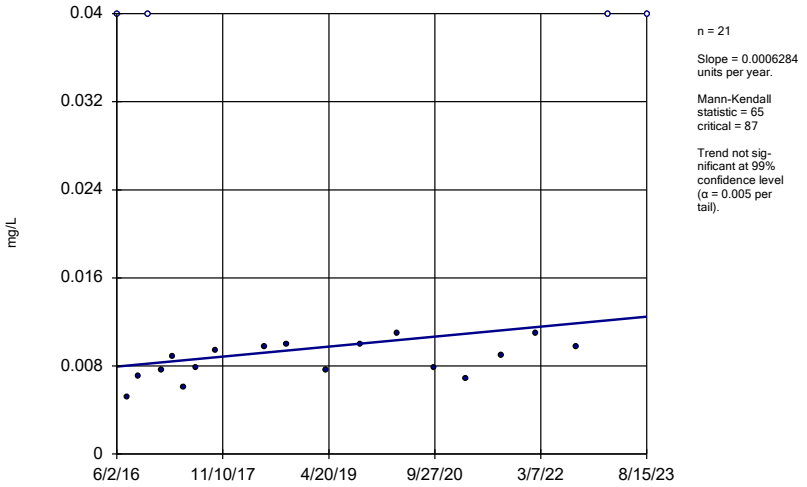
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = 0.0006284 units per year.

Mann-Kendall statistic = 65
critical = 87

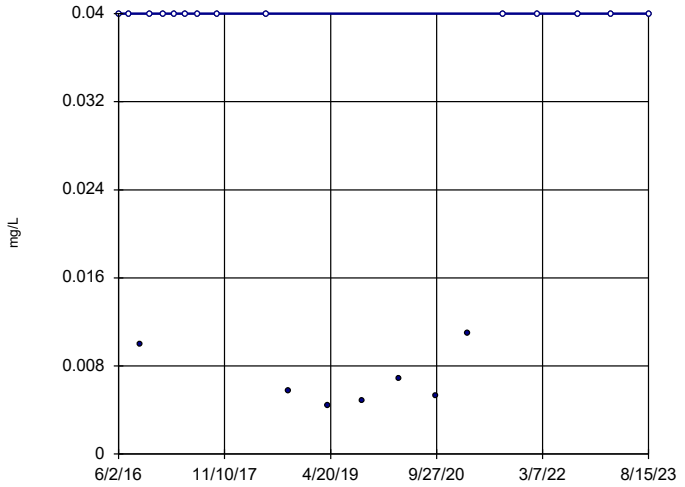
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -87

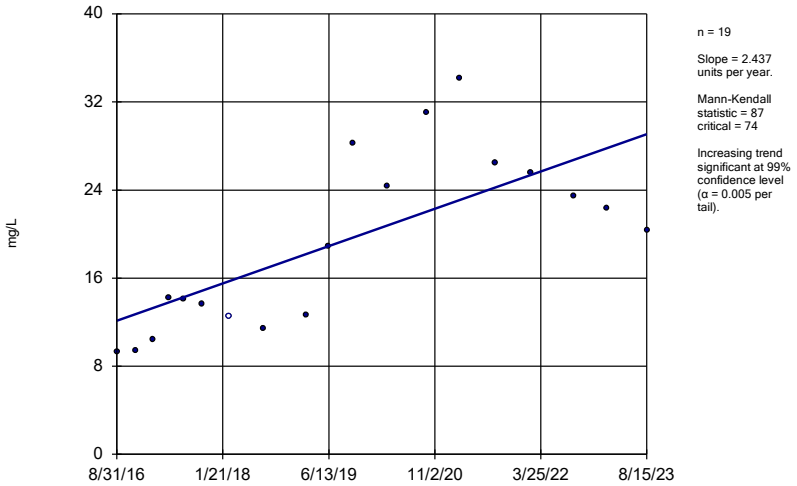
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 2.437 units per year.

Mann-Kendall statistic = 87 critical = 74

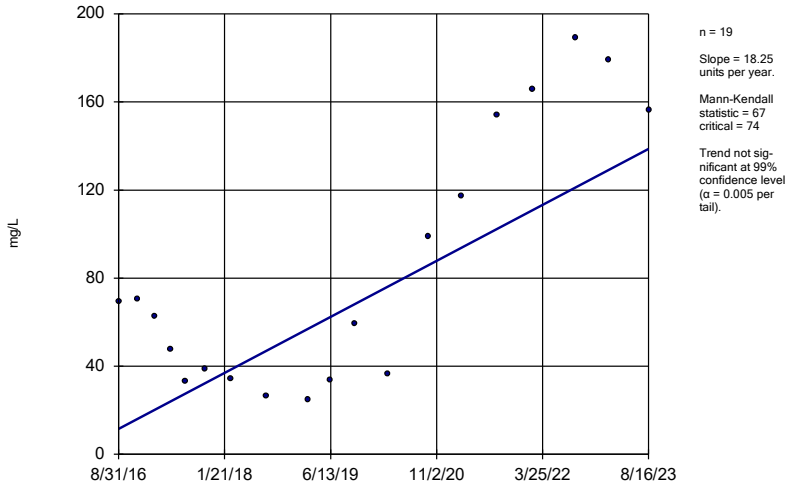
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

GWC-1R



n = 19

Slope = 18.25 units per year.

Mann-Kendall statistic = 67 critical = 74

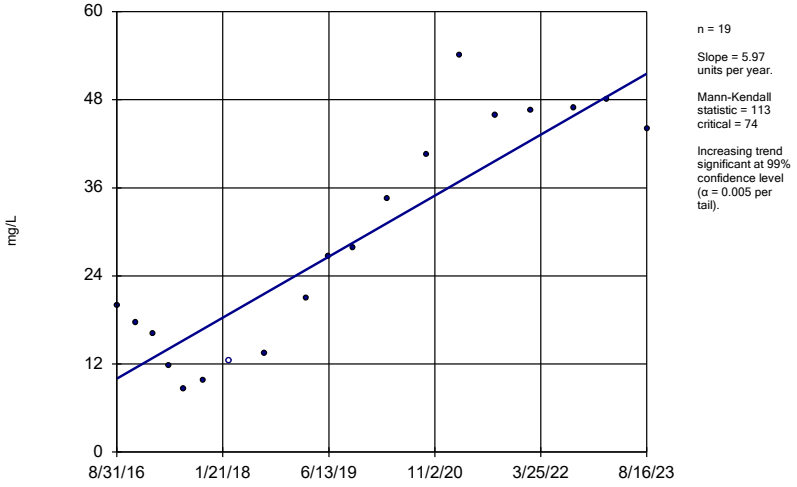
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-2R



n = 19

Slope = 5.97 units per year.

Mann-Kendall statistic = 113 critical = 74

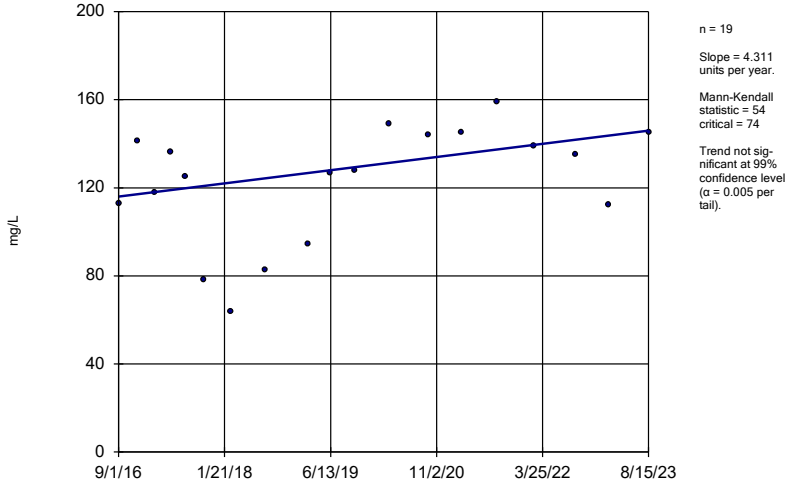
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

GWC-5R



n = 19

Slope = 4.311 units per year.

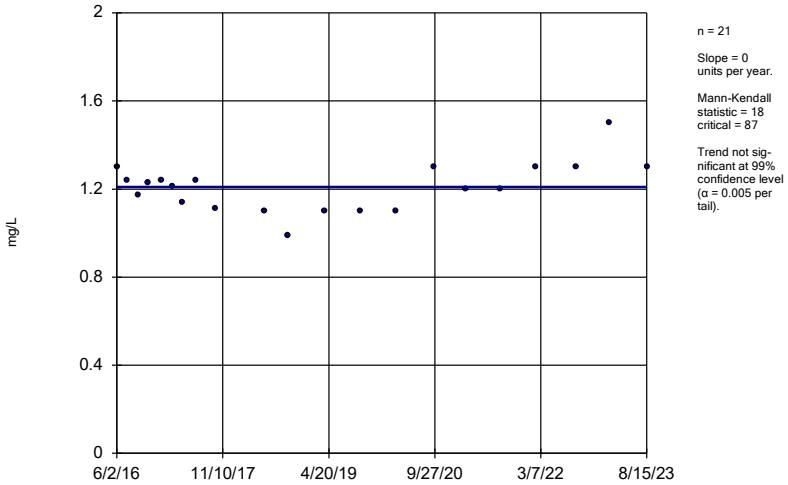
Mann-Kendall statistic = 54 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 18 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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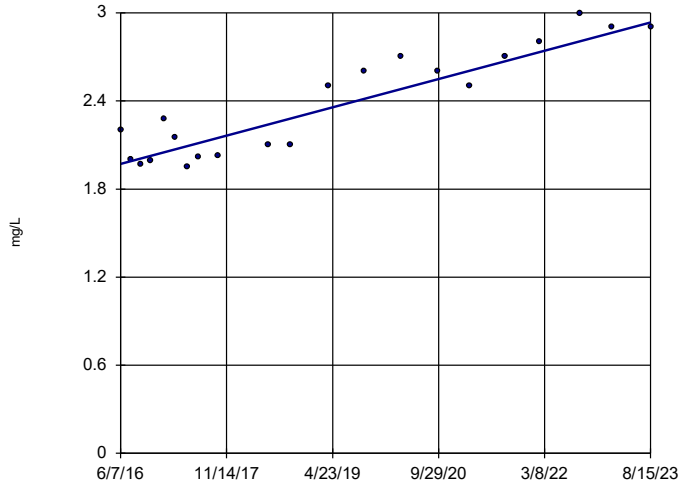
Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 0.134 units per year.

Mann-Kendall statistic = 143 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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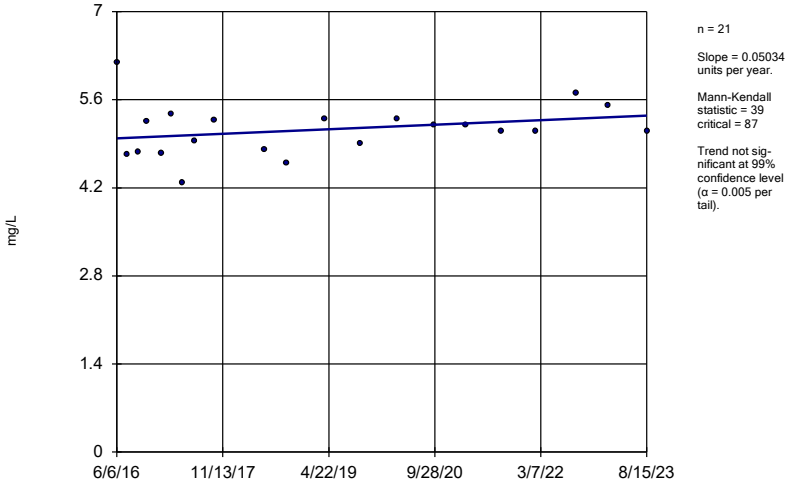
Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = 0.05034 units per year.

Mann-Kendall statistic = 39 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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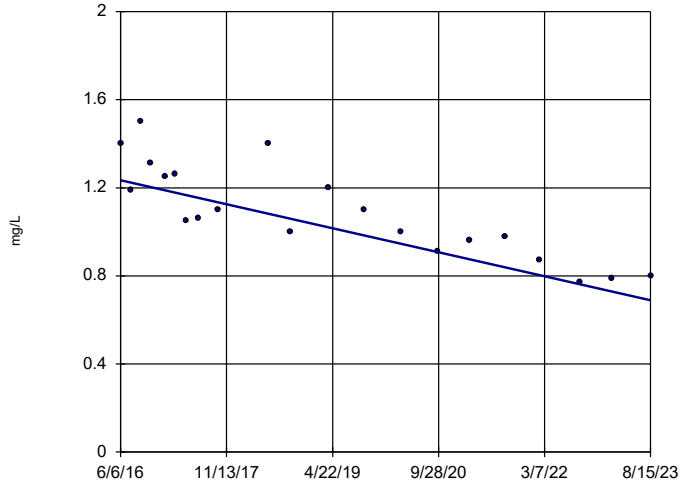
Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = -0.0757 units per year.

Mann-Kendall statistic = -147 critical = -87

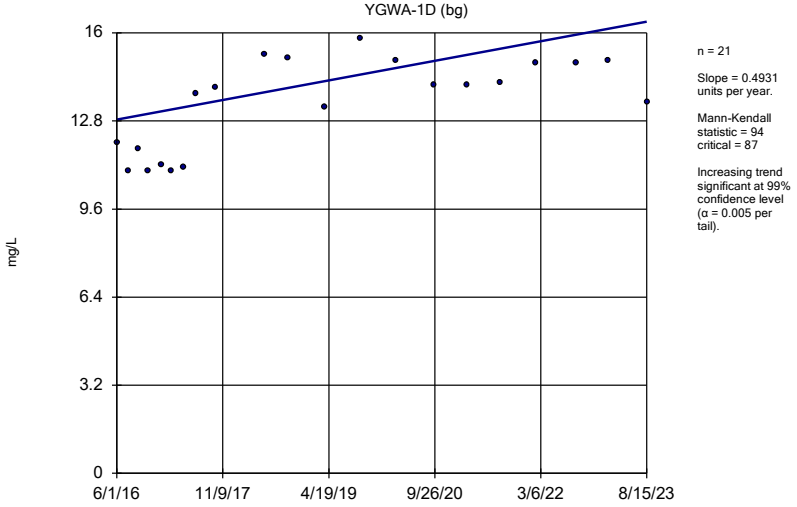
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0.4931 units per year.

Mann-Kendall statistic = 94 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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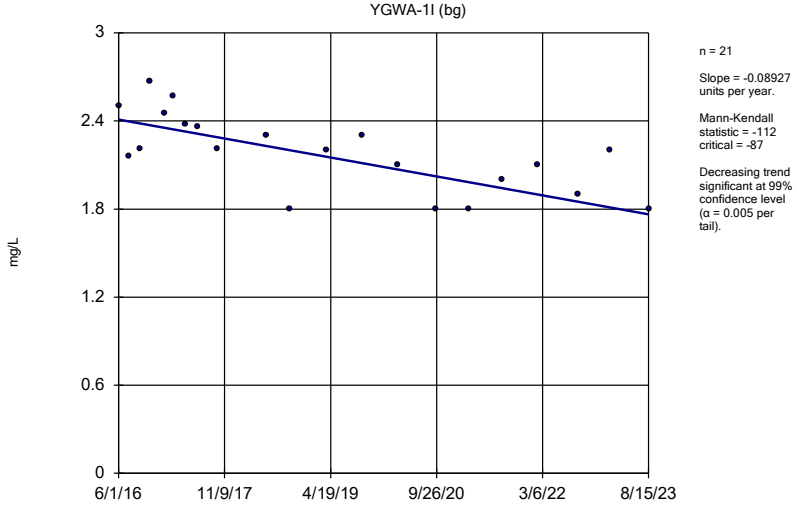
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = -0.08927 units per year.

Mann-Kendall statistic = -112 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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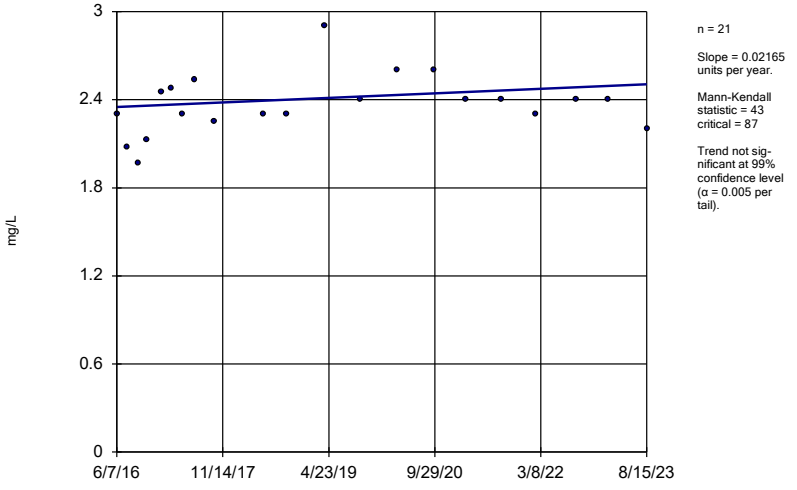
Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 0.02165 units per year.

Mann-Kendall statistic = 43 critical = 87

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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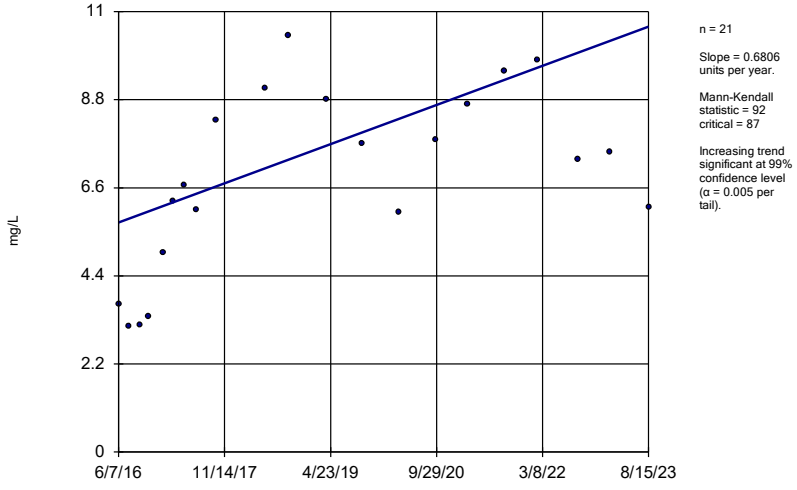
Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = 0.6806 units per year.

Mann-Kendall statistic = 92 critical = 87

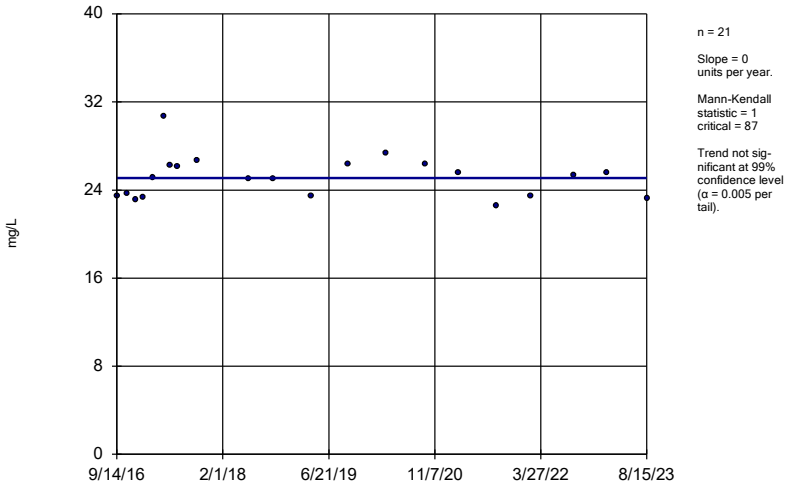
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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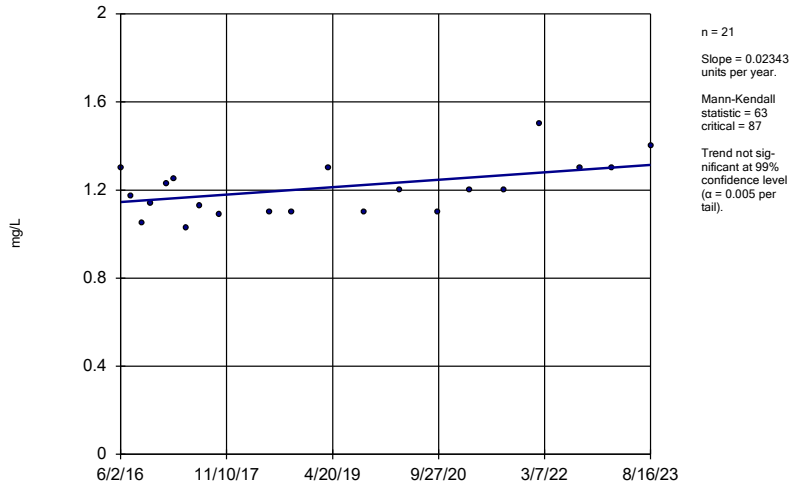
Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = 0.02343 units per year.

Mann-Kendall statistic = 63 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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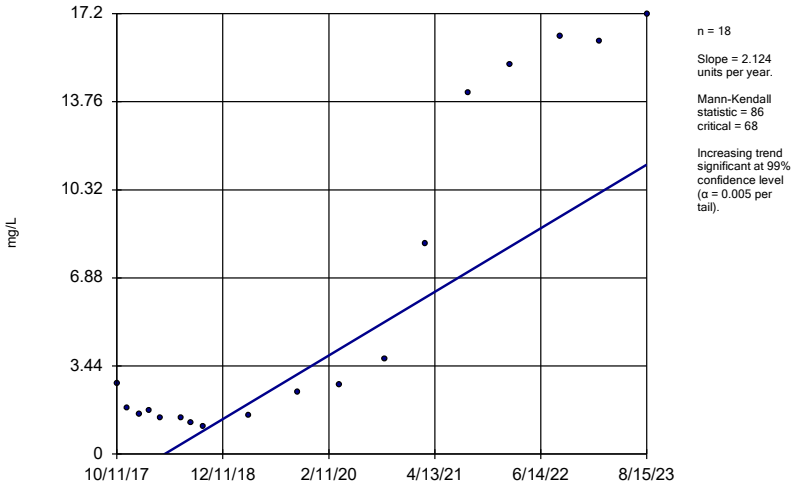
Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 2.124 units per year.

Mann-Kendall statistic = 86 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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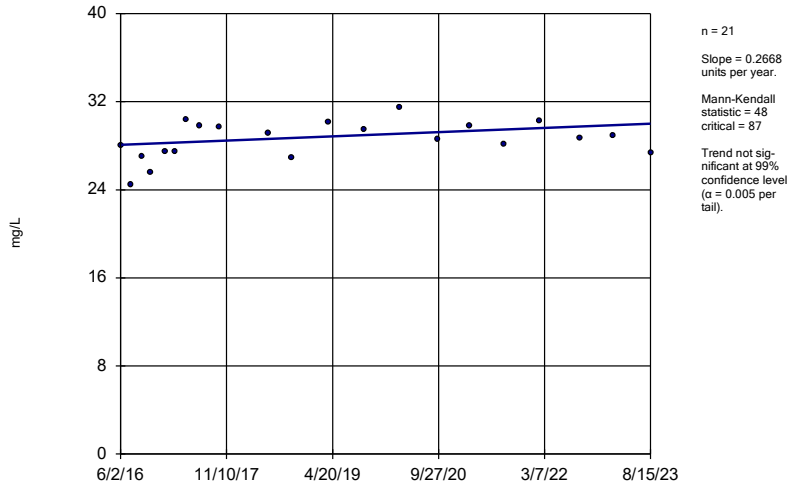
Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 0.2668 units per year.

Mann-Kendall statistic = 48 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

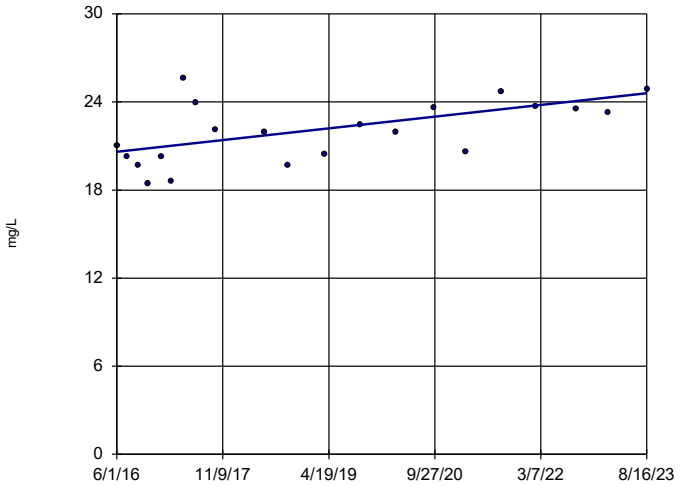
Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 0.5543 units per year.

Mann-Kendall statistic = 85 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

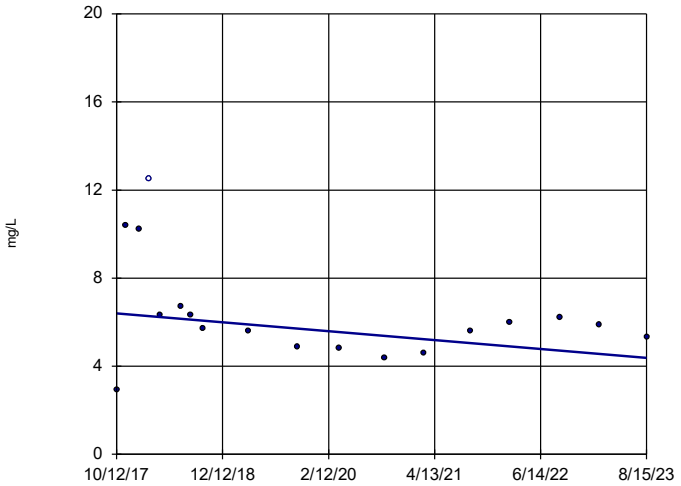
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -0.3452 units per year.

Mann-Kendall statistic = -49 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

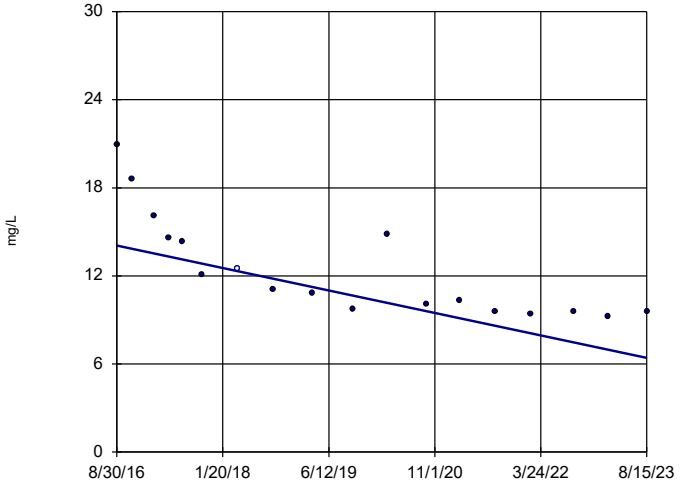
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -1.099 units per year.

Mann-Kendall statistic = -122 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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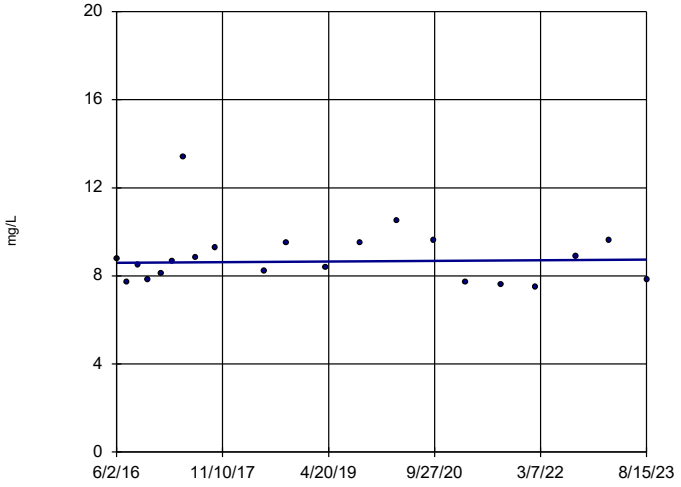
Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.02012 units per year.

Mann-Kendall statistic = 12 critical = 87

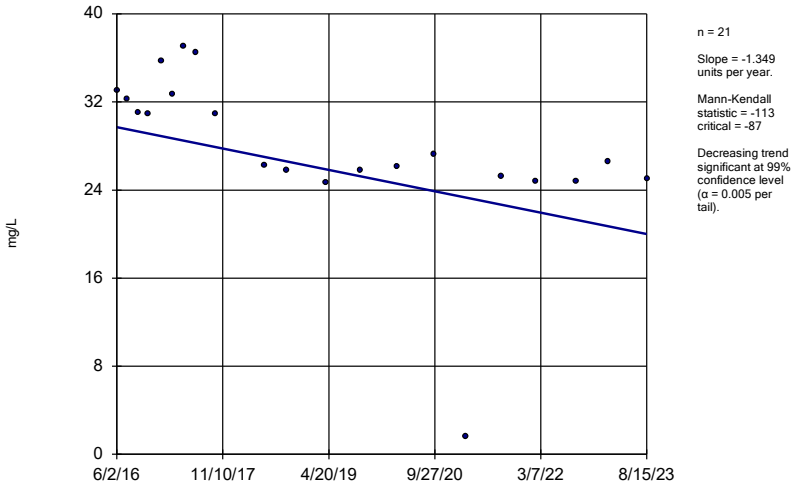
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -1.349 units per year.

Mann-Kendall statistic = -113 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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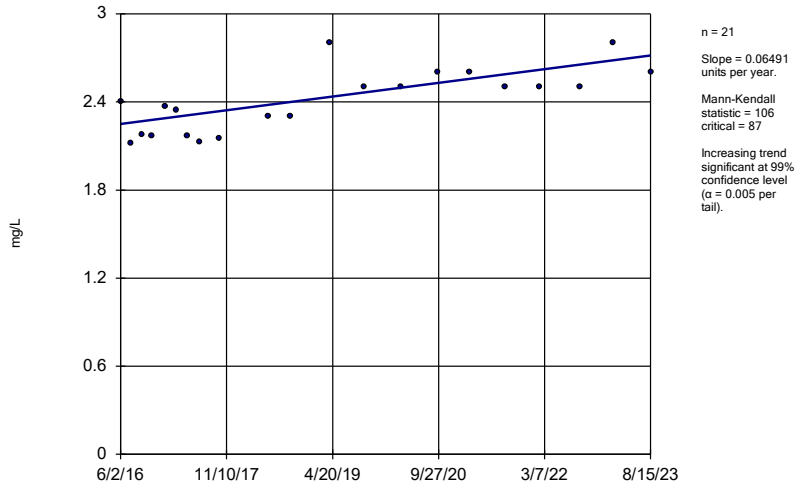
Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0.06491 units per year.

Mann-Kendall statistic = 106 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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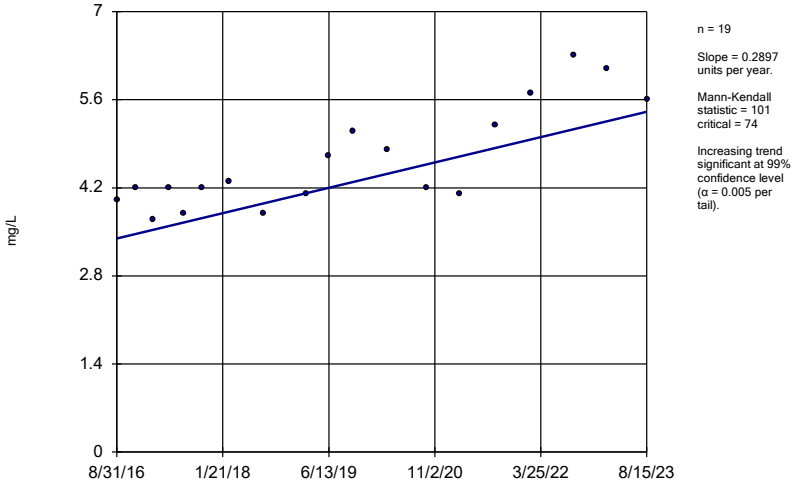
Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 0.2897 units per year.

Mann-Kendall statistic = 101 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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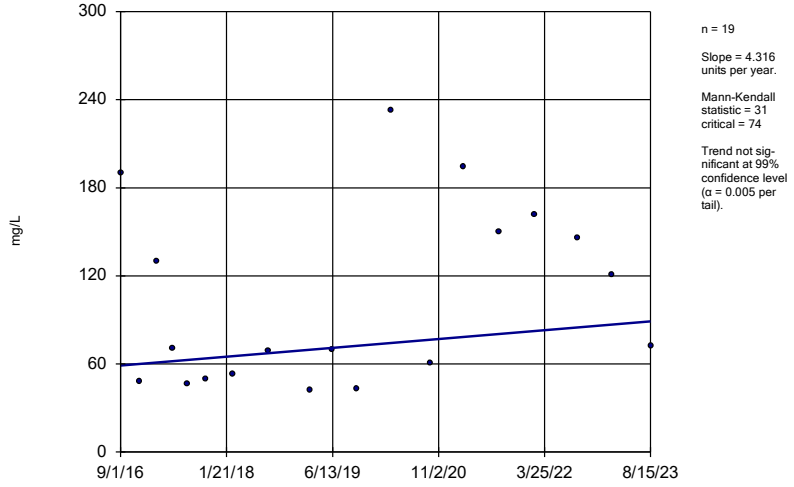
Sen's Slope Estimator

GWC-4R



n = 19

Slope = 4.316 units per year.

Mann-Kendall statistic = 31 critical = 74

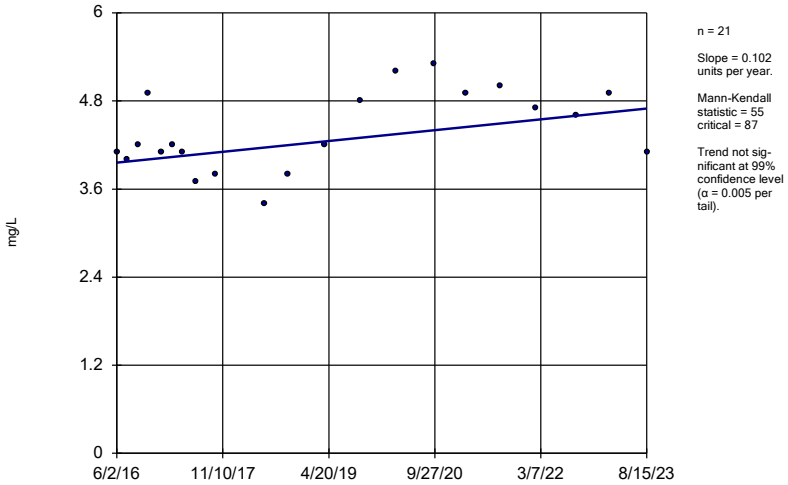
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = 0.102 units per year.

Mann-Kendall statistic = 55 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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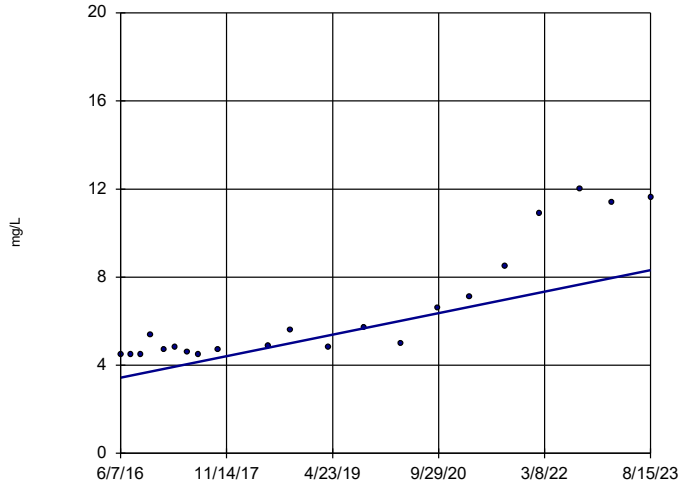
Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 0.6794 units per year.

Mann-Kendall statistic = 162 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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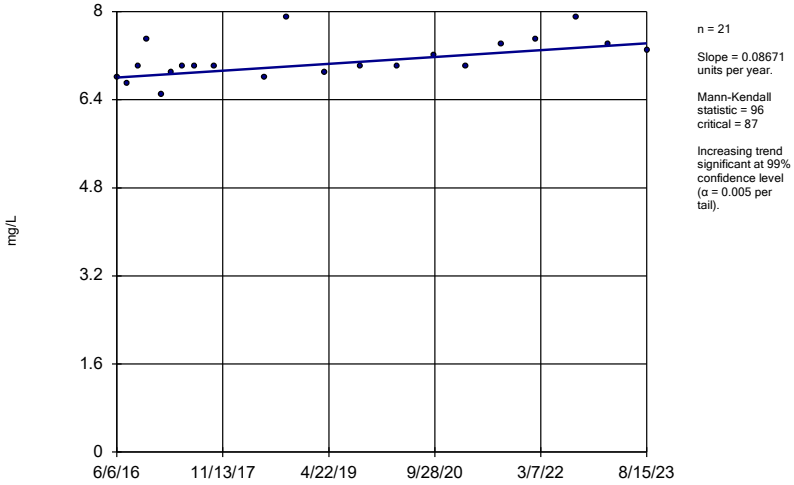
Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = 0.08671 units per year.

Mann-Kendall statistic = 96 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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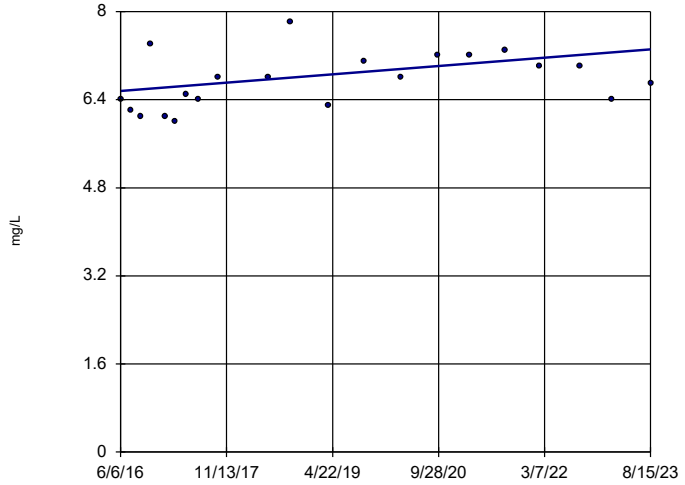
Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = 0.1048 units per year.

Mann-Kendall statistic = 63 critical = 87

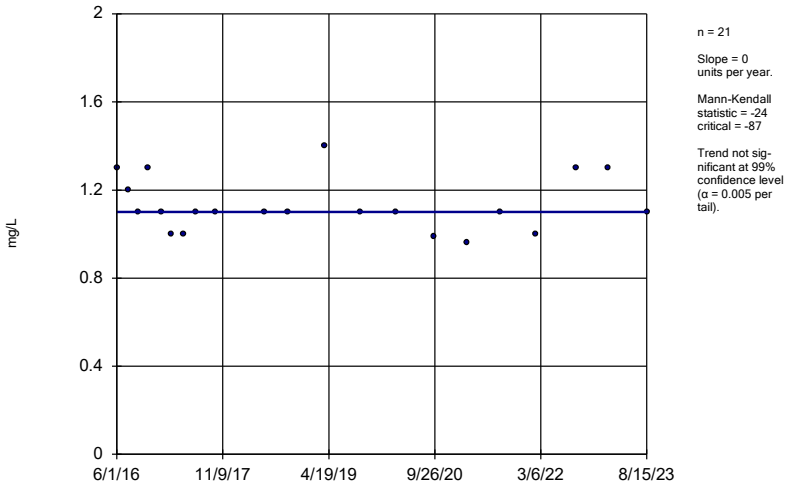
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -24 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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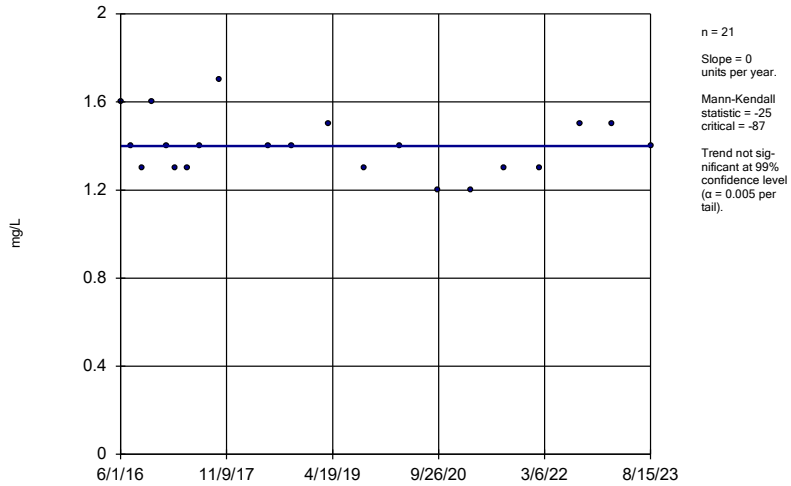
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -25 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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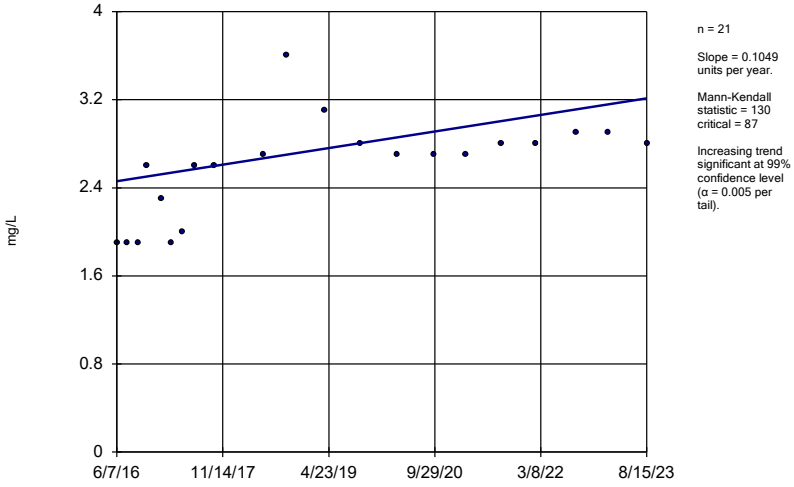
Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 0.1049 units per year.

Mann-Kendall statistic = 130 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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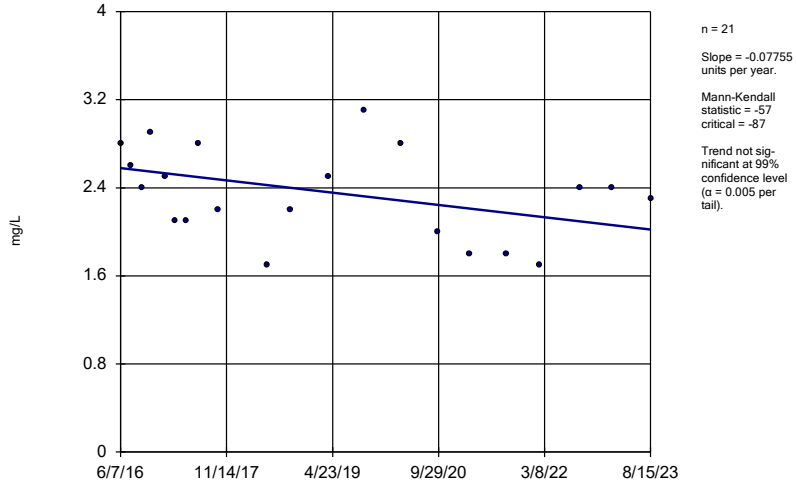
Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = -0.07755 units per year.

Mann-Kendall statistic = -57 critical = -87

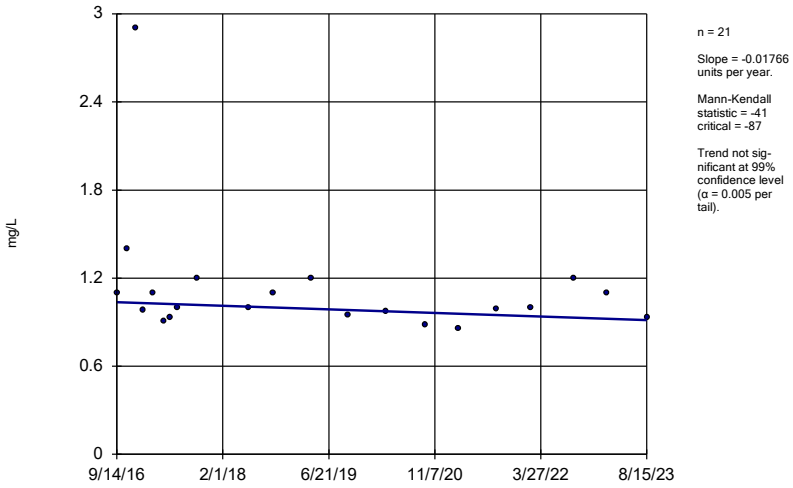
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = -0.01766 units per year.

Mann-Kendall statistic = -41
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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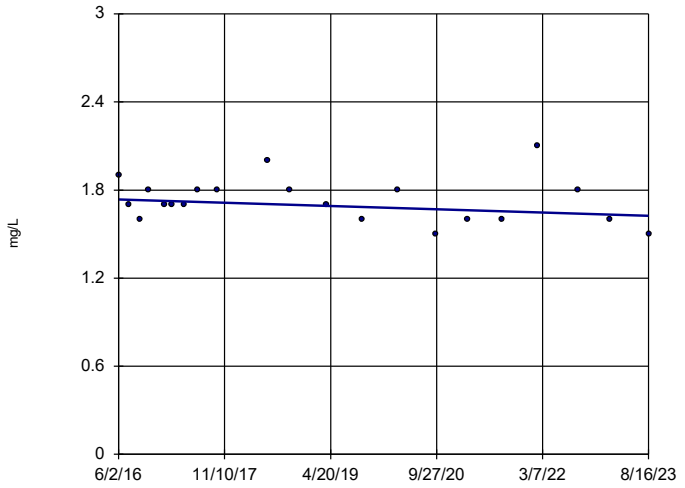
Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = -0.01564 units per year.

Mann-Kendall statistic = -40
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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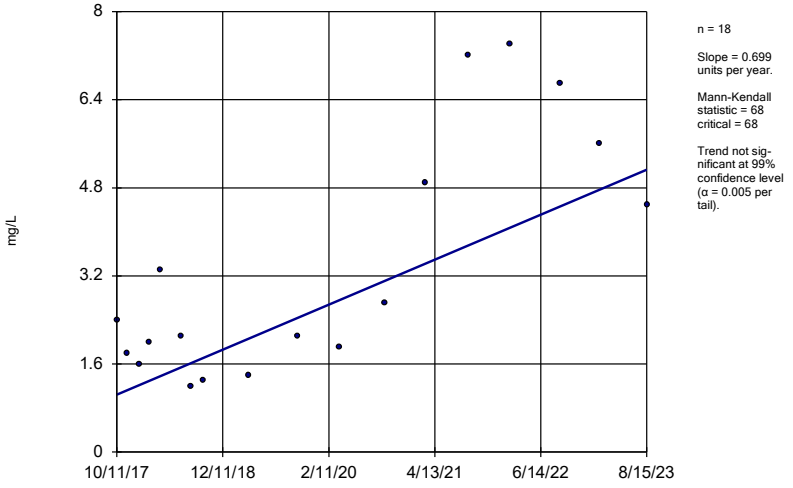
Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 0.699 units per year.

Mann-Kendall statistic = 68
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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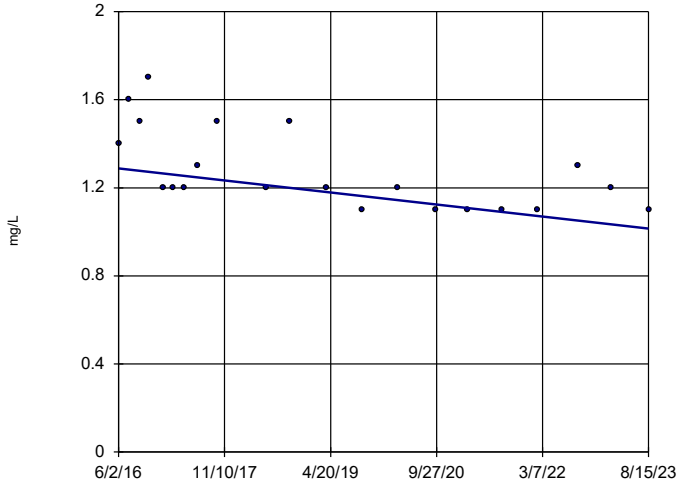
Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = -0.03797 units per year.

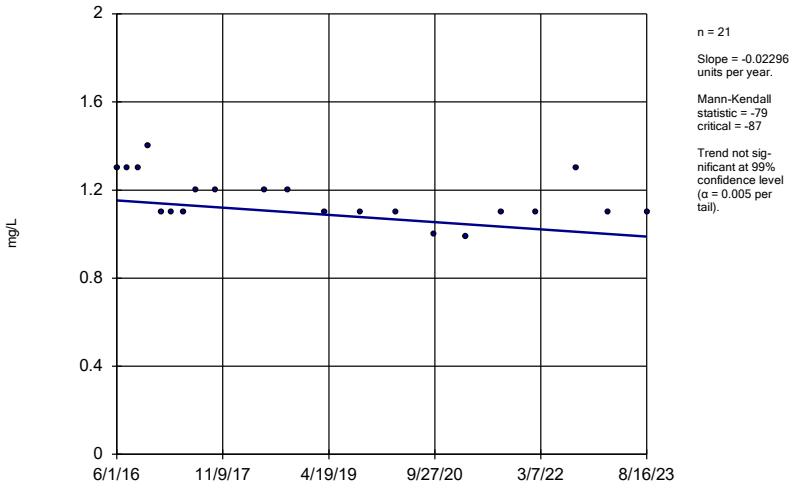
Mann-Kendall statistic = -98
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = -0.02296 units per year.

Mann-Kendall statistic = -79
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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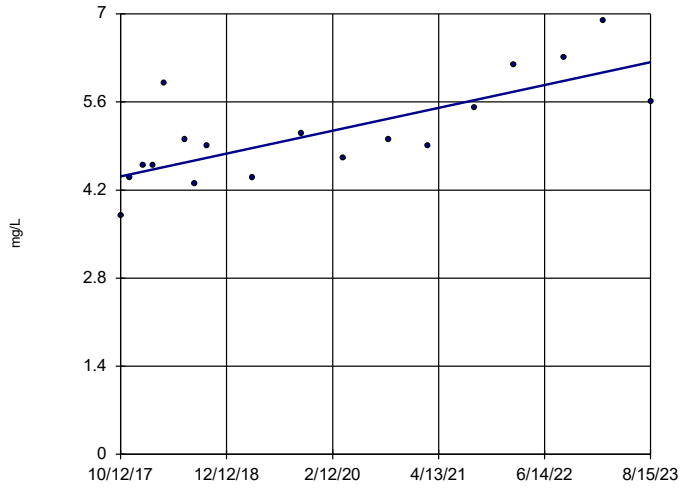
Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = 0.3111 units per year.

Mann-Kendall statistic = 91
critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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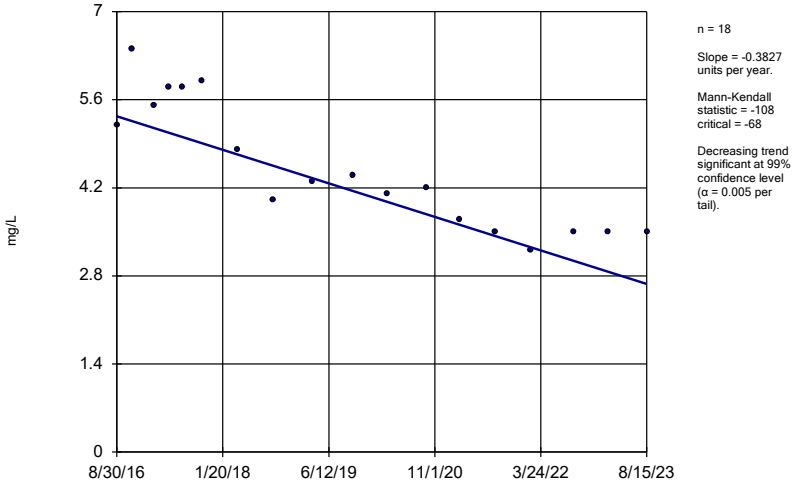
Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -0.3827 units per year.

Mann-Kendall statistic = -108
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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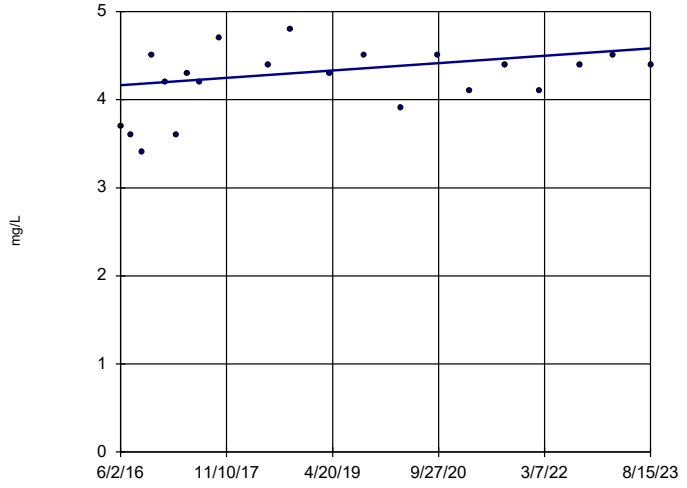
Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.05782 units per year.

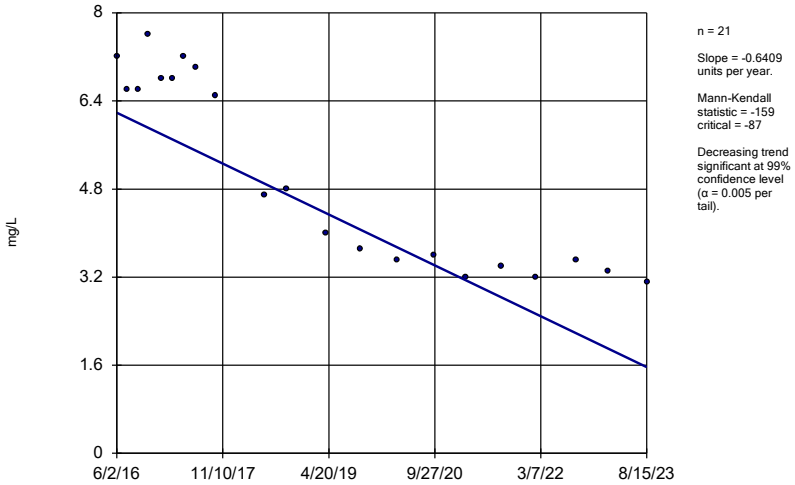
Mann-Kendall statistic = 58
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -0.6409 units per year.

Mann-Kendall statistic = -159 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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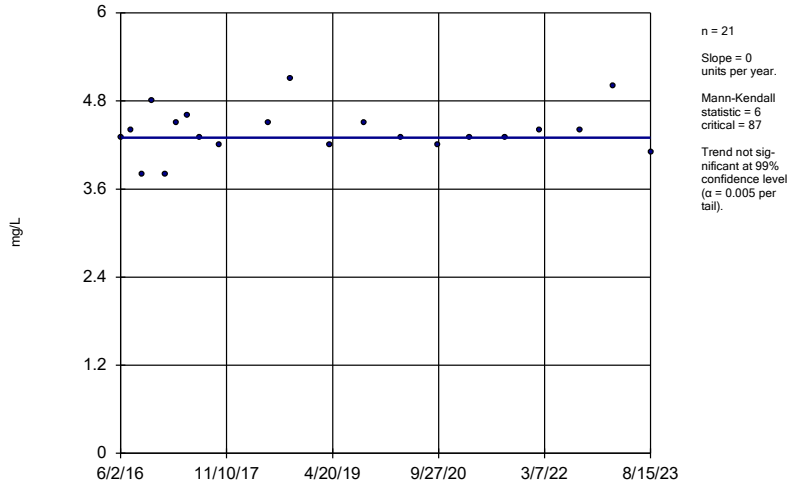
Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 6 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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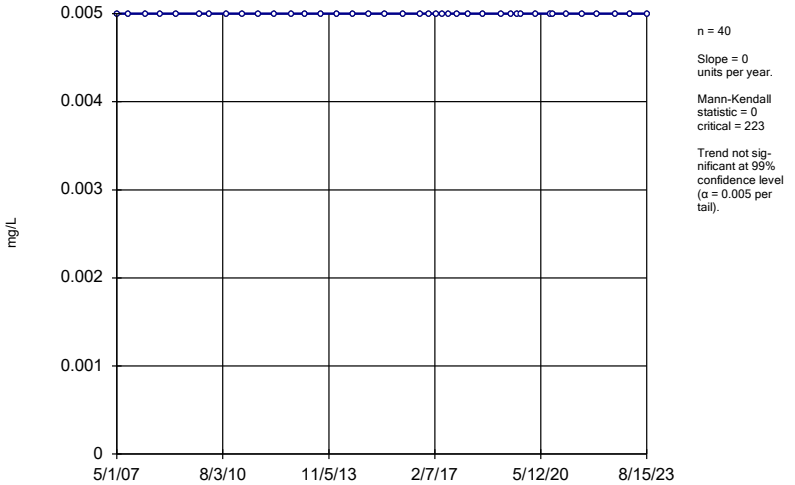
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 40

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 223

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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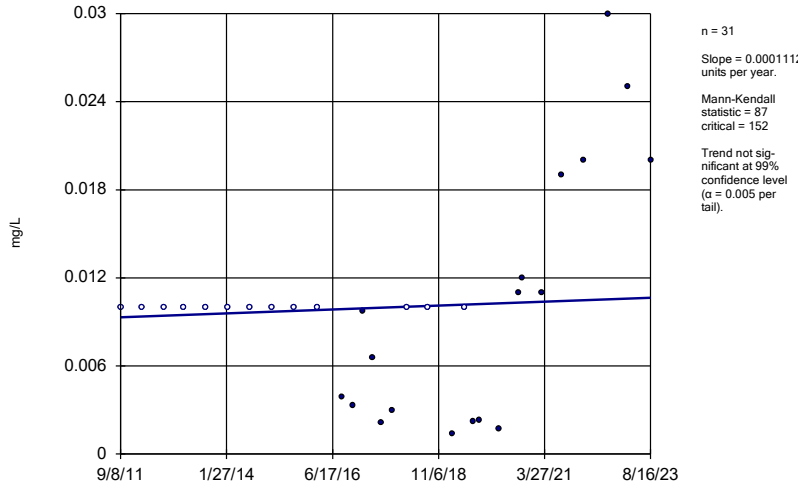
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-1R



n = 31

Slope = 0.0001112 units per year.

Mann-Kendall statistic = 87 critical = 152

Trend not significant at 99% confidence level (α = 0.005 per tail).

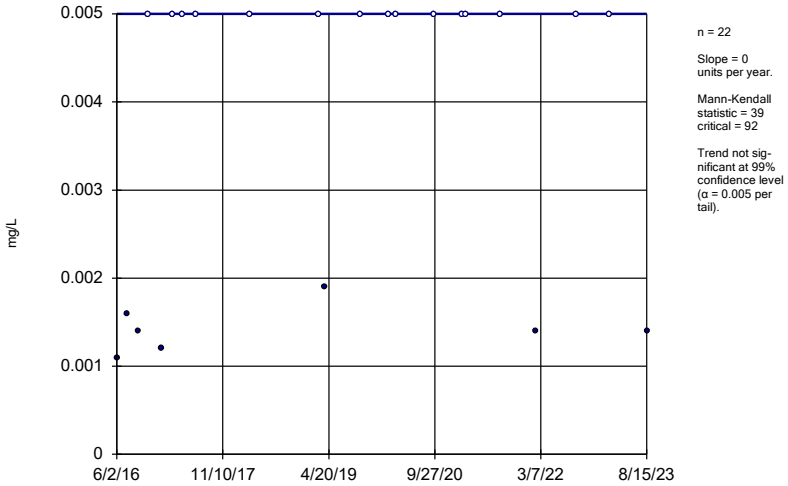
Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 39
critical = 92

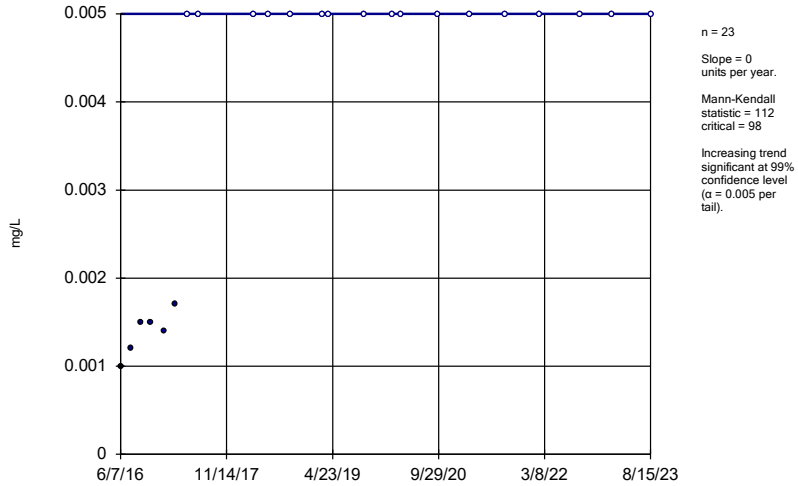
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 23

Slope = 0 units per year.

Mann-Kendall statistic = 112
critical = 98

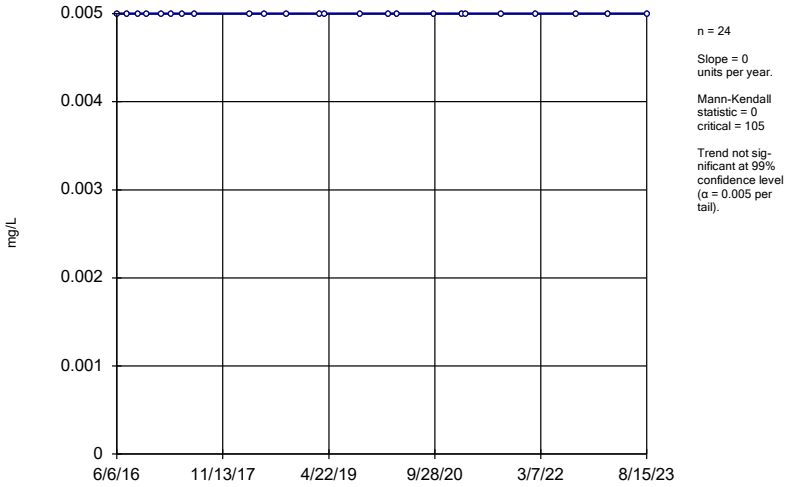
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 105

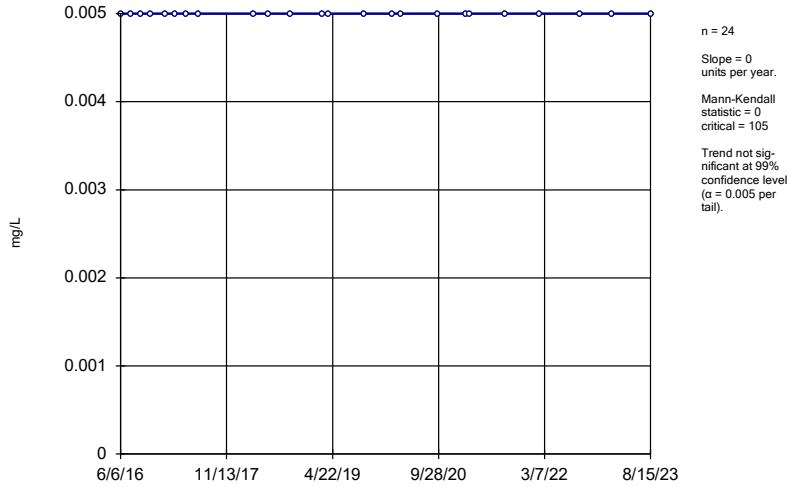
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 105

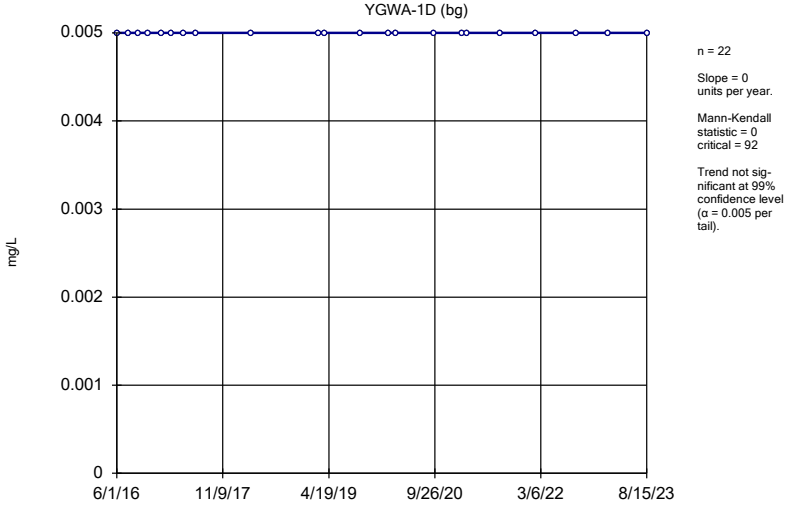
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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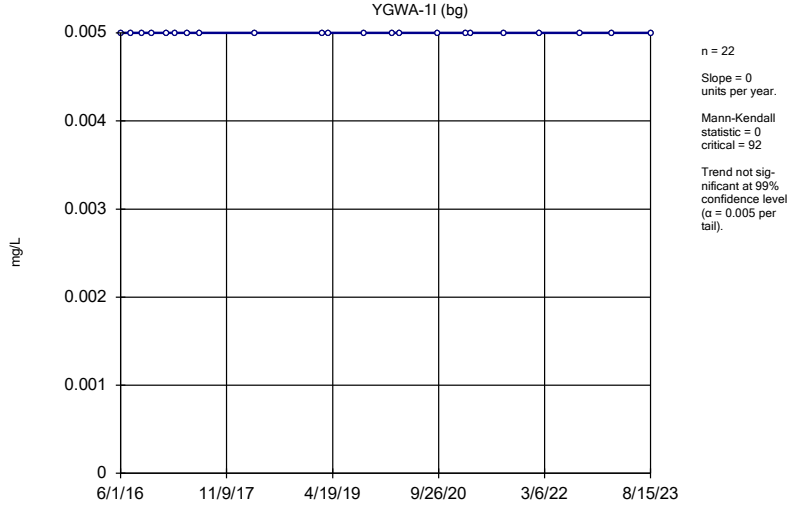
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:57 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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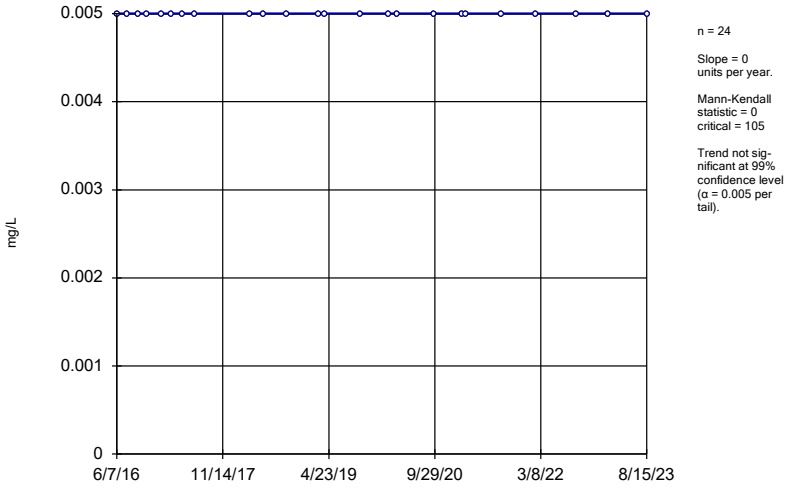
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

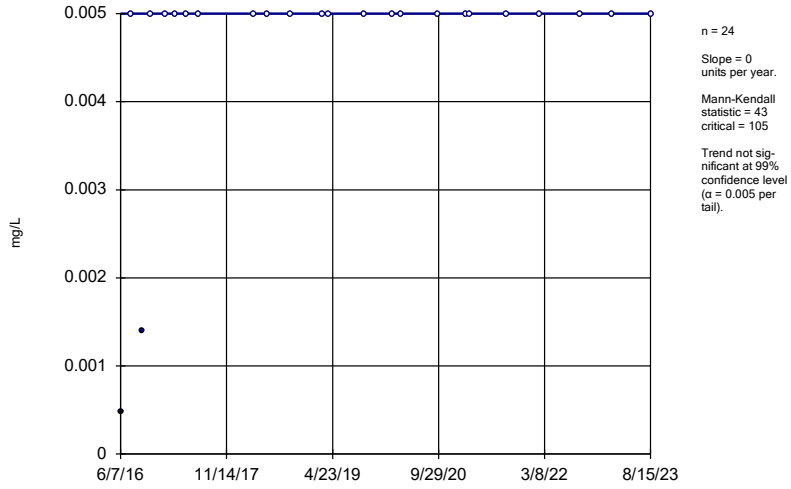
Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 43 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

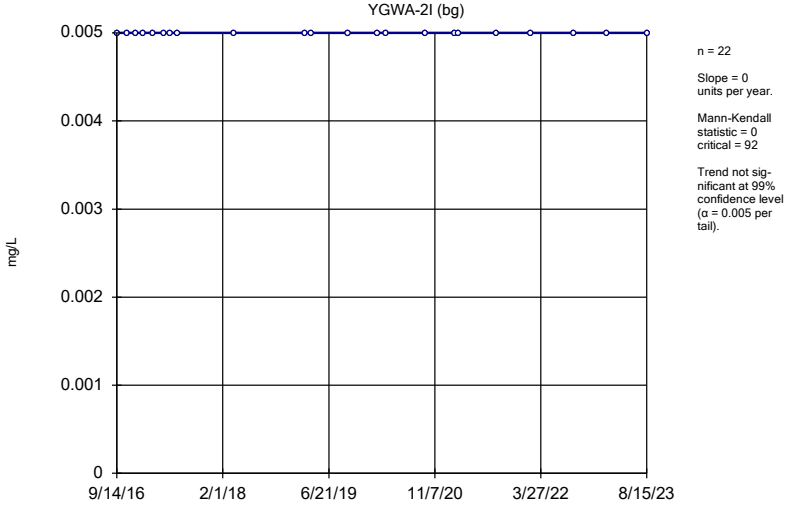
Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

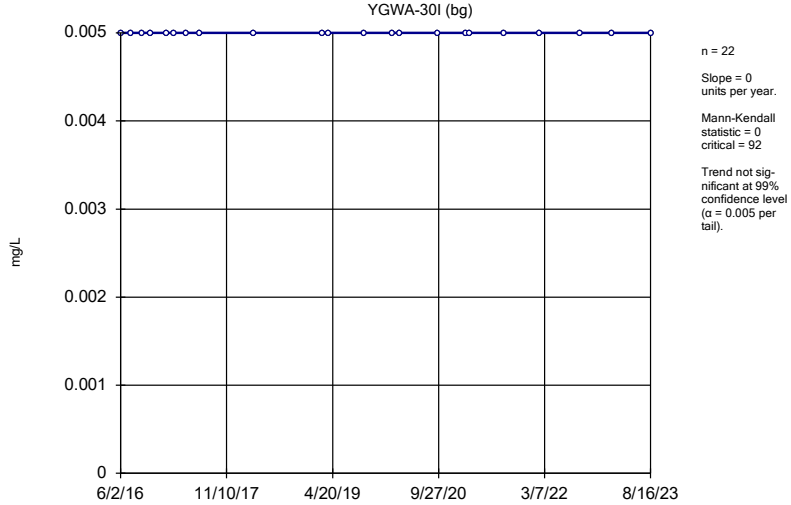
Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

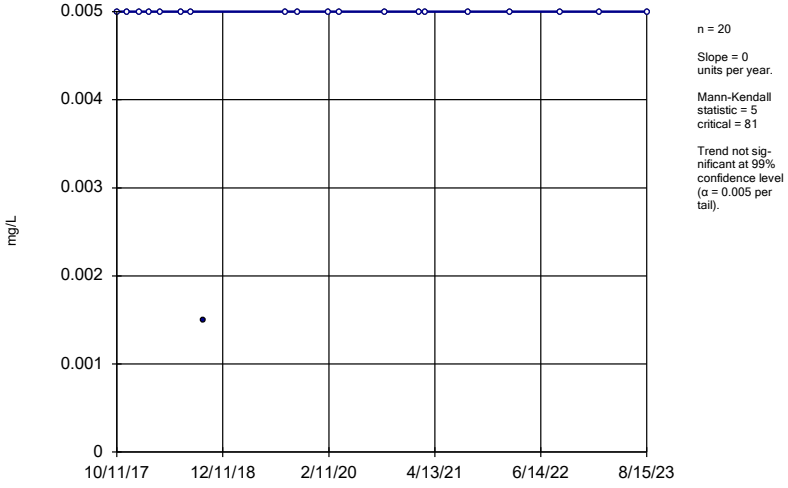
Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 5 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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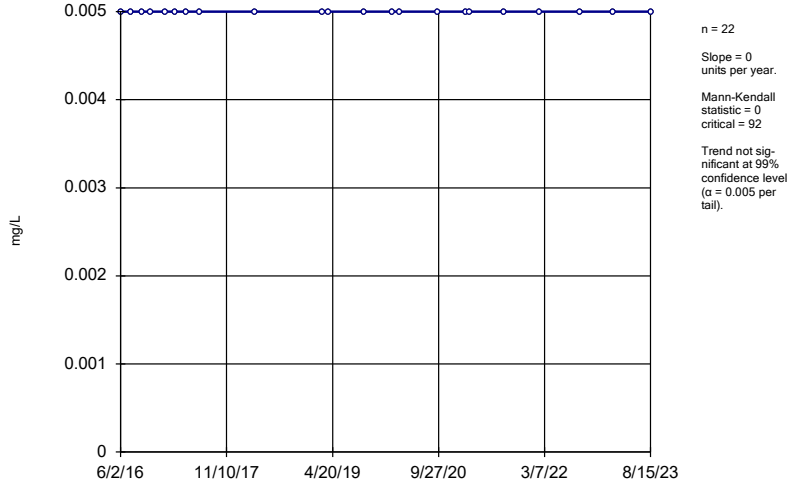
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 92

Trend not significant at 99% confidence level (α = 0.005 per tail).

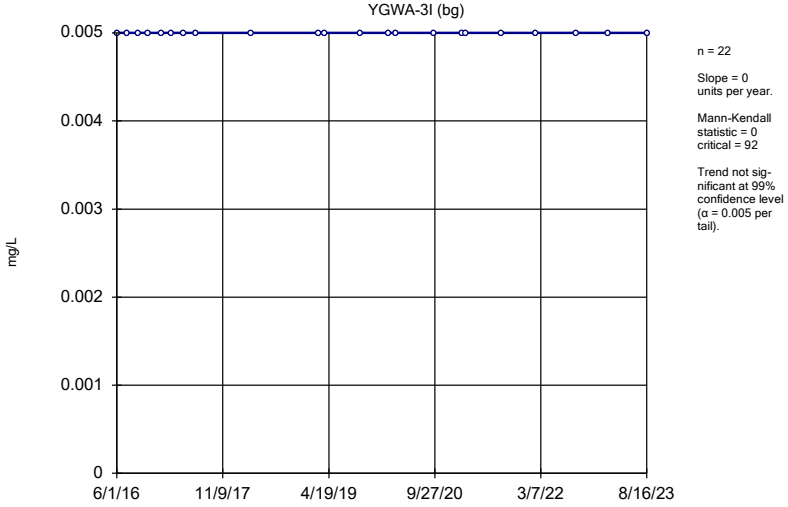
Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 22

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 92

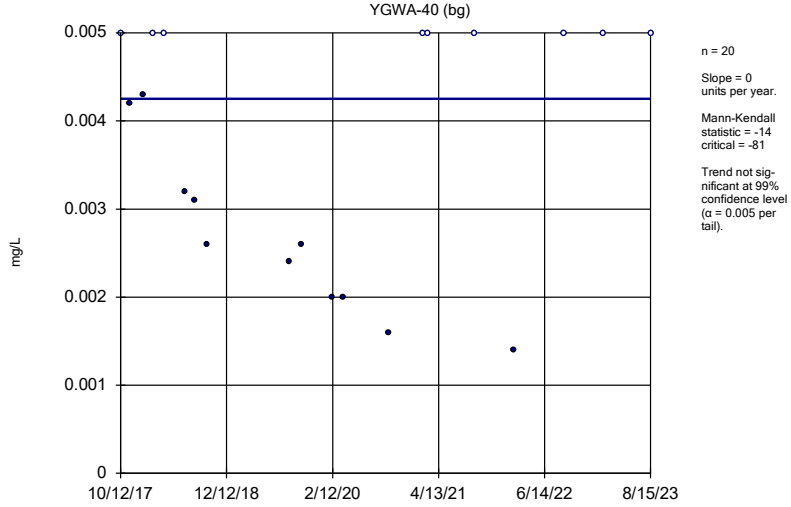
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -14
critical = -81

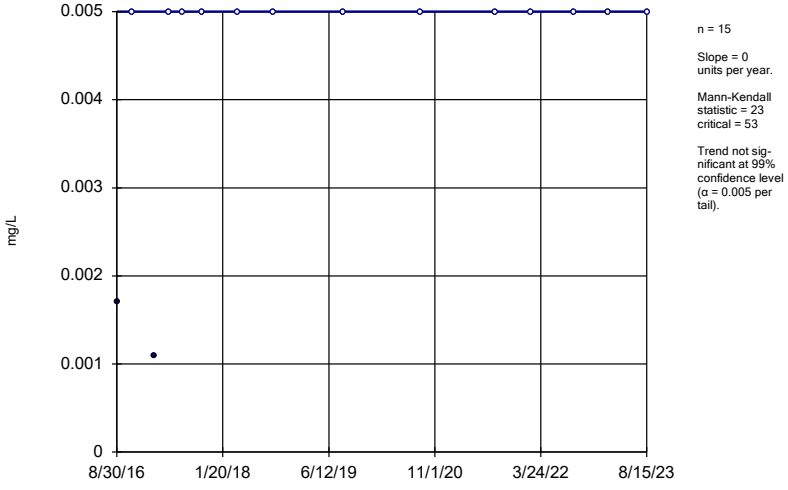
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 23
critical = 53

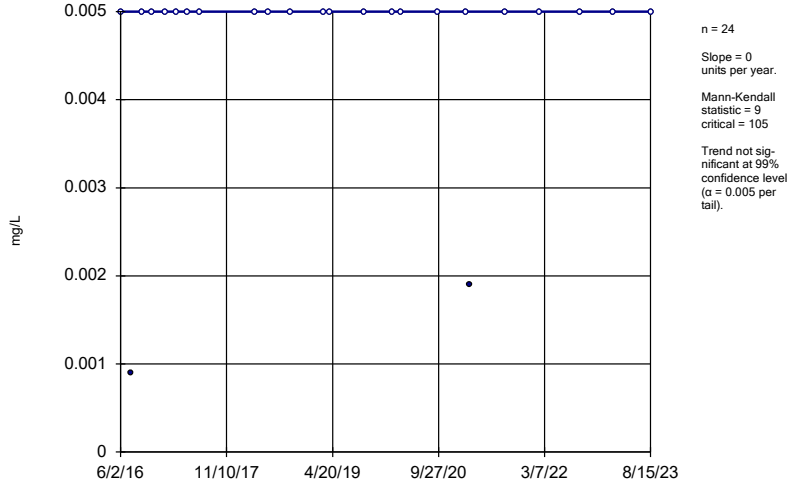
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 9
critical = 105

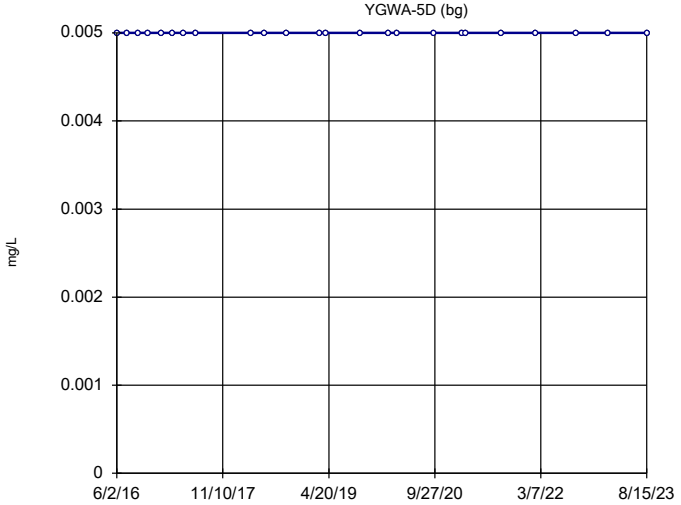
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 105

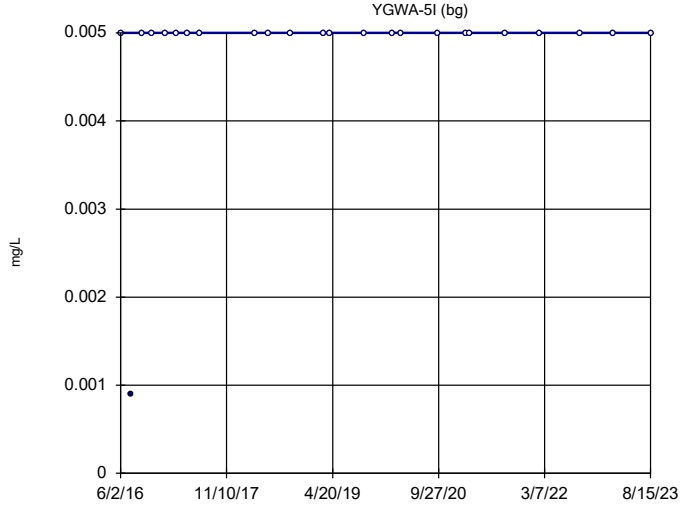
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 24

Slope = 0 units per year.

Mann-Kendall statistic = 21
critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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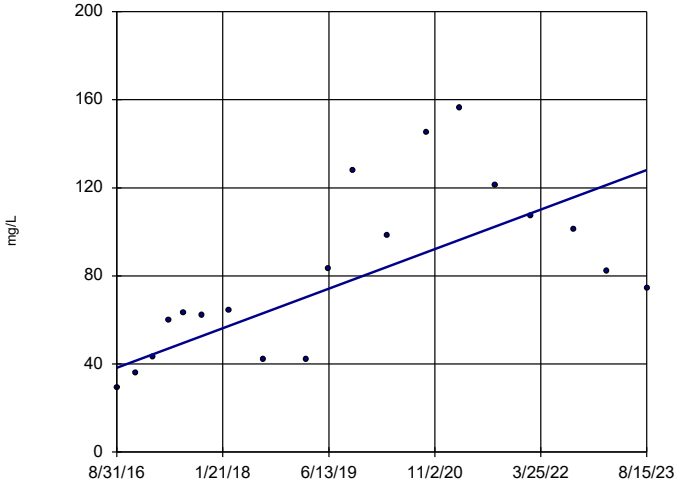
Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 12.89 units per year.

Mann-Kendall statistic = 88
critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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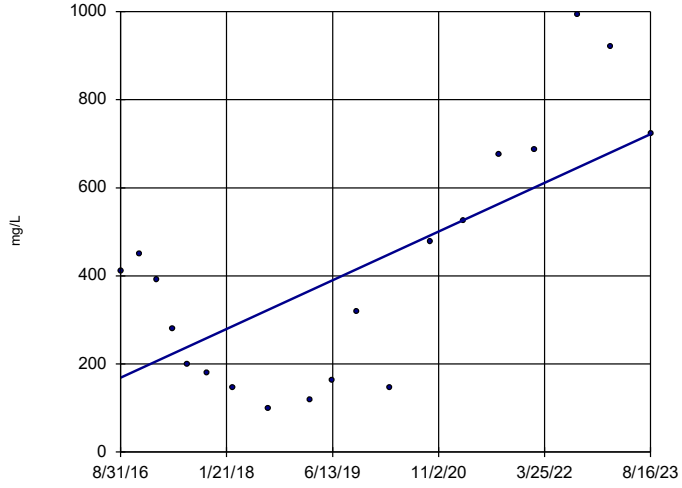
Sen's Slope Estimator

GWC-1R



n = 19

Slope = 79.49 units per year.

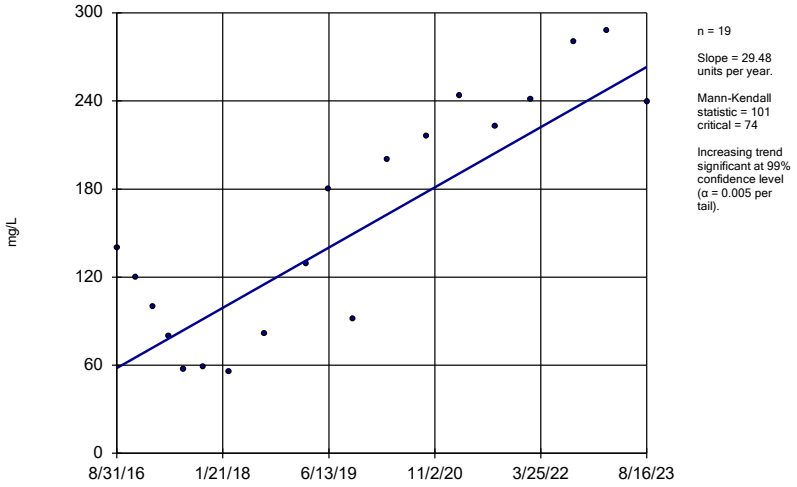
Mann-Kendall statistic = 61
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-2R



n = 19

Slope = 29.48 units per year.

Mann-Kendall statistic = 101 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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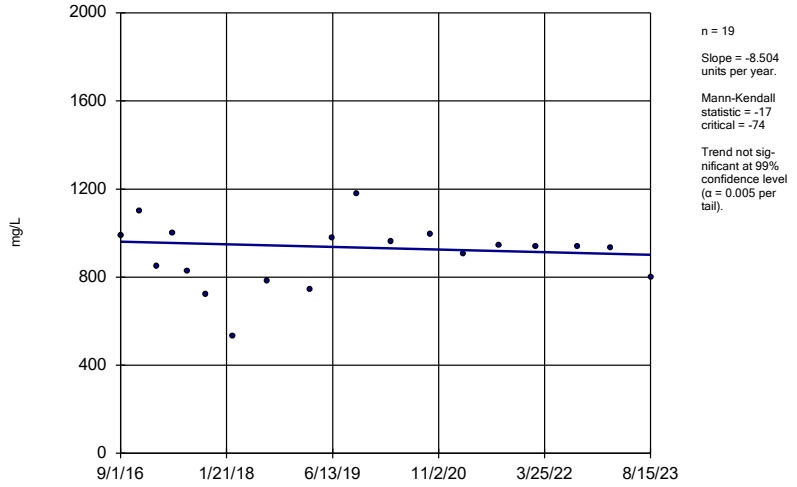
Sen's Slope Estimator

GWC-5R



n = 19

Slope = -8.504 units per year.

Mann-Kendall statistic = -17 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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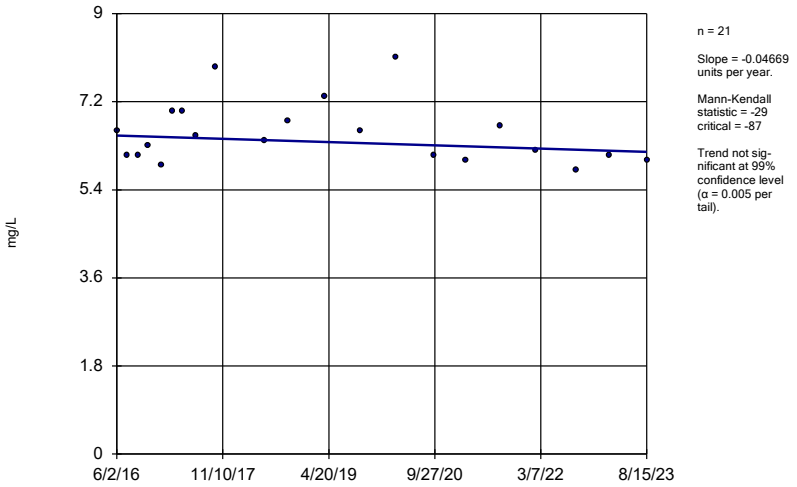
Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = -0.04669 units per year.

Mann-Kendall statistic = -29 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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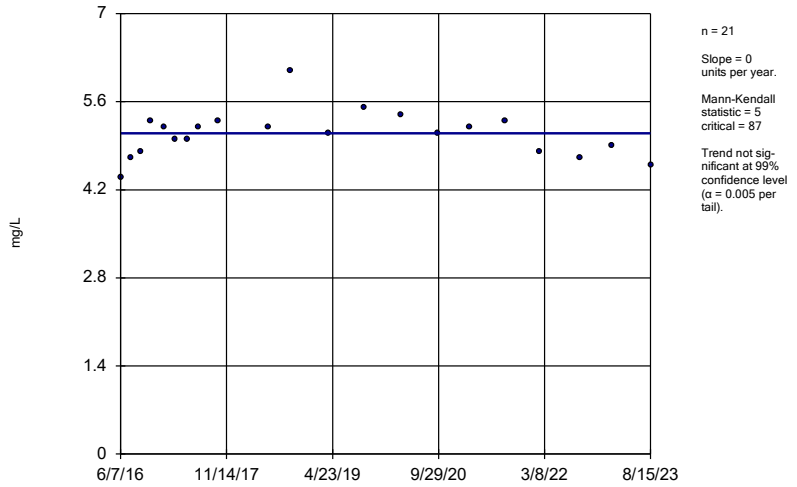
Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 5 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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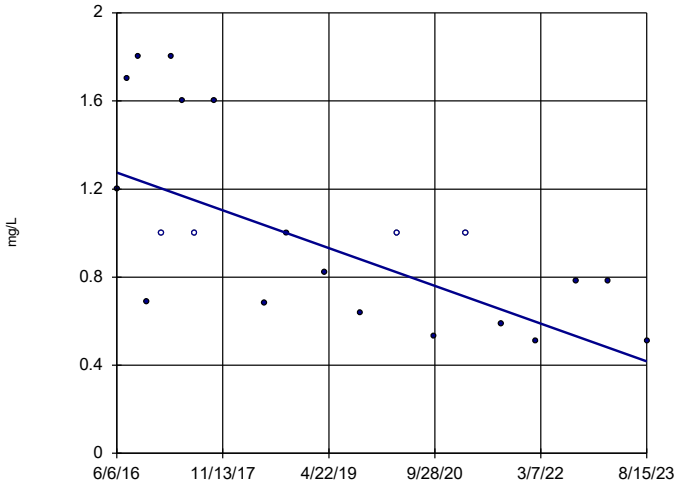
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = -0.1191 units per year.

Mann-Kendall statistic = -112
critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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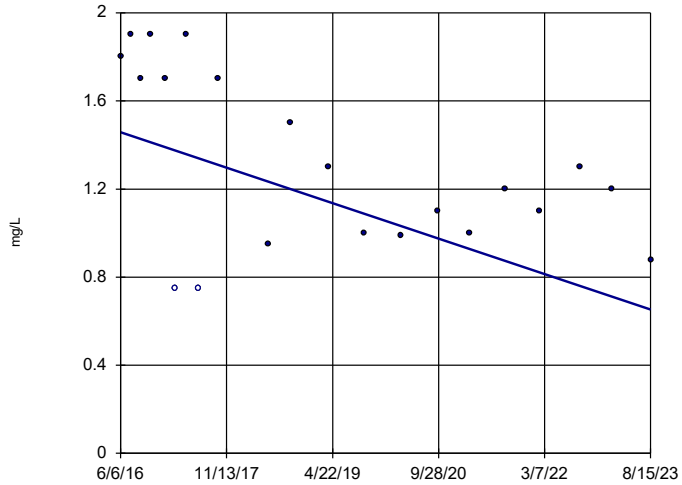
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = -0.112 units per year.

Mann-Kendall statistic = -71
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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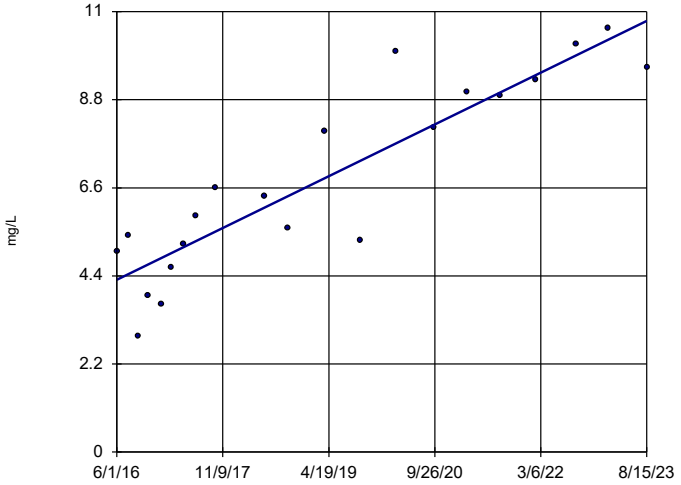
Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 0.8971 units per year.

Mann-Kendall statistic = 154
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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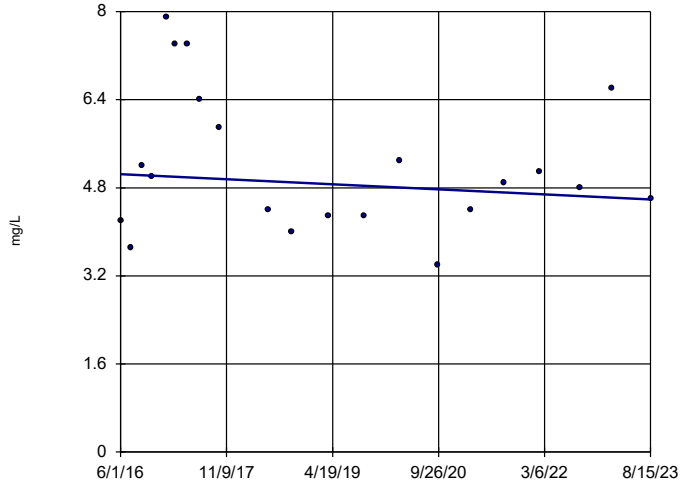
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = -0.06392 units per year.

Mann-Kendall statistic = -13
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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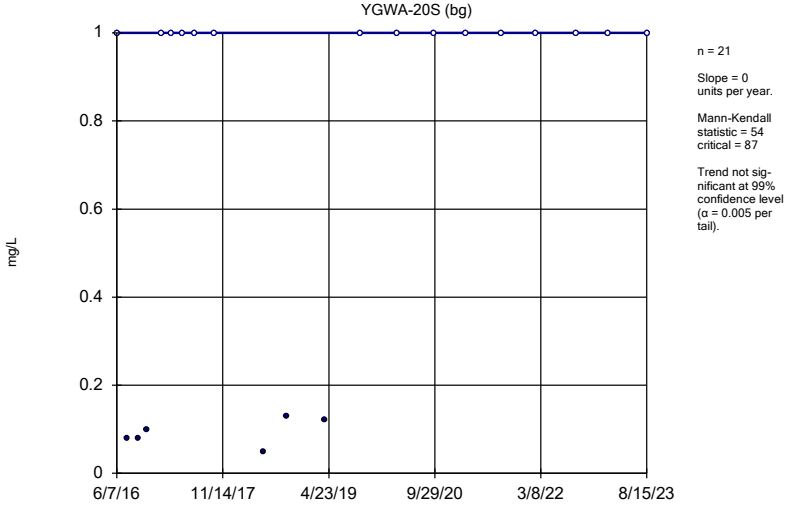
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = 54
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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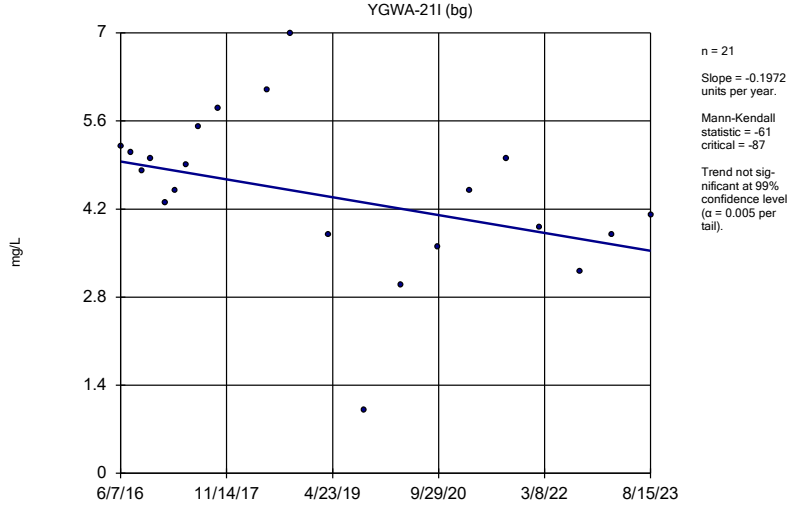
Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = -0.1972 units per year.

Mann-Kendall statistic = -61
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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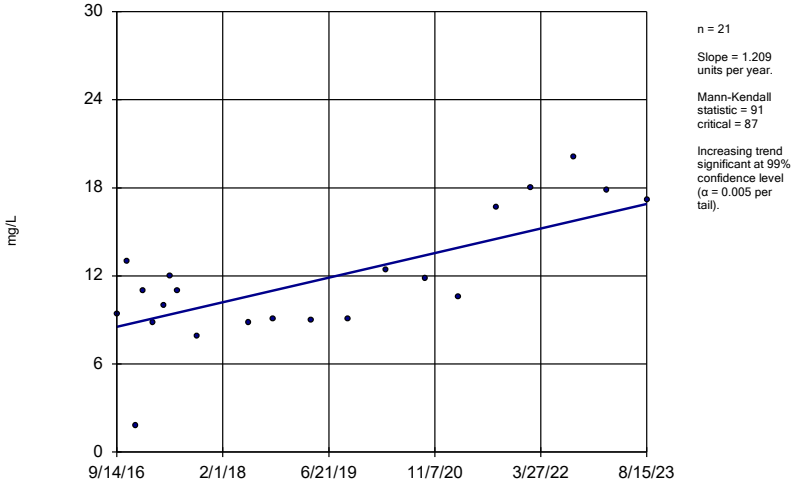
Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = 1.209 units per year.

Mann-Kendall statistic = 91
critical = 87

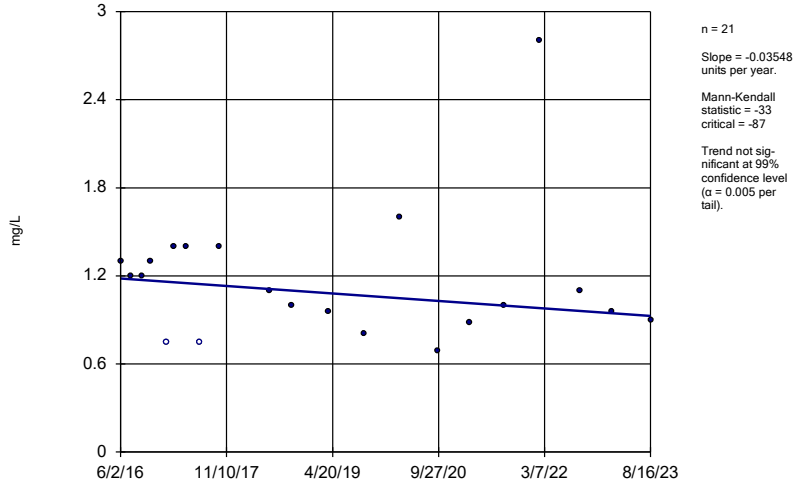
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = -0.03548 units per year.

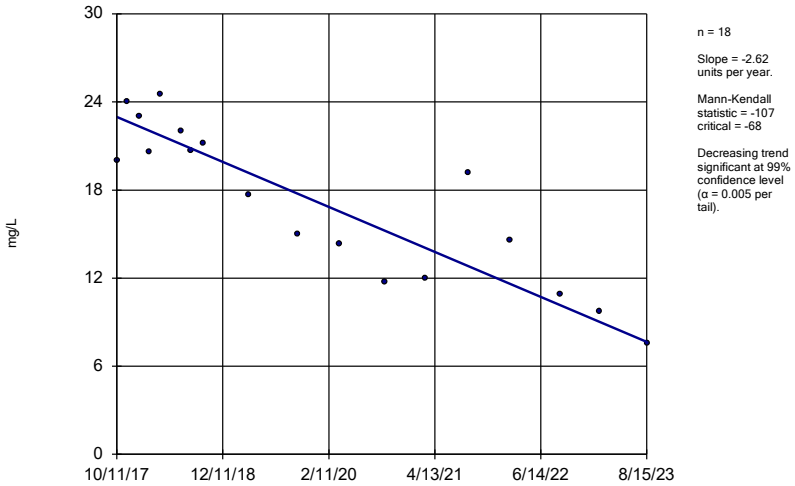
Mann-Kendall statistic = -33
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = -2.62 units per year.

Mann-Kendall statistic = -107
critical = -68

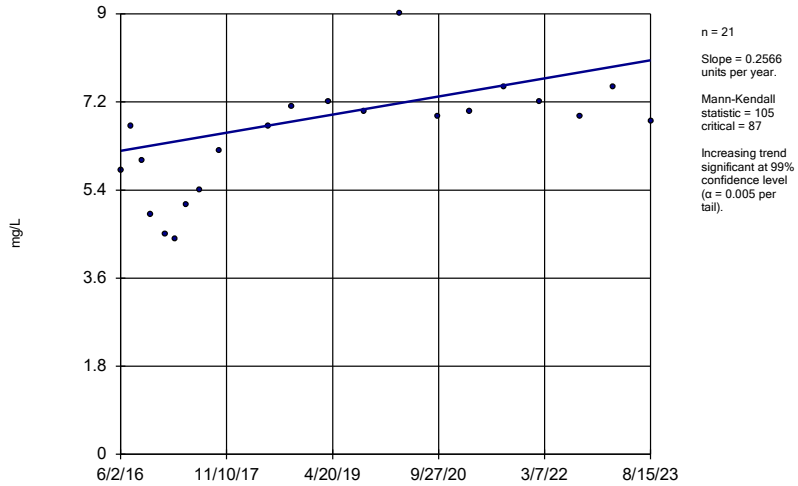
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 0.2566 units per year.

Mann-Kendall statistic = 105
critical = 87

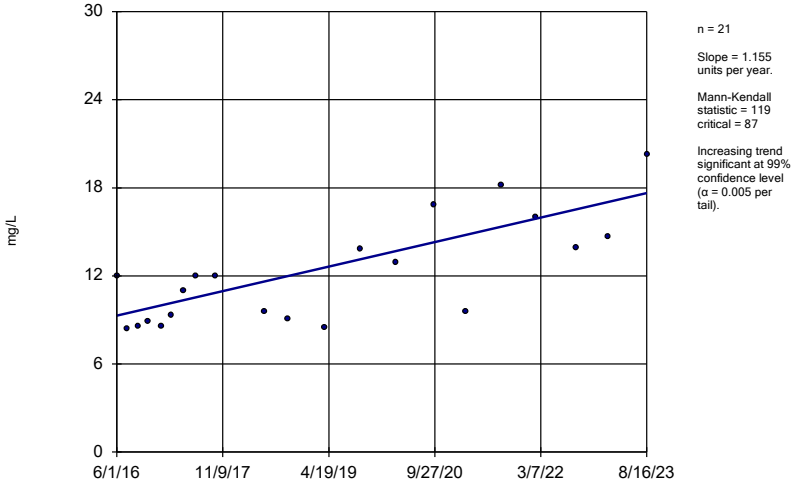
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 1.155 units per year.

Mann-Kendall statistic = 119
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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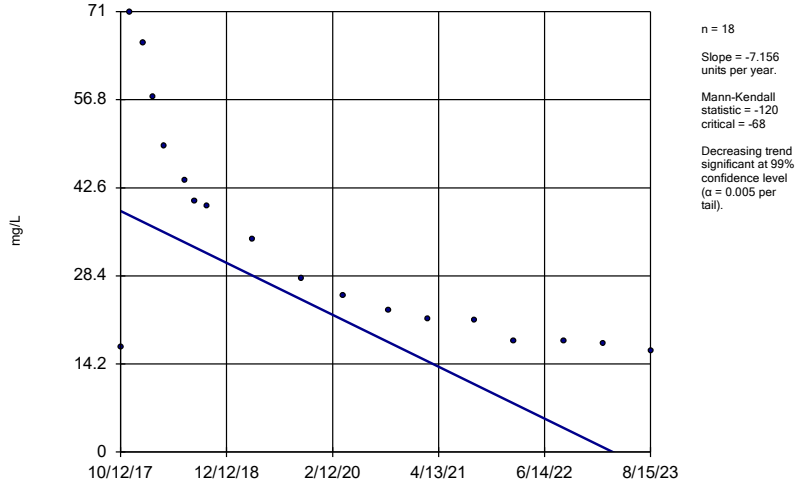
Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -7.156 units per year.

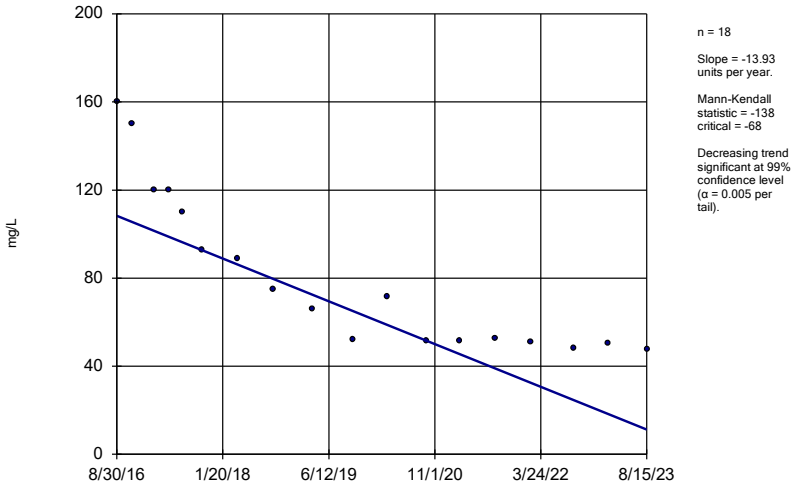
Mann-Kendall statistic = -120
critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -13.93 units per year.

Mann-Kendall statistic = -138 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

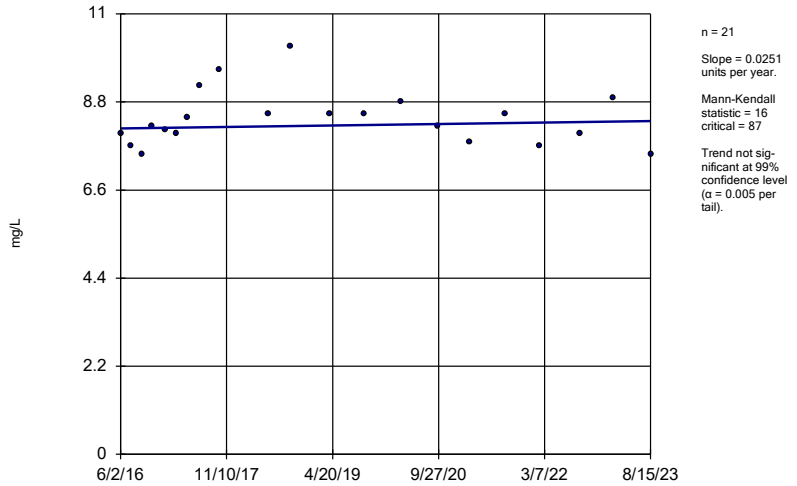
Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.0251 units per year.

Mann-Kendall statistic = 16 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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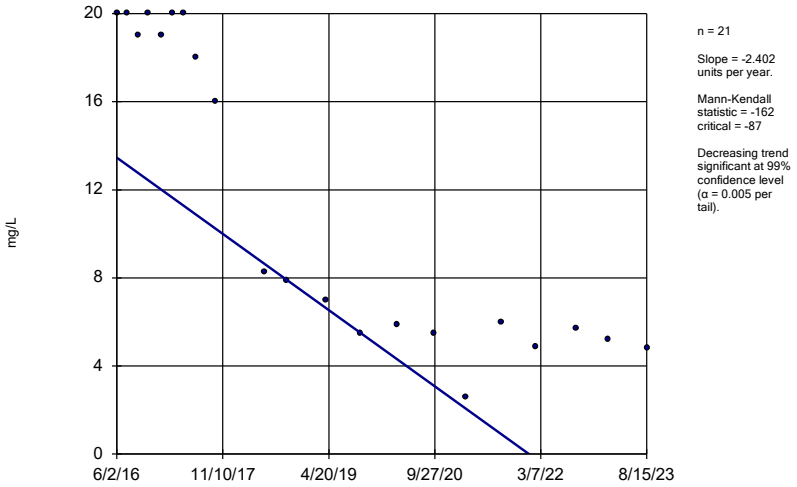
Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -2.402 units per year.

Mann-Kendall statistic = -162 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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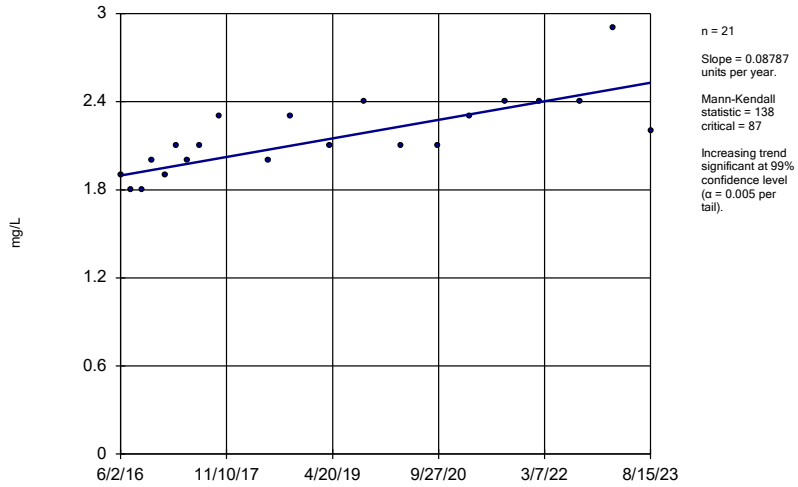
Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = 0.08787 units per year.

Mann-Kendall statistic = 138 critical = 87

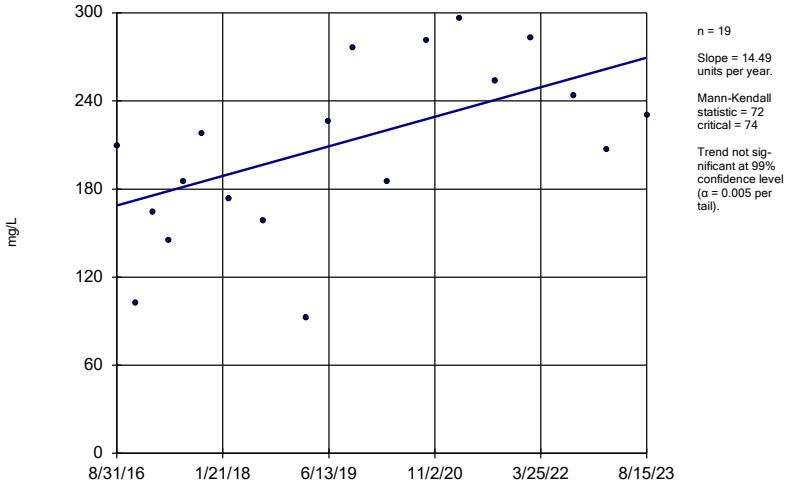
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWA-2 (bg)



n = 19

Slope = 14.49 units per year.

Mann-Kendall statistic = 72 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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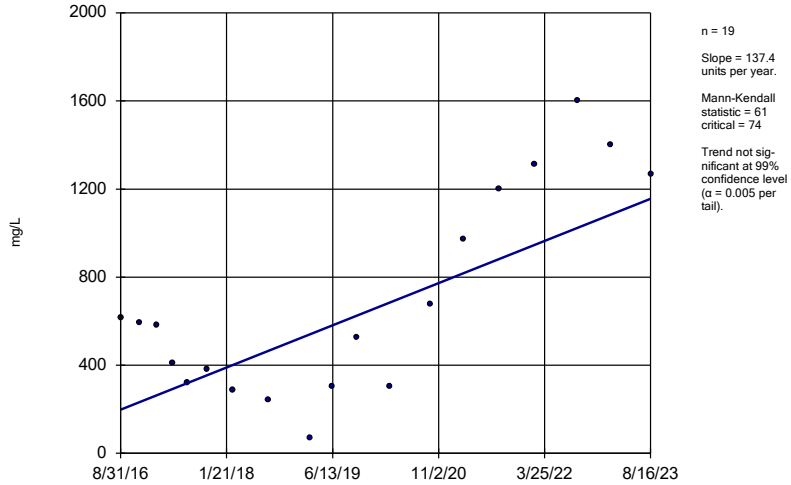
Sen's Slope Estimator

GWC-1R



n = 19

Slope = 137.4 units per year.

Mann-Kendall statistic = 61 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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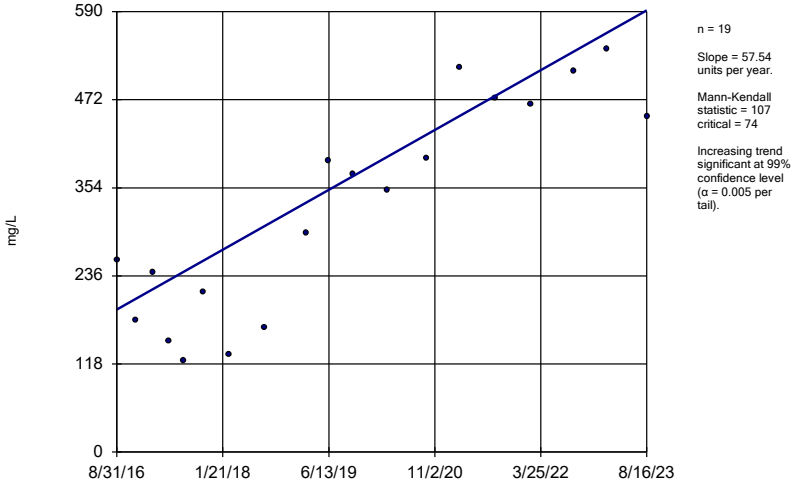
Sen's Slope Estimator

GWC-2R



n = 19

Slope = 57.54 units per year.

Mann-Kendall statistic = 107 critical = 74

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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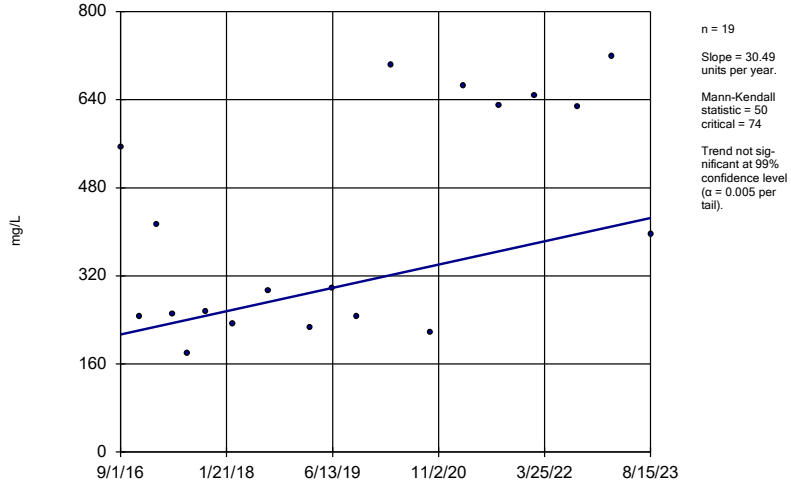
Sen's Slope Estimator

GWC-4R



n = 19

Slope = 30.49 units per year.

Mann-Kendall statistic = 50 critical = 74

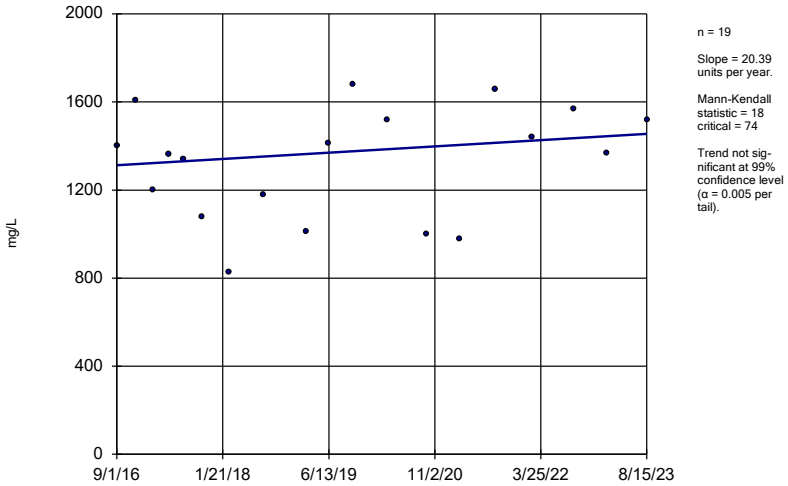
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-5R



n = 19

Slope = 20.39 units per year.

Mann-Kendall statistic = 18 critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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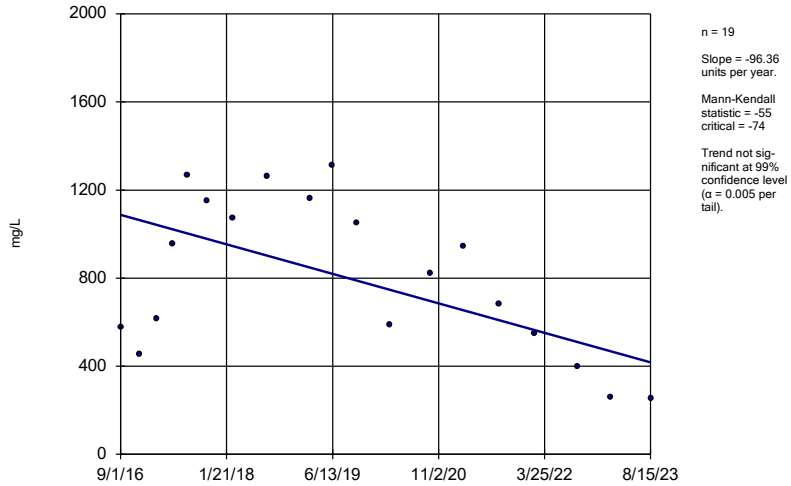
Sen's Slope Estimator

GWC-6R



n = 19

Slope = -96.36 units per year.

Mann-Kendall statistic = -55 critical = -74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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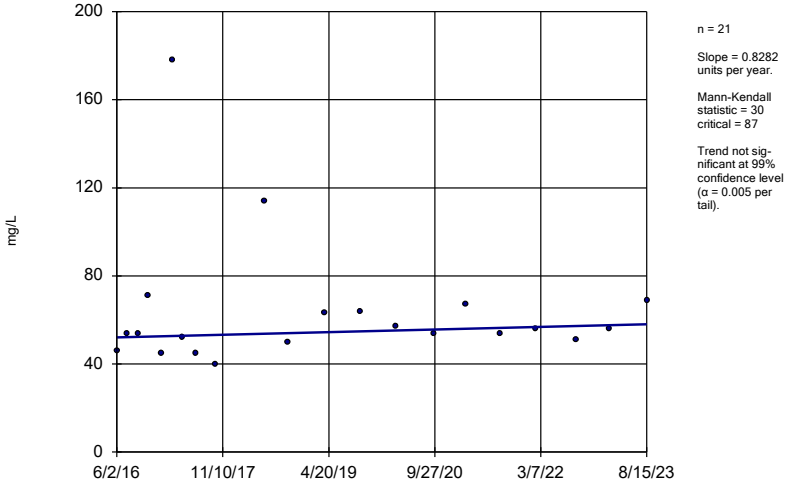
Sen's Slope Estimator

YGWA-14S (bg)



n = 21

Slope = 0.8282 units per year.

Mann-Kendall statistic = 30 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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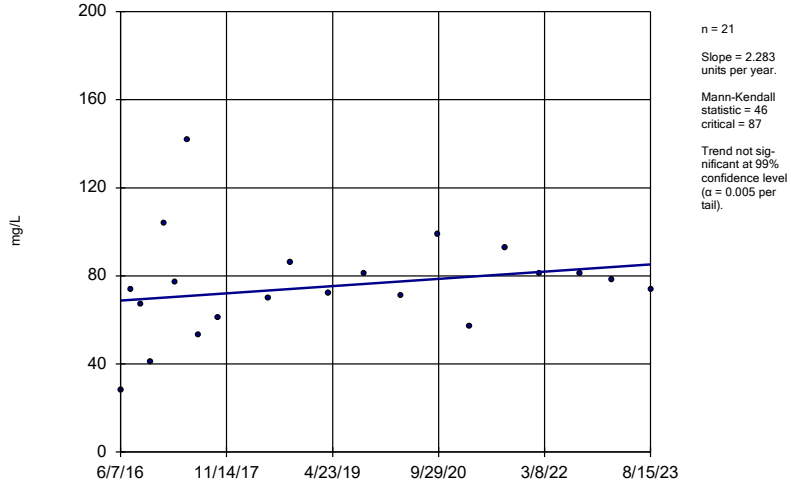
Sen's Slope Estimator

YGWA-17S (bg)



n = 21

Slope = 2.283 units per year.

Mann-Kendall statistic = 46 critical = 87

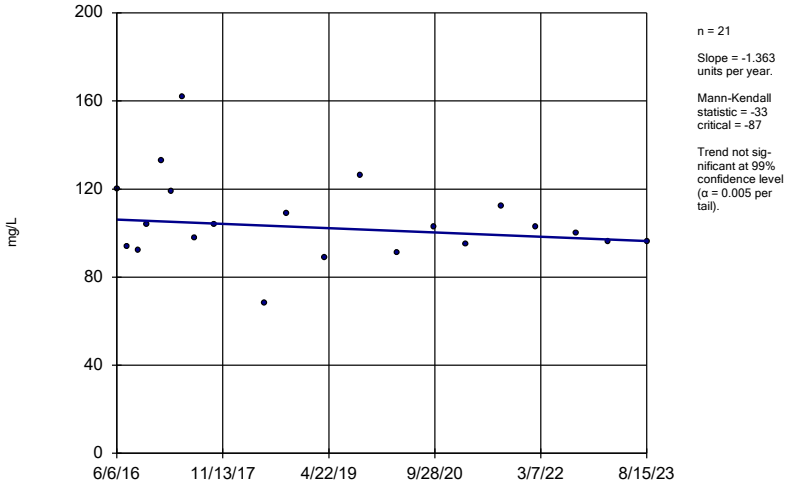
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-18I (bg)



n = 21

Slope = -1.363 units per year.

Mann-Kendall statistic = -33
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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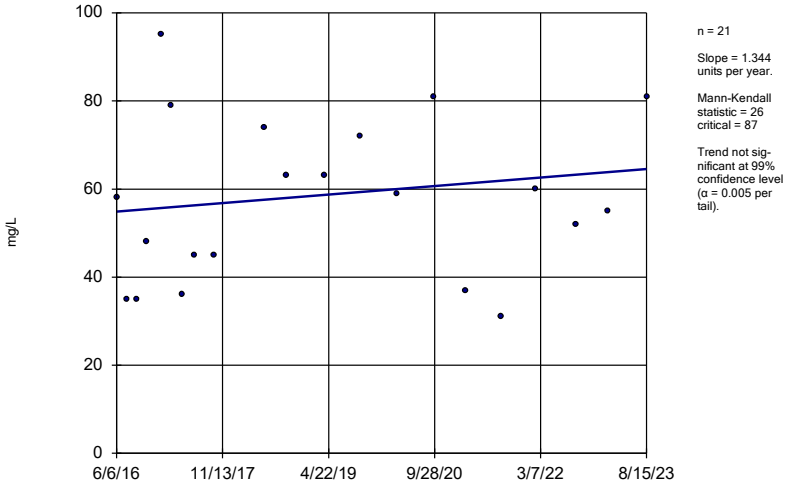
Sen's Slope Estimator

YGWA-18S (bg)



n = 21

Slope = 1.344 units per year.

Mann-Kendall statistic = 26
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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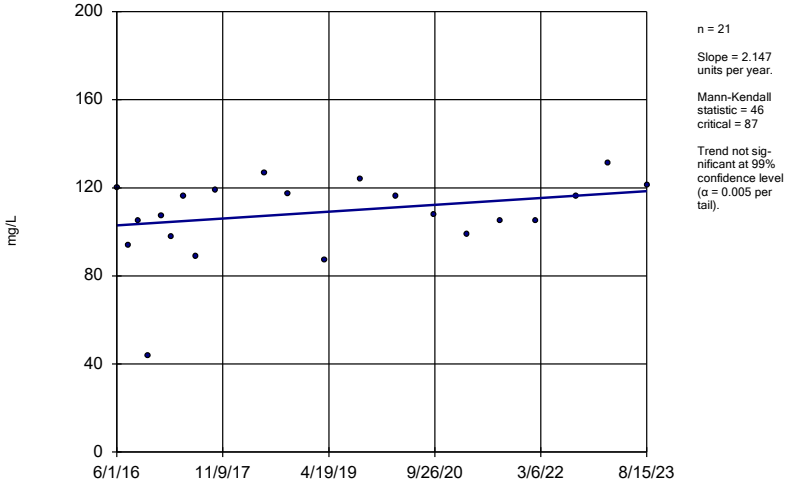
Sen's Slope Estimator

YGWA-1D (bg)



n = 21

Slope = 2.147 units per year.

Mann-Kendall statistic = 46
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

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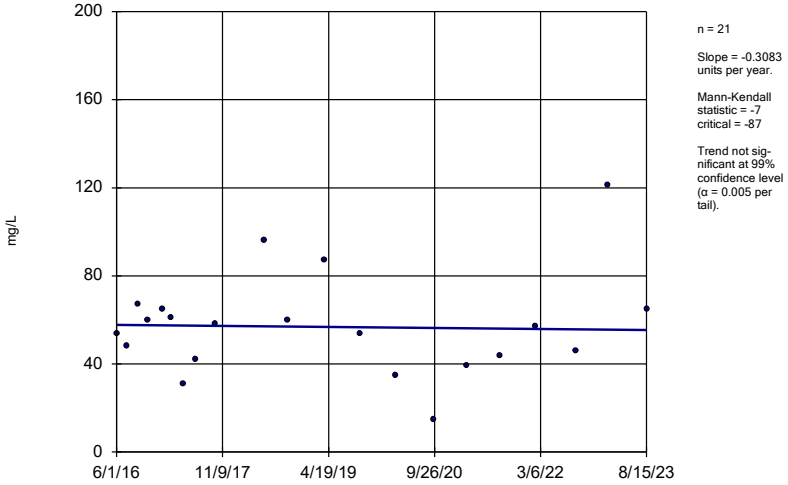
Sen's Slope Estimator

YGWA-1I (bg)



n = 21

Slope = -0.3083 units per year.

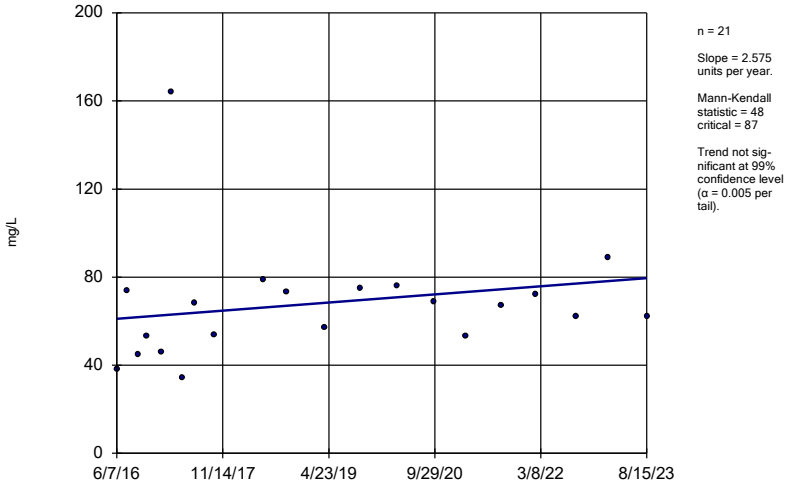
Mann-Kendall statistic = -7
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests
Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-20S (bg)



n = 21

Slope = 2.575 units per year.

Mann-Kendall statistic = 48
critical = 87

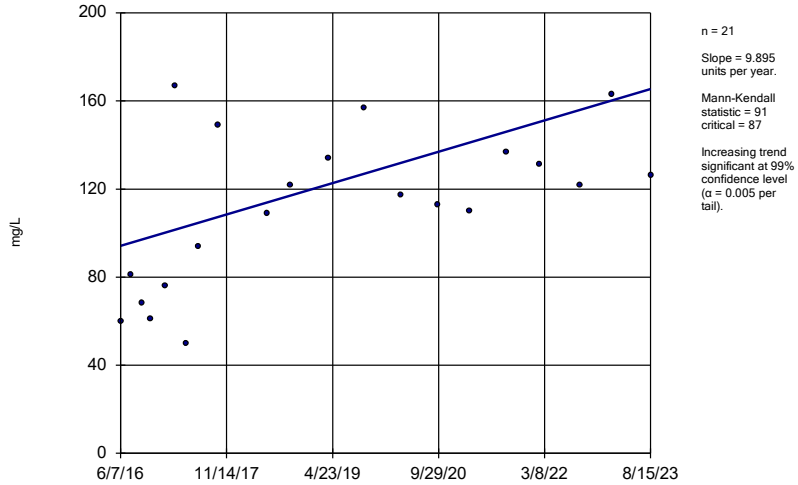
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-21I (bg)



n = 21

Slope = 9.895 units per year.

Mann-Kendall statistic = 91
critical = 87

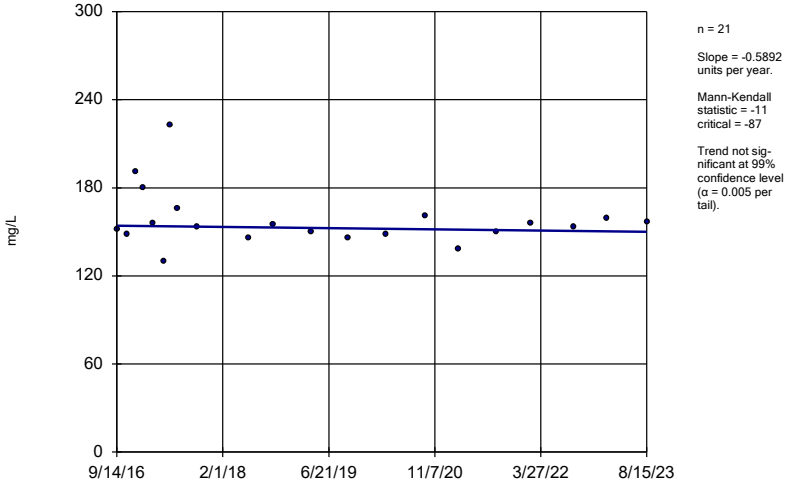
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-2I (bg)



n = 21

Slope = -0.5892 units per year.

Mann-Kendall statistic = -11
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

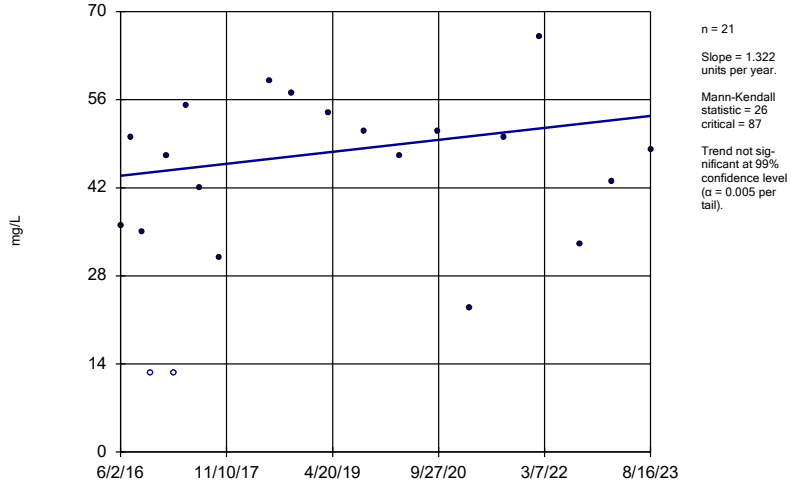
Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 21

Slope = 1.322 units per year.

Mann-Kendall statistic = 26
critical = 87

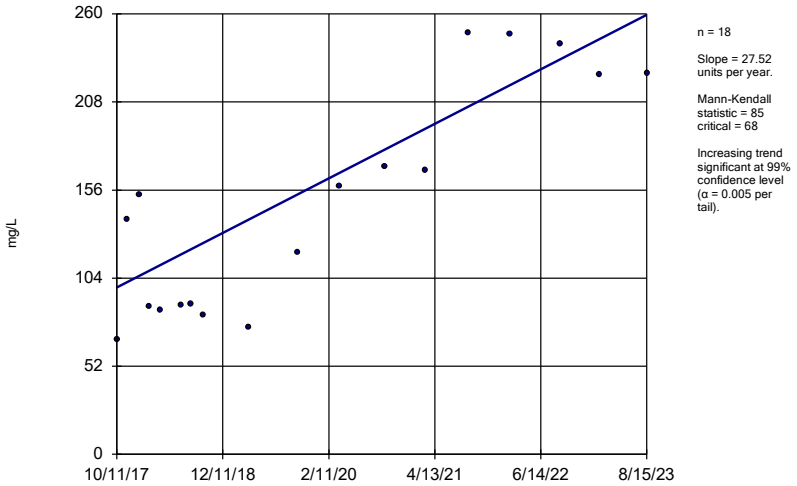
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-39 (bg)



n = 18

Slope = 27.52 units per year.

Mann-Kendall statistic = 85 critical = 68

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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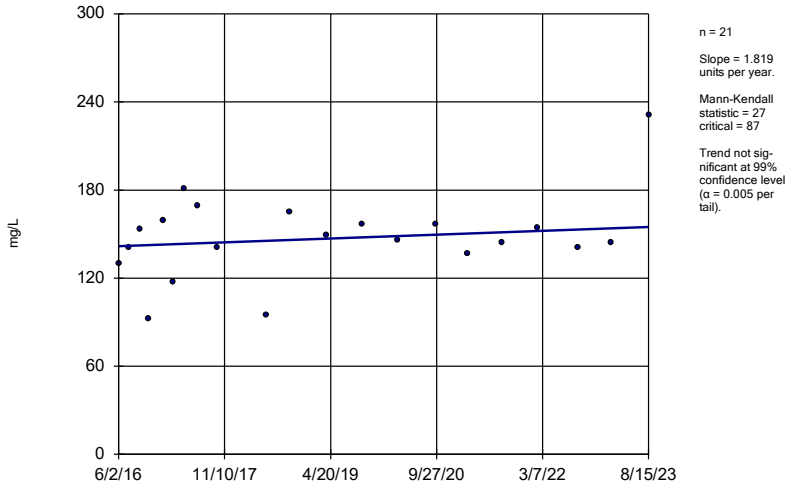
Sen's Slope Estimator

YGWA-3D (bg)



n = 21

Slope = 1.819 units per year.

Mann-Kendall statistic = 27 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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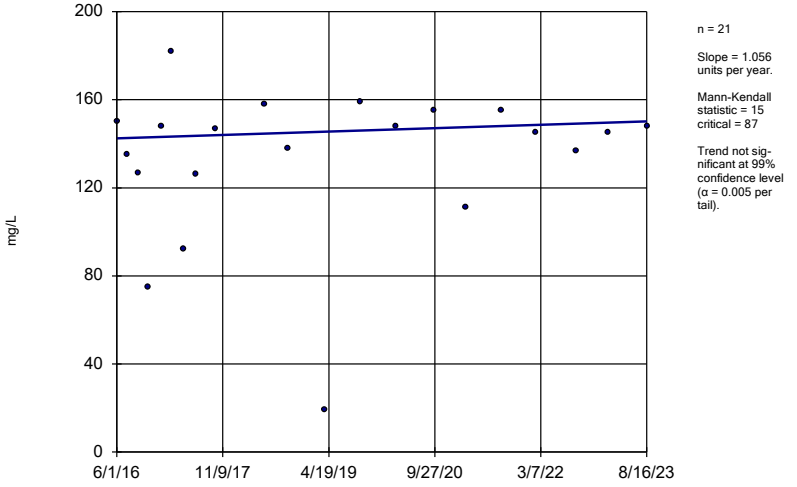
Sen's Slope Estimator

YGWA-3I (bg)



n = 21

Slope = 1.056 units per year.

Mann-Kendall statistic = 15 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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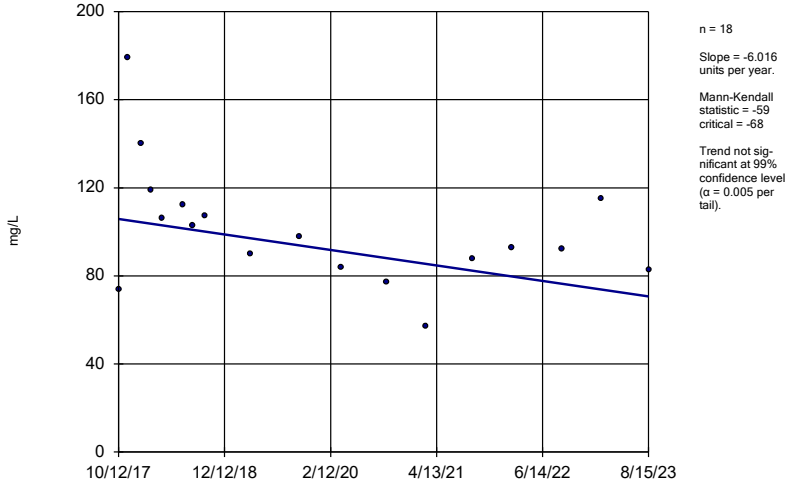
Sen's Slope Estimator

YGWA-40 (bg)



n = 18

Slope = -6.016 units per year.

Mann-Kendall statistic = -59 critical = -68

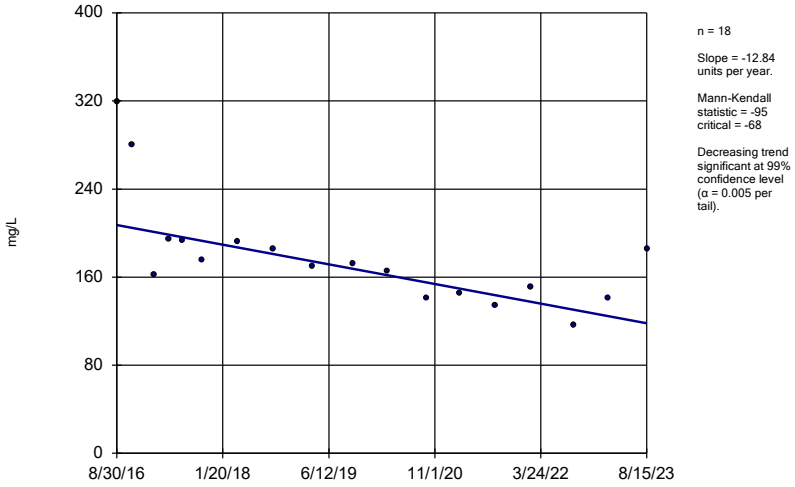
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-47 (bg)



n = 18

Slope = -12.84 units per year.

Mann-Kendall statistic = -95 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

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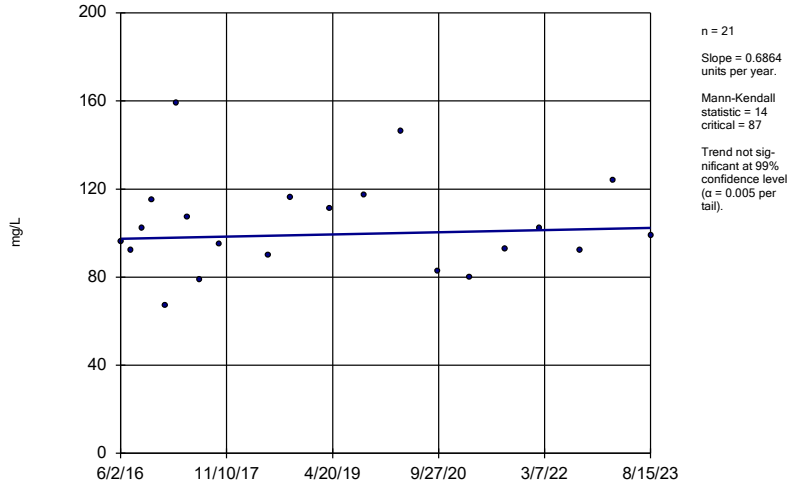
Sen's Slope Estimator

YGWA-4I (bg)



n = 21

Slope = 0.6864 units per year.

Mann-Kendall statistic = 14 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

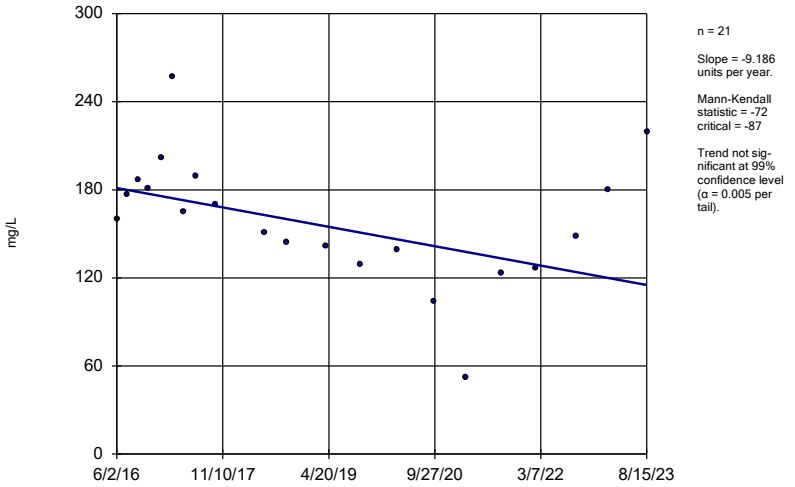
Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 21

Slope = -9.186 units per year.

Mann-Kendall statistic = -72 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

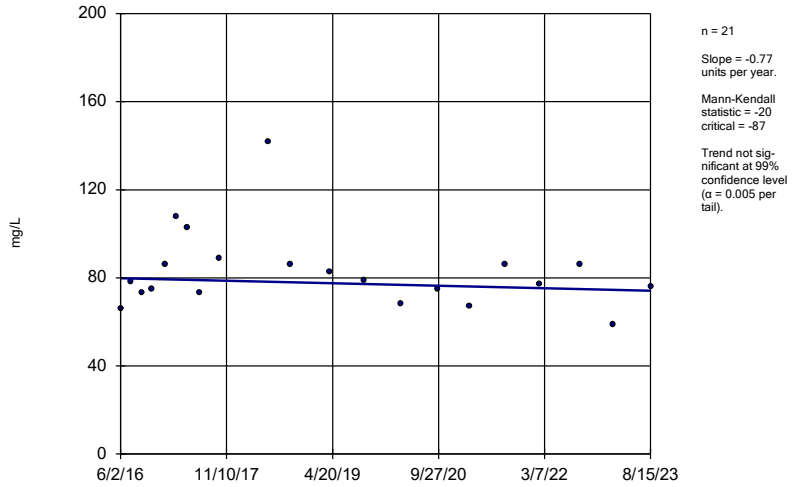
Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

Sanitas™ v.10.0.13 Software licensed to . UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 21

Slope = -0.77 units per year.

Mann-Kendall statistic = -20 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 10/19/2023 11:58 AM View: Trend Tests

Plant Yates Data: Yates Gypsum Landfill

FIGURE H.

Upper Tolerance Limits Summary Table

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:03 PM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	n/a	410	88.54	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	n/a	458	75.76	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.21	n/a	n/a	n/a	458	2.402	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0011	n/a	n/a	n/a	442	79.86	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.00063	n/a	n/a	n/a	442	94.8	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.0093	n/a	n/a	n/a	410	80.73	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	n/a	452	69.03	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	n/a	437	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	n/a	457	64.33	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.0013	n/a	n/a	n/a	412	86.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	n/a	437	26.77	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.00064	n/a	n/a	n/a	366	89.07	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	n/a	401	61.1	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	n/a	440	92.73	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	n/a	376	97.34	n/a	n/a	NaN	NP Inter(NDs)

FIGURE I.

YATES LANDFILL GYPSUM STACK GWPS				
Constituent Name	**MCL**	**CCR-Rule Specified**	**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		0.21	2
Beryllium, Total (mg/L)	0.004		0.0011	0.004
Cadmium, Total (mg/L)	0.005		0.00063	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1
Cobalt, Total (mg/L)	n/a	0.006	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)	n/a	0.015	0.0013	0.015
Lithium, Total (mg/L)	n/a	0.04	0.03	0.04
Mercury, Total (mg/L)	0.002		0.00064	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.014	0.1
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*

**CCR = Coal Combustion Residuals*

**GWPS = Groundwater Protection Standard*

FIGURE J.

Appendix IV Confidence Intervals - All Results (No Significant)

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:08 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-2R	0.003	0.003	0.006	No	36	97.22	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-4R	0.003	0.0017	0.006	No	36	86.11	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-5R	0.003	0.00054	0.006	No	31	93.55	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-1R	0.005	0.0047	0.01	No	31	70.97	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-2R	0.005	0.005	0.01	No	36	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-3R	0.005	0.0028	0.01	No	31	80.65	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-4R	0.005	0.0013	0.01	No	36	91.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-5R	0.005	0.0012	0.01	No	31	41.94	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-6R	0.005	0.0023	0.01	No	37	75.68	None	No	0.01	NP (NDs)
Barium (mg/L)	GWC-1R	0.05782	0.0417	2	No	31	0	None	No	0.01	Param.
Barium (mg/L)	GWC-2R	0.0632	0.04593	2	No	36	0	None	x^(1/3)	0.01	Param.
Barium (mg/L)	GWC-3R	0.03224	0.01781	2	No	31	0	None	x^(1/3)	0.01	Param.
Barium (mg/L)	GWC-4R	0.03721	0.02503	2	No	36	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-5R	0.036	0.014	2	No	31	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-6R	0.05375	0.03724	2	No	37	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-1R	0.0005	0.00013	0.004	No	31	41.94	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-2R	0.0005	0.00023	0.004	No	36	63.89	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-3R	0.0005377	0.0003416	0.004	No	31	22.58	Kaplan-Meier	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GWC-4R	0.0005	0.00013	0.004	No	36	83.33	Kaplan-Meier	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-5R	0.0023	0.0005	0.004	No	31	22.58	None	No	0.01	NP (normality)
Cadmium (mg/L)	GWC-1R	0.0025	0.00026	0.005	No	31	70.97	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-2R	0.0005	0.00016	0.005	No	36	77.78	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-3R	0.0005	0.00021	0.005	No	31	58.06	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-4R	0.0005	0.0005	0.005	No	36	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-5R	0.0009026	0.0006444	0.005	No	31	25.81	Kaplan-Meier	x^2	0.01	Param.
Chromium (mg/L)	GWC-1R	0.01	0.0012	0.1	No	31	38.71	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2R	0.005	0.0017	0.1	No	36	86.11	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-3R	0.0023	0.0011	0.1	No	31	32.26	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-4R	0.005	0.0013	0.1	No	36	80.56	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-5R	0.0028	0.0019	0.1	No	31	16.13	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-6R	0.0028	0.0014	0.1	No	37	29.73	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1R	0.005	0.0008	0.035	No	31	32.26	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-2R	0.02426	0.01442	0.035	No	36	2.778	None	No	0.01	Param.
Cobalt (mg/L)	GWC-3R	0.0074	0.0041	0.035	No	31	64.52	None	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-4R	0.002908	0.001456	0.035	No	36	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	GWC-5R	0.005	0.0012	0.035	No	31	70.97	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-6R	0.005	0.005	0.035	No	37	97.3	Kaplan-Meier	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1R	0.9913	0.5969	6.92	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2R	1.343	0.6551	6.92	No	18	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-3R	0.9406	0.2756	6.92	No	18	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-4R	0.5846	0.2648	6.92	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-5R	0.9083	0.3714	6.92	No	18	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-6R	0.9828	0.4593	6.92	No	18	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GWC-1R	0.1	0.06	4	No	21	80.95	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-2R	0.58	0.08	4	No	21	76.19	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-3R	0.134	0.06027	4	No	21	33.33	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	GWC-4R	0.11	0.08	4	No	21	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-5R	0.11	0.056	4	No	21	42.86	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-6R	0.1	0.07	4	No	21	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-1R	0.001	0.000067	0.015	No	31	93.55	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-2R	0.001	0.0001	0.015	No	36	80.56	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-3R	0.001	0.00015	0.015	No	31	77.42	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-4R	0.001	0.001	0.015	No	36	97.22	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-5R	0.001	0.00019	0.015	No	31	80.65	None	No	0.01	NP (NDs)

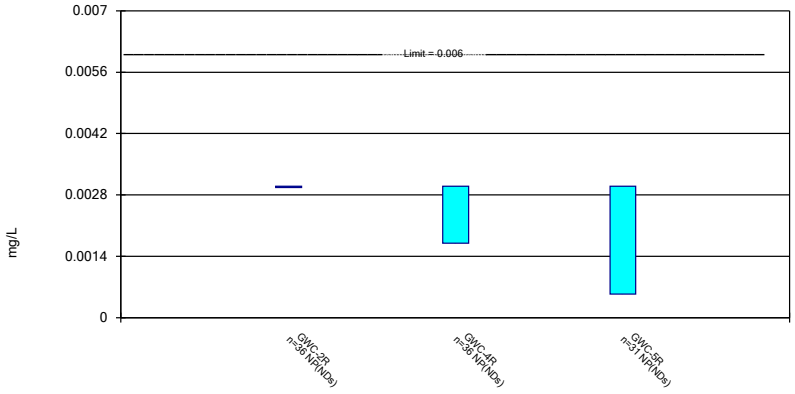
Appendix IV Confidence Intervals - All Results (No Significant)

Plant Yates Data: Yates Gypsum Landfill Printed 10/19/2023, 12:08 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GWC-1R	0.0024	0.0013	0.04	No	19	15.79	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-2R	0.0053	0.0036	0.04	No	19	15.79	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-3R	0.03	0.0012	0.04	No	19	78.95	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-4R	0.03	0.00098	0.04	No	19	63.16	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-5R	0.03	0.0014	0.04	No	19	42.11	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-6R	0.03	0.0017	0.04	No	19	26.32	None	No	0.01	NP (normality)
Mercury (mg/L)	GWC-1R	0.0002	0.0002	0.002	No	31	96.77	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-2R	0.0002	0.0002	0.002	No	36	97.22	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-3R	0.0002	0.000064	0.002	No	31	90.32	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-4R	0.0002	0.0002	0.002	No	36	88.89	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-5R	0.0002	0.0002	0.002	No	31	96.77	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-6R	0.0002	0.0002	0.002	No	37	94.59	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1R	0.011	0.0066	0.05	No	31	41.94	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-2R	0.01	0.0032	0.05	No	36	44.44	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-3R	0.01	0.0045	0.05	No	31	35.48	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-4R	0.0057	0.003575	0.05	No	36	22.22	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	GWC-5R	0.02496	0.01757	0.05	No	31	3.226	None	No	0.01	Param.
Selenium (mg/L)	GWC-6R	0.005	0.0037	0.05	No	37	56.76	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-2R	0.001	0.001	0.002	No	34	97.06	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-5R	0.001	0.00029	0.002	No	30	93.33	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

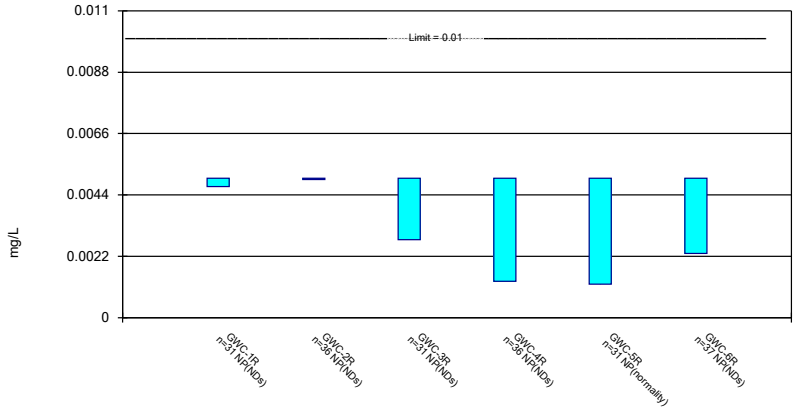
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

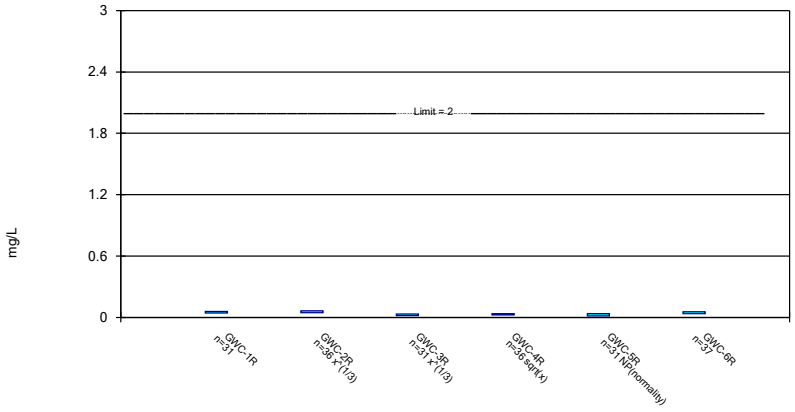
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

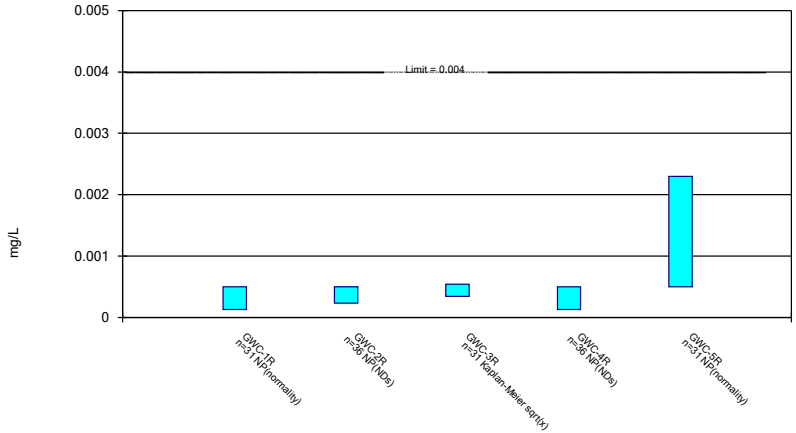
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

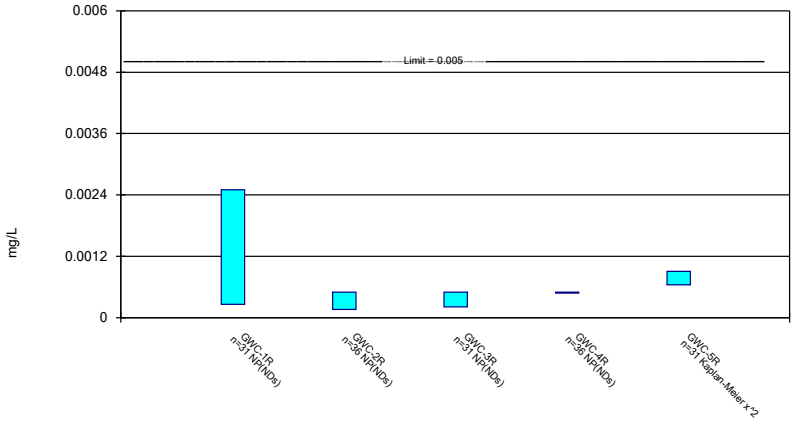
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates 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 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

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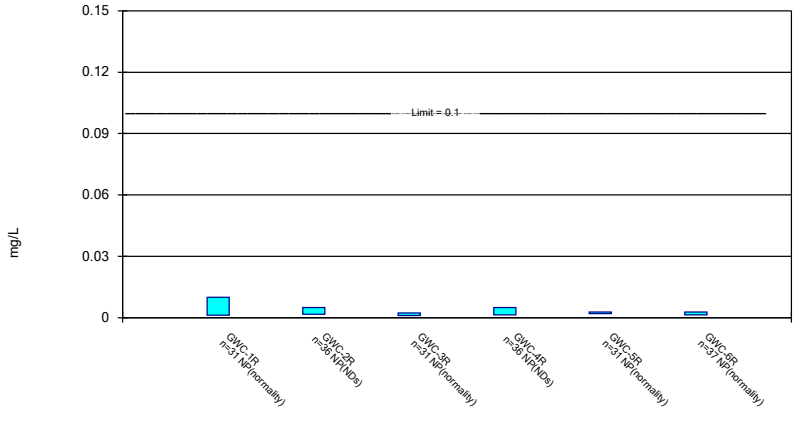
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

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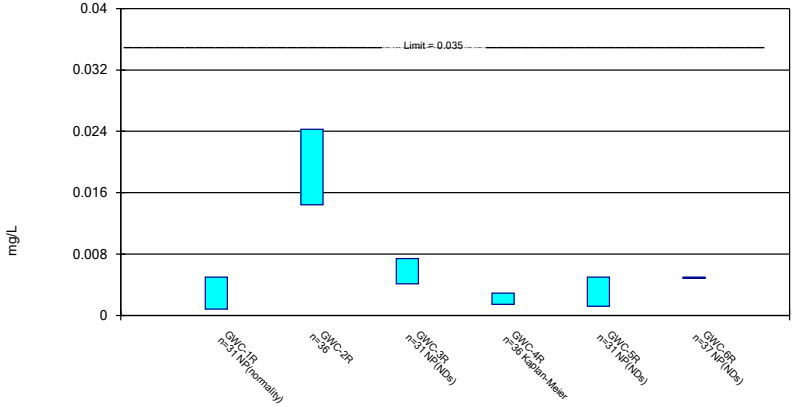
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

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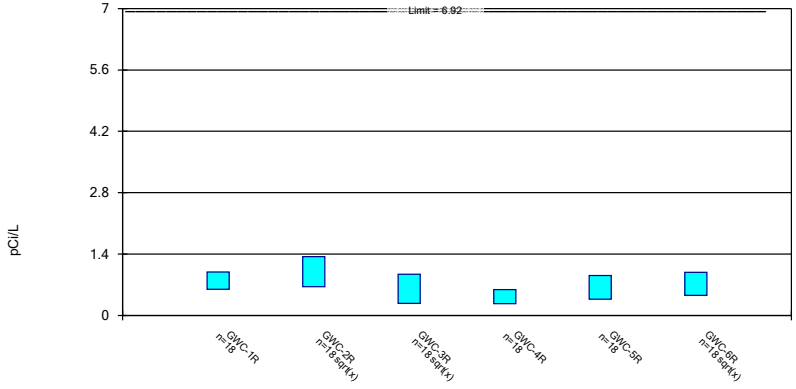
Parametric Confidence Interval

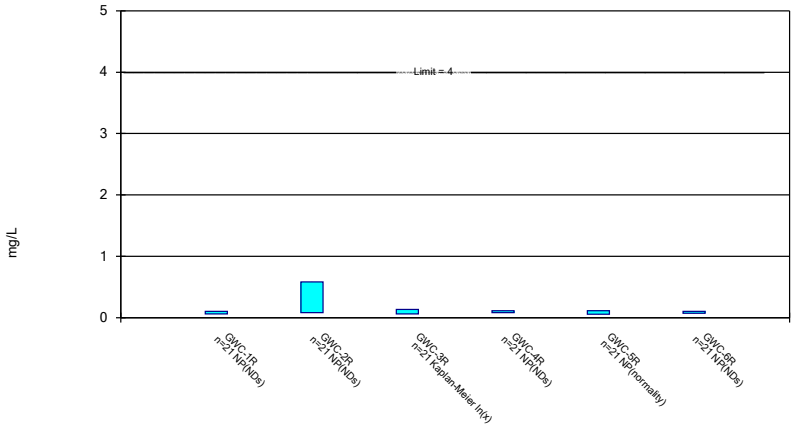
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates 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: Fluoride Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

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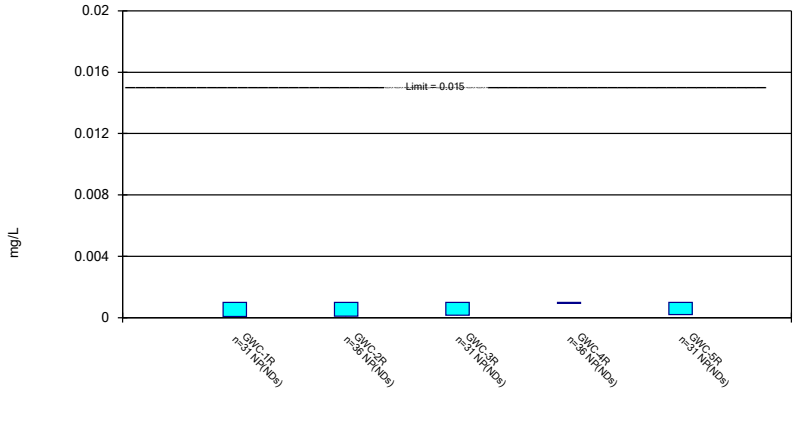
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

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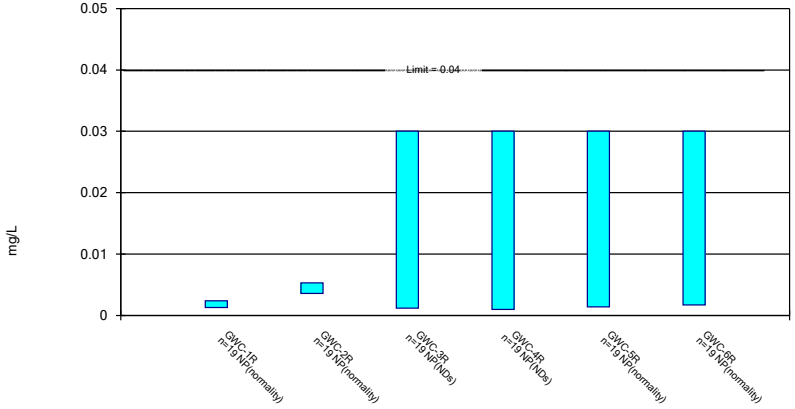
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

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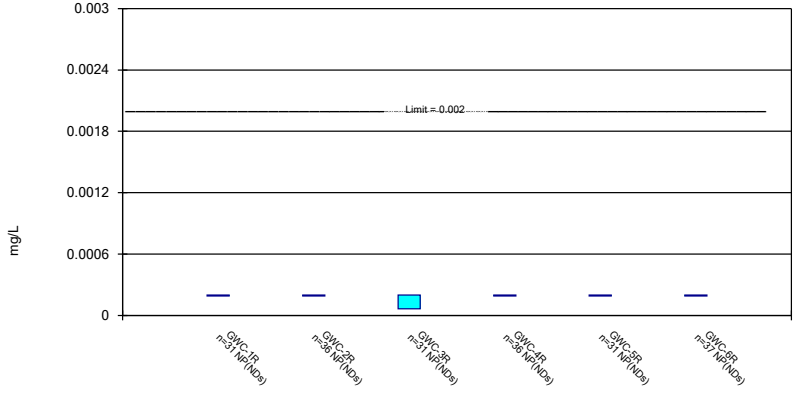
Non-Parametric Confidence Interval

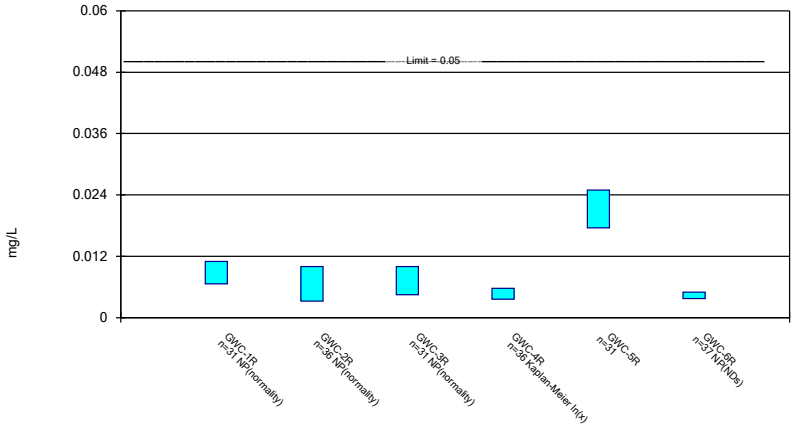
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates 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 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

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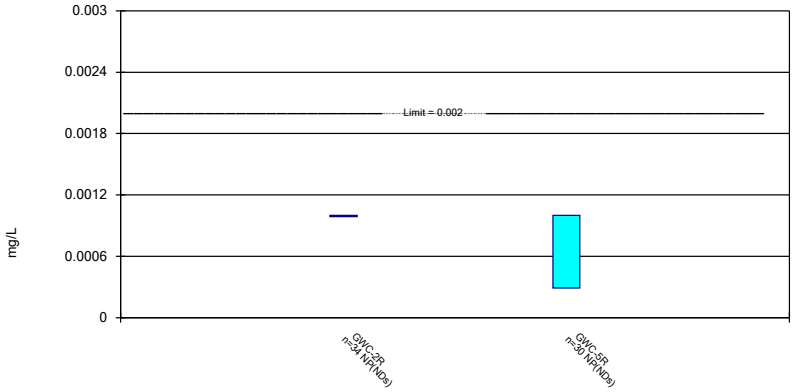
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 10/19/2023 12:07 PM View: Appendix IV
Plant Yates Data: Yates Gypsum Landfill

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-2R	GWC-4R	GWC-5R
11/22/2010	<0.003	<0.003	
1/4/2011	<0.003	<0.003	
2/17/2011	<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
3/4/2012		<0.003	
3/5/2012			<0.003
3/6/2012	<0.003		
9/5/2012			<0.003
9/10/2012		<0.003	
9/11/2012	<0.003		
2/5/2013			<0.003
2/6/2013	<0.003	<0.003	
8/13/2013	<0.003		
8/14/2013		<0.003	<0.003
2/4/2014	<0.003	<0.003	
2/5/2014			<0.003
8/4/2014		<0.003	<0.003
8/5/2014	<0.003		
2/2/2015	<0.003	<0.003	
2/3/2015			<0.003
8/3/2015		<0.003 (D)	<0.003 (D)
8/4/2015	<0.003		
2/16/2016		<0.003	<0.003
2/17/2016	<0.003		
8/31/2016	<0.003		
9/1/2016		0.0014 (J)	<0.003
11/28/2016	<0.003		
11/30/2016		<0.003	
12/1/2016			<0.003
2/22/2017	<0.003		
2/24/2017		<0.003	<0.003
5/10/2017	<0.003	<0.003	<0.003
7/17/2017			<0.003
7/18/2017	<0.003	<0.003	
10/16/2017			<0.003
10/17/2017	<0.003	<0.003	
2/20/2018	<0.003	<0.003	
2/21/2018			<0.003
8/7/2018			<0.003
8/8/2018	<0.003	<0.003	
2/26/2019	<0.003	<0.003	<0.003
6/12/2019	<0.003	0.00028 (J)	
6/13/2019			<0.003
8/19/2019		<0.003	
8/20/2019	<0.003		
8/21/2019			0.00054 (J)
10/9/2019	<0.003		<0.003
10/10/2019		<0.003	
3/18/2020	<0.003	<0.003	<0.003
8/27/2020			<0.003

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-2R	GWC-4R	GWC-5R
8/28/2020	<0.003	<0.003	
9/22/2020	0.0017 (J)	0.00053 (J)	
9/23/2020			0.00031 (J)
3/1/2021	<0.003	<0.003	
3/2/2021			<0.003
8/18/2021	<0.003	<0.003	<0.003
2/8/2022		0.0017 (J)	
2/9/2022	<0.003		<0.003
8/30/2022		0.00094 (J)	<0.003
8/31/2022	<0.003		
2/7/2023			<0.003
2/8/2023	<0.003	<0.003	
8/15/2023		<0.003	<0.003
8/16/2023	<0.003		
Mean	0.002964	0.002718	0.002834
Std. Dev.	0.0002167	0.0007393	0.0006437
Upper Lim.	0.003	0.003	0.003
Lower Lim.	0.003	0.0017	0.00054

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	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
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	<0.005
9/10/2012				<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		
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	
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	<0.005
8/3/2015			<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
2/17/2016		<0.005				
8/31/2016	<0.005	<0.005	<0.005			
9/1/2016				<0.005	<0.005	<0.005
11/28/2016		<0.005				
11/29/2016	<0.005					<0.005
11/30/2016			<0.005	<0.005		
12/1/2016					<0.005	
2/22/2017		<0.005				
2/23/2017	<0.005		<0.005			<0.005
2/24/2017				<0.005	<0.005	
5/9/2017	0.0005 (J)		<0.005			
5/10/2017		<0.005		<0.005	0.0011 (J)	0.0007 (J)
7/17/2017					0.0013 (J)	
7/18/2017	<0.005	<0.005	<0.005	<0.005		0.001 (J)
10/16/2017					0.0011 (J)	
10/17/2017	0.0009 (J)	<0.005		<0.005		
10/18/2017			<0.005			0.0011 (J)
2/19/2018						<0.005
2/20/2018		<0.005		<0.005		
2/21/2018	<0.005		<0.005		0.00091 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018						0.0023 (J)
8/7/2018	<0.005		<0.005		0.0021 (J)	
8/8/2018		<0.005		<0.005		
2/25/2019						0.00073 (J)
2/26/2019	<0.005	<0.005	<0.005	<0.005	0.00069 (J)	
6/12/2019		<0.005		0.00037 (J)		
6/13/2019	<0.005		0.0016 (J)		0.0012 (J)	0.00068 (J)
8/19/2019				0.00059 (J)		
8/20/2019	0.00044 (J)	0.00075 (J)				0.00072 (J)
8/21/2019			0.00061 (J)		0.00094 (J)	
10/8/2019						0.00056 (J)
10/9/2019	<0.005	<0.005			0.0012 (J)	
10/10/2019			<0.005	<0.005		
3/17/2020	<0.005		0.0016 (J)			<0.005
3/18/2020		<0.005		<0.005	0.0008 (J)	
8/27/2020	0.0011 (J)				0.0016 (J)	0.0011 (J)
8/28/2020		<0.005	<0.005	<0.005		
9/22/2020	<0.005	<0.005	<0.005	<0.005		
9/23/2020					0.00092 (J)	<0.005
3/1/2021	0.0022 (J)	0.0011 (J)		<0.005		
3/2/2021			0.0017 (J)		0.0024 (J)	
3/3/2021						<0.005
8/18/2021	0.0016 (J)	<0.005	0.0028 (J)	<0.005	0.0021 (J)	<0.005
2/8/2022	0.0026 (J)		0.0015 (J)	0.0013 (J)		<0.005
2/9/2022		<0.005			0.0034 (J)	
8/30/2022	0.0035 (J)		<0.005	<0.005	0.0035 (J)	<0.005
8/31/2022		<0.005				
2/7/2023	0.0047 (J)				0.0054	<0.005
2/8/2023		<0.005	<0.005	<0.005		
8/15/2023				<0.005	0.0053	<0.005
8/16/2023	<0.005	<0.005	<0.005			
Mean	0.004114	0.004774	0.004349	0.004646	0.003257	0.004024
Std. Dev.	0.001594	0.0009476	0.001381	0.001196	0.001871	0.001763
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.0047	0.005	0.0028	0.0013	0.0012	0.0023

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	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
11/22/2010		0.12		0.03		
1/4/2011		0.1		0.065		
2/17/2011		0.1		0.061		
3/10/2011						0.017
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	0.086					0.019
3/4/2012				0.046		
3/5/2012	0.044		0.014		0.048	0.027
3/6/2012		0.049				
9/5/2012	0.034		0.0095		0.07	0.04
9/10/2012				0.084		
9/11/2012		0.045				
2/5/2013	0.03				0.068	0.056
2/6/2013		0.05	0.0094	0.042		
8/13/2013	0.027	0.13	0.13			0.07
8/14/2013				0.042	0.036	
2/4/2014	0.037	0.08		0.046		0.051
2/5/2014			0.066		0.044	
8/4/2014			0.043	0.027	0.058	
8/5/2014	0.048	0.068				0.041
2/2/2015	0.069	0.066		0.02		
2/3/2015			0.031		0.033	0.04
8/3/2015			0.039 (D)	0.017 (D)	0.037 (D)	
8/4/2015	0.023 (D)	0.053				0.042
2/16/2016	0.044		0.038	0.032	0.04	0.068
2/17/2016		0.059				
8/31/2016	0.0711	0.0601	0.0286			
9/1/2016				0.0377	0.0345	0.0536
11/28/2016		0.0562				
11/29/2016	0.0754					0.0459
11/30/2016			0.0258	0.0148		
12/1/2016					0.0342	
2/22/2017		0.0481				
2/23/2017	0.0646		0.0278			0.0581
2/24/2017				0.029	0.0347	
5/9/2017	0.0463		0.0308			
5/10/2017		0.0563		0.0182	0.0363	0.0873
7/17/2017					0.0274	
7/18/2017	0.039	0.049	0.0407	0.0187		0.0994
10/16/2017					0.0151	
10/17/2017	0.0349	0.047		0.0157		
10/18/2017			0.049			0.0757
2/19/2018						0.0703
2/20/2018		0.0467		0.0151		
2/21/2018	0.0322		0.0285		0.0174	

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018						0.076
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		0.046		0.017		
6/13/2019	0.033		0.021		0.014	0.062
8/19/2019				0.02		
8/20/2019	0.07	0.05				0.06
8/21/2019			0.02		0.014	
10/8/2019						0.054
10/9/2019	0.054	0.045			0.015	
10/10/2019			0.018	0.018		
3/17/2020	0.031		0.024			0.031
3/18/2020		0.04		0.038	0.015	
8/27/2020	0.072				0.013	0.045
8/28/2020		0.044	0.014	0.026		
9/22/2020	0.068	0.04	0.014	0.026		
9/23/2020					0.012	0.044
3/1/2021	0.063	0.043		0.035		
3/2/2021			0.015		0.011	
3/3/2021						0.043
8/18/2021	0.076	0.033	0.014	0.04	0.013	0.035
2/8/2022	0.066		0.013	0.031		0.03
2/9/2022		0.038			0.011	
8/30/2022	0.058		0.01	0.022	0.01	0.028
8/31/2022		0.026				
2/7/2023	0.051				0.011	0.032
2/8/2023		0.027	0.0089	0.034		
8/15/2023				0.022	0.01	0.028
8/16/2023	0.042	0.026	0.0096			
Mean	0.04976	0.0569	0.02815	0.03259	0.02683	0.04549
Std. Dev.	0.01827	0.02418	0.02313	0.01649	0.01736	0.02062
Upper Lim.	0.05782	0.0632	0.03224	0.03721	0.036	0.05375
Lower Lim.	0.0417	0.04593	0.01781	0.02503	0.014	0.03724

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
11/22/2010		<0.0005		<0.0005	
1/4/2011		<0.0005		<0.0005	
2/17/2011		<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				
3/4/2012				<0.0005	
3/5/2012	<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	
9/11/2012		<0.0005			
2/5/2013	<0.0005				<0.0005
2/6/2013		<0.0005	<0.0005	<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
8/4/2014			0.0011 (J)	<0.0005	0.00026 (J)
8/5/2014	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)
8/3/2015			0.00051 (JD)	<0.0005 (D)	0.00046 (JD)
8/4/2015	<0.0005 (D)	<0.0005			
2/16/2016	<0.0005		0.00084 (J)	<0.0005	0.00048 (J)
2/17/2016		<0.0005			
8/31/2016	0.0001 (J)	<0.0005	0.0003 (J)		
9/1/2016				<0.0005	0.0005 (J)
11/28/2016		<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			
2/23/2017	<0.0005		0.0003 (J)		
2/24/2017				<0.0005	0.0002 (J)
5/9/2017	8E-05 (J)		0.0002 (J)		
5/10/2017		<0.0005		<0.0005	0.0003 (J)
7/17/2017					0.0004 (J)
7/18/2017	<0.0005	<0.0005	0.0002 (J)	<0.0005	
10/16/2017					0.0006 (J)
10/17/2017	0.0001 (J)	<0.0005		<0.0005	
10/18/2017			0.0004 (J)		
2/20/2018		<0.0005		<0.0005	
2/21/2018	<0.0005		<0.0005		<0.0005
8/7/2018	7.4E-05 (J)		0.00026 (J)		0.00096 (J)
8/8/2018		7E-05 (J)		<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	
6/13/2019	<0.0005		0.00051 (J)		0.0015 (J)
8/19/2019				<0.0005	
8/20/2019	0.0001 (J)	0.00017 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
8/21/2019			0.00046 (J)		0.0028 (J)
10/9/2019	0.00013 (J)	0.00014 (J)			0.0022 (J)
10/10/2019			0.00039 (J)	<0.0005	
3/17/2020	7.6E-05 (J)		0.00095 (J)		
3/18/2020		0.00012 (J)		<0.0005	0.0028 (J)
8/27/2020	0.00024 (J)				0.0023 (J)
8/28/2020		0.0002 (J)	0.0005 (J)	<0.0005	
9/22/2020	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			0.00081		0.0037
8/18/2021	0.0003 (J)	0.00022 (J)	0.0011	0.00011 (J)	0.0033
2/8/2022	0.00032 (J)		0.001	8.5E-05 (J)	
2/9/2022		0.00023 (J)			0.0036
8/30/2022	0.00037 (J)		0.00056	7.2E-05 (J)	0.0032
8/31/2022		0.00023 (J)			
2/7/2023	0.00037 (J)				0.0025
2/8/2023		0.00025 (J)	0.00033 (J)	0.00013 (J)	
8/15/2023				<0.0005	0.0033
8/16/2023	0.00033 (J)	0.00021 (J)	0.0006		
Mean	0.0003197	0.0003868	0.0005365	0.000431	0.001393
Std. Dev.	0.000177	0.0001589	0.0002429	0.0001569	0.001219
Upper Lim.	0.0005	0.0005	0.0005377	0.0005	0.0023
Lower Lim.	0.00013	0.00023	0.0003416	0.00013	0.0005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
11/22/2010		<0.0005		<0.0005	
1/4/2011		<0.0005		<0.0005	
2/17/2011		<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	<0.001
9/8/2011	<0.0025				
3/4/2012				<0.0005	
3/5/2012	<0.0025		<0.0005		<0.001
3/6/2012		<0.0005			
9/5/2012	<0.0025		<0.0005		<0.001
9/10/2012				<0.0005	
9/11/2012		<0.0005			
2/5/2013	<0.0025				<0.001
2/6/2013		<0.0005	<0.0005	<0.0005	
8/13/2013	<0.0025	<0.0005	<0.0005		
8/14/2013				<0.0005	<0.001
2/4/2014	<0.0025	<0.0005		<0.0005	
2/5/2014			<0.0005		<0.001
8/4/2014			0.00034 (J)	<0.0005	0.00045 (J)
8/5/2014	<0.0025	<0.0005			
2/2/2015	<0.0025	<0.0005		<0.0005	
2/3/2015			<0.0005		<0.001
8/3/2015			<0.0005 (D)	<0.0005 (D)	0.00046 (JD)
8/4/2015	<0.0025 (D)	<0.0005			
2/16/2016	<0.0025		0.00025 (J)	<0.0005	0.00097 (J)
2/17/2016		<0.0005			
8/31/2016	<0.0025	0.0001 (J)	<0.0005		
9/1/2016				0.0001 (J)	0.0005 (J)
11/28/2016		0.0001 (J)			
11/29/2016	8E-05 (J)				
11/30/2016			<0.0005	<0.0005	
12/1/2016					0.0004 (J)
2/22/2017		<0.0005			
2/23/2017	<0.0025		<0.0005		
2/24/2017				<0.0005	0.0003 (J)
5/9/2017	<0.0025		<0.0005		
5/10/2017		<0.0005		<0.0005	0.0003 (J)
7/17/2017					0.0004 (J)
7/18/2017	<0.0025	<0.0005	<0.0005	<0.0005	
10/16/2017					0.0006 (J)
10/17/2017	<0.0025	<0.0005		<0.0005	
10/18/2017			<0.0005		
2/20/2018		<0.0005		<0.0005	
2/21/2018	<0.0025		<0.0005		<0.001
8/7/2018	<0.0025		<0.0005		0.00083 (J)
8/8/2018		<0.0005		<0.0005	
2/26/2019	<0.0025	<0.0005	0.00011 (J)	<0.0005	0.00081 (J)
6/12/2019		<0.0005		<0.0005	
6/13/2019	<0.0025		0.00021 (J)		0.00073 (J)
8/19/2019				<0.0005	
8/20/2019	<0.0025	<0.0005			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
8/21/2019			<0.0005		0.0012 (J)
10/9/2019	<0.0025	<0.0005			0.0011 (J)
10/10/2019			0.00018 (J)	<0.0005	
3/17/2020	<0.0025		0.00037 (J)		
3/18/2020		<0.0005		<0.0005	0.0012 (J)
8/27/2020	0.00012 (J)				0.00091 (J)
8/28/2020		0.00015 (J)	0.00014 (J)	<0.0005	
9/22/2020	0.00016 (J)	0.00016 (J)	0.00013 (J)	<0.0005	
9/23/2020					0.00094 (J)
3/1/2021	0.00013 (J)	0.00016 (J)		<0.0005	
3/2/2021			0.00021 (J)		0.0011
8/18/2021	0.00017 (J)	0.00016 (J)	0.00022 (J)	<0.0005	0.001
2/8/2022	0.00019 (J)		0.00018 (J)	<0.0005	
2/9/2022		<0.0005			0.001
8/30/2022	0.00026 (J)		0.00016 (J)	0.00011 (J)	0.00098
8/31/2022		0.00012 (J)			
2/7/2023	0.0002 (J)				0.0013
2/8/2023		<0.0005	<0.0005	<0.0005	
8/15/2023				<0.0005	0.0011
8/16/2023	0.00019 (J)	0.00012 (J)	0.00013 (J)		
Mean	0.001823	0.0004186	0.0003752	0.0004781	0.0008574
Std. Dev.	0.001077	0.0001549	0.0001575	9.177E-05	0.0002843
Upper Lim.	0.0025	0.0005	0.0005	0.0005	0.0009026
Lower Lim.	0.00026	0.00016	0.00021	0.0005	0.0006444

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	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
11/22/2010		<0.005		<0.005		
1/4/2011		<0.005		0.0062		
2/17/2011		<0.005		<0.005		
3/10/2011						<0.01
3/11/2011		<0.005		<0.005		
3/28/2011		<0.005		<0.005		
9/7/2011		<0.005	<0.005	<0.005	<0.01	
9/8/2011	<0.01					0.0018
3/4/2012				<0.005		
3/5/2012	<0.01		<0.005		<0.01	<0.01
3/6/2012		<0.005				
9/5/2012	<0.01		<0.005		<0.01	0.0013
9/10/2012				<0.005		
9/11/2012		<0.005				
2/5/2013	<0.01				<0.01	<0.01
2/6/2013		<0.005	<0.005	<0.005		
8/13/2013	<0.01	0.0017	0.0019			0.0025
8/14/2013				<0.005	0.0016	
2/4/2014	<0.01	<0.005		<0.005		0.0013
2/5/2014			0.0023		0.0018	
8/4/2014			0.002	<0.005	0.0029	
8/5/2014	<0.01	<0.005				0.0018
2/2/2015	0.0028	<0.005		<0.005		
2/3/2015			0.0014		0.0017	0.0015
8/3/2015			0.0012 (JD)	<0.005 (D)	0.0028 (D)	
8/4/2015	<0.01 (D)	<0.005				0.0028
2/16/2016	<0.01		0.0017	<0.005	0.0028	0.001 (J)
2/17/2016		<0.005				
8/31/2016	0.0012 (J)	<0.005	0.0013 (J)			
9/1/2016				<0.005	0.0021 (J)	0.0015 (J)
11/28/2016		<0.005				
11/29/2016	0.0009 (J)					0.0014 (J)
11/30/2016			0.001 (J)	0.0013 (J)		
12/1/2016					0.0017 (J)	
2/22/2017		<0.005				
2/23/2017	0.001 (J)		0.0012 (J)			0.0017 (J)
2/24/2017				<0.005	0.0018 (J)	
5/9/2017	0.0011 (J)		0.0016 (J)			
5/10/2017		0.0008 (J)		0.0007 (J)	0.0024 (J)	0.0015 (J)
7/17/2017					0.0017 (J)	
7/18/2017	0.0008 (J)	<0.005	0.0009 (J)	0.0011 (J)		0.0012 (J)
10/16/2017					0.0023 (J)	
10/17/2017	0.001 (J)	<0.005		<0.005		
10/18/2017			0.001 (J)			0.0012 (J)
2/19/2018						<0.01
2/20/2018		<0.005		<0.005		
2/21/2018	<0.01		<0.005		<0.01	

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018						<0.01
8/7/2018	<0.01		<0.005		0.0024 (J)	
8/8/2018		<0.005		<0.005		
2/25/2019						<0.01
2/26/2019	<0.01	<0.005	<0.005	<0.005	0.0019 (J)	
6/12/2019		<0.005		<0.005		
6/13/2019	0.0009 (J)		0.00073 (J)		0.0018 (J)	0.00089 (J)
8/19/2019				0.00051 (J)		
8/20/2019	0.0011 (J)	<0.005				0.0017 (J)
8/21/2019			0.001 (J)		0.0024 (J)	
10/8/2019						0.0014 (J)
10/9/2019	0.0012 (J)	0.00059 (J)			0.0024 (J)	
10/10/2019			0.0014 (J)	0.00057 (J)		
3/17/2020	0.001 (J)		0.0013 (J)			0.0013 (J)
3/18/2020		0.0004 (J)		<0.005	0.0023 (J)	
8/27/2020	0.0013 (J)				0.0022 (J)	0.0012 (J)
8/28/2020		0.00057 (J)	0.00088 (J)	<0.005		
9/22/2020	0.0012 (J)	<0.005	0.0011 (J)	<0.005		
9/23/2020					0.002 (J)	0.0015 (J)
3/1/2021	0.0012 (J)	<0.005		<0.005		
3/2/2021			0.001 (J)		0.0021 (J)	
3/3/2021						0.0014 (J)
8/18/2021	0.0015 (J)	<0.005	<0.005	<0.005	0.0023 (J)	0.0015 (J)
2/8/2022	0.002 (J)		0.0011 (J)	<0.005		0.0017 (J)
2/9/2022		<0.005			0.0022 (J)	
8/30/2022	0.0015 (J)		<0.005	<0.005	0.0019 (J)	0.0016 (J)
8/31/2022		<0.005				
2/7/2023	0.002 (J)				0.0028 (J)	0.0025 (J)
2/8/2023		<0.005	0.0017 (J)	0.0012 (J)		
8/15/2023				<0.005	0.0018 (J)	0.0021 (J)
8/16/2023	0.0016 (J)	<0.005	<0.005			
Mean	0.004687	0.004418	0.002507	0.004349	0.003423	0.004089
Std. Dev.	0.004309	0.001479	0.001781	0.001584	0.002953	0.003916
Upper Lim.	0.01	0.005	0.0023	0.005	0.0028	0.0028
Lower Lim.	0.0012	0.0017	0.0011	0.0013	0.0019	0.0014

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	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
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	0.015					<0.005
3/4/2012				0.0032		
3/5/2012	<0.005		<0.005		<0.005	<0.005
3/6/2012		0.021				
9/5/2012	0.0018		<0.005		<0.005	<0.005
9/10/2012				0.0067		
9/11/2012		0.017				
2/5/2013	0.0013				<0.005	<0.005
2/6/2013		0.025	<0.005	0.0024		
8/13/2013	<0.005	0.023	<0.005			<0.005
8/14/2013				0.0014	<0.005	
2/4/2014	<0.005	0.019		<0.005		<0.005
2/5/2014			<0.005		<0.005	
8/4/2014			<0.005	<0.005	<0.005	
8/5/2014	<0.005	0.023				<0.005
2/2/2015	0.0015	0.022		<0.005		
2/3/2015			<0.005		<0.005	<0.005
8/3/2015			<0.005 (D)	<0.005 (D)	<0.005 (D)	
8/4/2015	<0.005 (D)	0.021				0.0014
2/16/2016	<0.005		<0.005	0.0082	<0.005	<0.005
2/17/2016		0.024				
8/31/2016	0.0006 (J)	0.0239	<0.005			
9/1/2016				0.0023 (J)	<0.005	<0.005
11/28/2016		0.0189				
11/29/2016	<0.005					<0.005
11/30/2016			<0.005	0.0008 (J)		
12/1/2016					<0.005	
2/22/2017		0.0184				
2/23/2017	0.0009 (J)		<0.005			<0.005
2/24/2017				0.0025 (J)	<0.005	
5/9/2017	0.0008 (J)		<0.005			
5/10/2017		0.0213		<0.005	<0.005	<0.005
7/17/2017					<0.005	
7/18/2017	0.0032 (J)	0.0261	<0.005	0.0005 (J)		<0.005
10/16/2017					<0.005	
10/17/2017	0.0007 (J)	0.0182		0.0006 (J)		
10/18/2017			<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	

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018						<0.005
8/7/2018	<0.005		<0.005		<0.005	
8/8/2018		0.014		0.001 (J)		
2/25/2019						<0.005
2/26/2019	<0.005	0.029	<0.005	<0.005	<0.005	
6/12/2019		0.013		0.00078 (J)		
6/13/2019	0.00033 (J)		0.01		<0.005	<0.005
8/19/2019				0.001 (J)		
8/20/2019	0.00079 (J)	0.014				<0.005
8/21/2019			0.0016 (J)		0.00034 (J)	
10/8/2019						<0.005
10/9/2019	0.00064 (J)	0.024			0.00031 (J)	
10/10/2019			<0.005	0.00099 (J)		
3/17/2020	0.00054 (J)		0.011			<0.005
3/18/2020		0.019		0.0031 (J)	0.00044 (J)	
8/27/2020	0.00081 (J)				<0.005	<0.005
8/28/2020		0.0072	0.0041 (J)	0.00049 (J)		
9/22/2020	0.0008 (J)	0.0054	0.0021 (J)	0.00039 (J)		
9/23/2020					<0.005	<0.005
3/1/2021	0.00083 (J)	0.00074 (J)		0.0016 (J)		
3/2/2021			0.0086		0.00039 (J)	
3/3/2021						<0.005
8/18/2021	0.0014 (J)	0.00066 (J)	0.01	0.0027 (J)	0.00053 (J)	<0.005
2/8/2022	0.0019 (J)		0.0074	0.0034 (J)		<0.005
2/9/2022		0.00085 (J)			0.00064 (J)	
8/30/2022	0.00087 (J)		0.0021 (J)	0.002 (J)	0.00077 (J)	<0.005
8/31/2022		0.0036 (J)				
2/7/2023	0.00086 (J)				0.00085 (J)	<0.005
2/8/2023		0.00052 (J)	0.00085 (J)	0.0006 (J)		
8/15/2023				0.002 (J)	0.0012 (J)	<0.005
8/16/2023	0.00063 (J)	0.011	0.0032 (J)			
Mean	0.002781	0.01934	0.005192	0.003037	0.003725	0.004903
Std. Dev.	0.002977	0.01211	0.00226	0.002023	0.002032	0.0005918
Upper Lim.	0.005	0.02426	0.0074	0.002908	0.005	0.005
Lower Lim.	0.0008	0.01442	0.0041	0.001456	0.0012	0.005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
11/28/2016		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		0.739 (U)				
2/23/2017	0.504 (U)		0.728 (U)			1.18 (U)
2/24/2017				0.305 (U)	0.487 (U)	
5/9/2017	0.434 (U)		0.0367 (U)			
5/10/2017		0.458 (U)		0.0659 (U)	0.289 (U)	0.658 (U)
7/17/2017					0.528 (U)	
7/18/2017	1.37	0.708 (U)	0.237 (U)	0.199 (U)		0.797 (U)
10/16/2017					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						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						0.866 (U)
8/7/2018	0.578 (U)		0.376 (U)		0.51 (U)	
8/8/2018		2.01		0.0378 (U)		
8/19/2019				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						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	1.4		2.84			2.5
3/18/2020		1.3		0.866 (U)	0.788 (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	0.7 (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			1.13 (U)		0.686 (U)	
3/3/2021						0.721 (U)
8/18/2021	0.713 (U)	0.583 (U)	0.544 (U)	0.109 (U)	0.437 (U)	0.352 (U)
2/8/2022	0.649 (U)		0.389 (U)	0.319 (U)		0.413 (U)
2/9/2022		0.42 (U)			0.48 (U)	
8/30/2022	0.476 (U)		0.884 (U)	0.433 (U)	1.36	0.861 (U)
8/31/2022		1.55				
2/7/2023	1.17				0.871 (U)	0.72 (U)
2/8/2023		0.453 (U)	0.0452 (U)	0.453 (U)		
8/15/2023				0.7 (U)	0.326 (U)	0.374 (U)
8/16/2023	0.884 (U)	1.69	0.947 (U)			
Mean	0.7941	1.048	0.6863	0.4247	0.6399	0.7599
Std. Dev.	0.326	0.5861	0.6446	0.2644	0.4437	0.5155
Upper Lim.	0.9913	1.343	0.9406	0.5846	0.9083	0.9828
Lower Lim.	0.5969	0.6551	0.2756	0.2648	0.3714	0.4593

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	0.05 (J)	0.08 (J)	0.07 (J)			
9/1/2016				0.15 (J)	0.03 (J)	0.28 (J)
11/28/2016		0.03 (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		0.04 (J)				
2/23/2017	0.06 (J)		0.04 (J)			0.07 (J)
2/24/2017				0.08 (J)	0.03 (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					0.37	
7/18/2017	<0.1	<0.1	<0.1	<0.1		<0.1
10/16/2017					<0.1	
10/17/2017	<0.1	<0.1		<0.1		
10/18/2017			0.22 (J)			<0.1
2/19/2018						<0.1
2/20/2018		<0.1		<0.1		
2/21/2018	<0.1		<0.1		<0.1	
8/6/2018						<0.1
8/7/2018	<0.1		<0.1		<0.1	
8/8/2018		<0.1		<0.1		
2/25/2019						<0.1
2/26/2019	<0.1	<0.1	<0.1	<0.1	0.035 (J)	
6/12/2019		0.58		<0.1		
6/13/2019	<0.1		0.58		<0.1	<0.1
8/19/2019				<0.1		
8/20/2019	<0.1	<0.1				<0.1
8/21/2019			0.037 (J)		<0.1	
10/8/2019						<0.1
10/9/2019	<0.1	<0.1			0.35	
10/10/2019			<0.1	<0.1		
3/17/2020	<0.1		0.1 (J)			<0.1
3/18/2020		<0.1		<0.1	<0.1	
8/27/2020	<0.1				0.064 (J)	<0.1
8/28/2020		<0.1	0.097 (J)	<0.1		
9/22/2020	<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			0.15		0.094 (J)	
3/3/2021						<0.1
8/18/2021	<0.1	<0.1	0.16	<0.1	0.056 (J)	<0.1
2/8/2022	<0.1		0.16	<0.1		<0.1
2/9/2022		<0.1			0.053 (J)	
8/30/2022	<0.1		0.14	0.05 (J)	0.11	0.064 (J)
8/31/2022		<0.1				
2/7/2023	<0.1				0.077 (J)	0.07 (J)
2/8/2023		<0.1	0.12	0.05 (J)		
8/15/2023				<0.1	0.056 (J)	<0.1
8/16/2023	<0.1	<0.1	0.087 (J)			
Mean	0.09095	0.1133	0.1281	0.09429	0.106	0.09781
Std. Dev.	0.01947	0.1091	0.1126	0.02336	0.08852	0.04706

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
Upper Lim.	0.1	0.58	0.134	0.11	0.11	0.1
Lower Lim.	0.06	0.08	0.06027	0.08	0.056	0.07

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
11/22/2010		<0.001		<0.001	
1/4/2011		<0.001		<0.001	
2/17/2011		<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				
3/4/2012				<0.001	
3/5/2012	<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	
9/11/2012		<0.001			
2/5/2013	<0.001				<0.001
2/6/2013		<0.001	<0.001	<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
8/4/2014			<0.001	<0.001	<0.001
8/5/2014	<0.001	<0.001			
2/2/2015	<0.001	<0.001		<0.001	
2/3/2015			<0.001		<0.001
8/3/2015			<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
2/17/2016		<0.001			
8/31/2016	<0.001	<0.001	0.0001 (J)		
9/1/2016				<0.001	<0.001
11/28/2016		<0.001			
11/29/2016	<0.001				
11/30/2016			<0.001	<0.001	
12/1/2016					<0.001
2/22/2017		<0.001			
2/23/2017	<0.001		<0.001		
2/24/2017				<0.001	<0.001
5/9/2017	<0.001		<0.001		
5/10/2017		0.0001 (J)		<0.001	<0.001
7/17/2017					<0.001
7/18/2017	<0.001	7E-05 (J)	<0.001	<0.001	
10/16/2017					<0.001
10/17/2017	<0.001	<0.001		<0.001	
10/18/2017			8E-05 (J)		
2/20/2018		<0.001		<0.001	
2/21/2018	<0.001		<0.001		<0.001
8/7/2018	<0.001		<0.001		<0.001
8/8/2018		<0.001		<0.001	
2/26/2019	<0.001	<0.001	<0.001	<0.001	<0.001
6/12/2019		<0.001		<0.001	
6/13/2019	<0.001		<0.001		<0.001
8/19/2019				<0.001	
8/20/2019	<0.001	6.1E-05 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
8/21/2019			8.2E-05 (J)		7E-05 (J)
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		0.00015 (J)		
3/18/2020		<0.001		<0.001	7.9E-05 (J)
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	<0.001	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			9.6E-05 (J)		5.4E-05 (J)
8/18/2021	<0.001	<0.001	<0.001	<0.001	<0.001
2/8/2022	<0.001		<0.001	<0.001	
2/9/2022		<0.001			<0.001
8/30/2022	<0.001		<0.001	<0.001	<0.001
8/31/2022		<0.001			
2/7/2023	<0.001				<0.001
2/8/2023		<0.001	<0.001	<0.001	
8/15/2023				<0.001	<0.001
8/16/2023	<0.001	<0.001	<0.001		
Mean	0.0009393	0.0008201	0.0007944	0.0009734	0.0008226
Std. Dev.	0.0002349	0.0003714	0.0003873	0.0001598	0.0003687
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	6.7E-05	0.0001	0.00015	0.001	0.00019

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	0.0024 (J)	<0.03	<0.03			
9/1/2016				<0.03	<0.03	<0.03
11/28/2016		<0.03				
11/29/2016	<0.03					<0.03
11/30/2016			<0.03	<0.03		
12/1/2016					<0.03	
2/22/2017		0.0036 (J)				
2/23/2017	<0.03		<0.03			0.0028 (J)
2/24/2017				<0.03	<0.03	
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	
7/18/2017	<0.03	0.0035 (J)	<0.03	<0.03		0.002 (J)
10/16/2017					<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
2/20/2018		<0.03		<0.03		
2/21/2018	0.0014 (J)		<0.03		<0.03	
8/6/2018						<0.03
8/7/2018	0.001 (J)		<0.03		<0.03	
8/8/2018		0.0031 (J)		<0.03		
8/19/2019				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						0.0021 (J)
10/9/2019	0.0013 (J)	0.0047 (J)			0.0014 (J)	
10/10/2019			<0.03	0.0013 (J)		
3/17/2020	0.00094 (J)		0.0012 (J)			0.0018 (J)
3/18/2020		0.0053 (J)		<0.03	0.0017 (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	0.0015 (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			0.00088 (J)		0.0016 (J)	
3/3/2021						0.0018 (J)
8/18/2021	0.0019 (J)	0.0049 (J)	0.001 (J)	0.00085 (J)	0.0016 (J)	0.0016 (J)
2/8/2022	0.0018 (J)		0.00094 (J)	<0.03		0.0016 (J)
2/9/2022		0.0042 (J)			0.0018 (J)	
8/30/2022	0.0019 (J)		<0.03	<0.03	0.0014 (J)	0.0013 (J)
8/31/2022		0.0042 (J)				
2/7/2023	0.0023 (J)				0.0014 (J)	0.0017 (J)
2/8/2023		0.0038 (J)	<0.03	0.00098 (J)		
8/15/2023				0.00074 (J)	0.0014 (J)	<0.03
8/16/2023	0.0019 (J)	0.0044 (J)	<0.03			
Mean	0.006123	0.0082	0.0239	0.01933	0.01349	0.009858
Std. Dev.	0.01063	0.009714	0.01214	0.01436	0.01447	0.01247
Upper Lim.	0.0024	0.0053	0.03	0.03	0.03	0.03
Lower Lim.	0.0013	0.0036	0.0012	0.00098	0.0014	0.0017

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
9/9/2009						<0.0002
11/18/2009						<0.0002
1/5/2010						<0.0002
3/3/2010						<0.0002
9/7/2010						<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
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
3/4/2012				<0.0002		
3/5/2012	<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		
9/11/2012		<0.0002				
2/5/2013	<0.0002				<0.0002	<0.0002
2/6/2013		<0.0002	<0.0002	0.00014		
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	
8/4/2014			<0.0002	<0.0002	<0.0002	
8/5/2014	<0.0002	<0.0002				<0.0002
2/2/2015	<0.0002	<0.0002		<0.0002		
2/3/2015			<0.0002		<0.0002	<0.0002
8/3/2015			<0.0002 (D)	<0.0002 (D)	<0.0002 (D)	
8/4/2015	<0.0002 (D)	<0.0002				<0.0002
2/16/2016	<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			
9/1/2016				<0.0002	<0.0002	<0.0002
11/28/2016		<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				
2/23/2017	<0.0002		<0.0002			<0.0002
2/24/2017				<0.0002	<0.0002	
5/9/2017	<0.0002		<0.0002			
5/10/2017		<0.0002		<0.0002	<0.0002	<0.0002
7/17/2017					<0.0002	
7/18/2017	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
10/16/2017					<0.0002	
10/17/2017	<0.0002	<0.0002		<0.0002		
10/18/2017			<0.0002			<0.0002
2/19/2018						<0.0002
2/20/2018		<0.0002		<0.0002		
2/21/2018	<0.0002		<0.0002		<0.0002	

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018						<0.0002
8/7/2018	<0.0002		<0.0002		<0.0002	
8/8/2018		<0.0002		<0.0002		
2/25/2019						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		
6/13/2019	<0.0002		<0.0002		<0.0002	<0.0002
8/19/2019				<0.0002		
8/20/2019	<0.0002	<0.0002				<0.0002
8/21/2019			<0.0002		<0.0002	
10/8/2019						<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
5/7/2020		<0.0002	<0.0002	<0.0002	<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		
9/23/2020					<0.0002	<0.0002
3/1/2021	<0.0002	<0.0002		<0.0002		
3/2/2021			<0.0002		<0.0002	
3/3/2021						<0.0002
8/18/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/8/2022	<0.0002		<0.0002	<0.0002		<0.0002
2/9/2022		<0.0002			<0.0002	
8/30/2022	<0.0002		<0.0002	0.00014 (J)	<0.0002	<0.0002
8/31/2022		<0.0002				
2/7/2023	<0.0002				<0.0002	<0.0002
2/8/2023		<0.0002	<0.0002	0.0002 (J)		
8/15/2023				<0.0002	<0.0002	<0.0002
8/16/2023	<0.0002	<0.0002	<0.0002			
Mean	0.0001955	0.0001964	0.000197	0.0001927	0.0001955	0.0001913
Std. Dev.	2.532E-05	2.15E-05	5.942E-05	2.697E-05	2.514E-05	3.745E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	0.0002	0.0002	6.4E-05	0.0002	0.0002	0.0002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	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
11/22/2010		<0.01		<0.01		
1/4/2011		<0.01		<0.01		
2/17/2011		<0.01		<0.01		
3/10/2011						<0.005
3/11/2011		<0.01		<0.01		
3/28/2011		<0.01		<0.01		
9/7/2011		<0.01	<0.01	<0.01	<0.013	
9/8/2011	<0.01					<0.005
3/4/2012				<0.01		
3/5/2012	<0.01		<0.01		0.014	<0.005
3/6/2012		<0.01				
9/5/2012	<0.01		<0.01		0.012	<0.005
9/10/2012				0.011		
9/11/2012		<0.01				
2/5/2013	<0.01				0.011	<0.005
2/6/2013		<0.01	<0.01	0.011		
8/13/2013	<0.01	<0.01	0.0057			<0.005
8/14/2013				0.013	0.025	
2/4/2014	<0.01	<0.01		0.017		<0.005
2/5/2014			<0.01		0.02	
8/4/2014			<0.01	0.0085	0.032	
8/5/2014	<0.01	<0.01				<0.005
2/2/2015	<0.01	<0.01		0.0089		
2/3/2015			<0.01		0.011	<0.005
8/3/2015			<0.01 (D)	0.0067 (D)	0.046 (D)	
8/4/2015	<0.01 (D)	<0.01				<0.005
2/16/2016	<0.01		<0.01	0.0047 (J)	0.022	<0.005
2/17/2016		<0.01				
8/31/2016	0.0039 (J)	0.0029 (J)	0.0038 (J)			
9/1/2016				0.0132	0.0212	0.002 (J)
11/28/2016		0.0019 (J)				
11/29/2016	0.0033 (J)					0.0017 (J)
11/30/2016			0.0054 (J)	0.0046 (J)		
12/1/2016					0.0234	
2/22/2017		0.0015 (J)				
2/23/2017	0.0097 (J)		0.002 (J)			0.0018 (J)
2/24/2017				0.0108	0.0154	
5/9/2017	0.0066 (J)		<0.01			
5/10/2017		0.0016 (J)		0.0054 (J)	0.0152	0.0023 (J)
7/17/2017					0.0136	
7/18/2017	0.0021 (J)	0.0024 (J)	0.0027 (J)	0.0047 (J)		0.0046 (J)
10/16/2017					0.0242	
10/17/2017	0.003 (J)	0.0028 (J)		0.004 (J)		
10/18/2017			0.0047 (J)			0.0037 (J)
2/19/2018						<0.005
2/20/2018		<0.01		<0.01		
2/21/2018	<0.01		<0.01		0.0127	

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018						0.0047 (J)
8/7/2018	<0.01		0.0016 (J)		0.021	
8/8/2018		0.0025 (J)		0.0041 (J)		
2/25/2019						0.0051 (J)
2/26/2019	0.0014 (J)	0.003 (J)	0.002 (J)	0.0027 (J)	0.024	
6/12/2019		0.0034 (J)		0.0029 (J)		
6/13/2019	<0.01		0.0089 (J)		0.027	0.0048 (J)
8/19/2019				0.003 (J)		
8/20/2019	0.0022 (J)	0.0032 (J)				0.0039 (J)
8/21/2019			0.004 (J)		0.037	
10/8/2019						0.0031 (J)
10/9/2019	0.0023 (J)	0.0026 (J)			0.034	
10/10/2019			0.0021 (J)	0.0024 (J)		
3/17/2020	0.0017 (J)		0.0096 (J)			0.0026 (J)
3/18/2020		0.0032 (J)		0.0046 (J)	0.028	
8/27/2020	0.011				0.021	0.0027 (J)
8/28/2020		0.0037 (J)	0.0045 (J)	0.0031 (J)		
9/22/2020	0.012	0.0056 (J)	0.0091 (J)	0.0032 (J)		
9/23/2020					0.026	0.0031 (J)
3/1/2021	0.011	0.0043 (J)		0.0041 (J)		
3/2/2021			0.012		0.019	
3/3/2021						0.002 (J)
8/18/2021	0.019	0.0042 (J)	0.017	0.0046 (J)	0.017	0.0016 (J)
2/8/2022	0.02		0.0091	0.0044 (J)		<0.005
2/9/2022		0.0042 (J)			0.017	
8/30/2022	0.03		0.0068	0.0038 (J)	0.019	<0.005
8/31/2022		0.0042 (J)				
2/7/2023	0.025				0.02	<0.005
2/8/2023		0.0043 (J)	0.002 (J)	0.0029 (J)		
8/15/2023				0.0021 (J)	0.024	<0.005
8/16/2023	0.02	0.0033 (J)	0.0052			
Mean	0.01014	0.006244	0.007361	0.006983	0.02126	0.004181
Std. Dev.	0.006781	0.003491	0.00376	0.003836	0.008368	0.001232
Upper Lim.	0.011	0.01	0.01	0.0057	0.02496	0.005
Lower Lim.	0.0066	0.0032	0.0045	0.003575	0.01757	0.0037

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R
11/22/2010	<0.001	
1/4/2011	<0.001	
2/17/2011	<0.001	
3/11/2011	<0.001	
3/28/2011	<0.001	
9/7/2011	<0.001	<0.001
3/5/2012		<0.001
3/6/2012	<0.001	
9/5/2012		<0.001
9/11/2012	<0.001	
2/5/2013		<0.001
2/6/2013	<0.001	
8/13/2013	<0.001	
8/14/2013		<0.001
2/4/2014	<0.001	
2/5/2014		<0.001
8/4/2014		<0.001
2/2/2015	<0.001	
2/3/2015		<0.001
2/16/2016		<0.001
2/17/2016	7E-05 (J)	
8/31/2016	<0.001	
9/1/2016		<0.001
11/28/2016	<0.001	
12/1/2016		<0.001
2/22/2017	<0.001	
2/24/2017		<0.001
5/10/2017	<0.001	<0.001
7/17/2017		<0.001
7/18/2017	<0.001	
10/16/2017		<0.001
10/17/2017	<0.001	
2/20/2018	<0.001	
2/21/2018		<0.001
8/7/2018		<0.001
8/8/2018	<0.001	
2/26/2019	<0.001	<0.001
6/12/2019	<0.001	
6/13/2019		<0.001
8/20/2019	<0.001	
8/21/2019		5.3E-05 (J)
10/9/2019	<0.001	<0.001
3/18/2020	<0.001	<0.001
8/27/2020		<0.001
8/28/2020	<0.001	
9/22/2020	<0.001	
9/23/2020		<0.001
3/1/2021	<0.001	
3/2/2021		<0.001
8/18/2021	<0.001	<0.001
2/9/2022	<0.001	<0.001
8/30/2022		<0.001

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 10/19/2023 12:08 PM View: Appendix IV

Plant Yates Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R
8/31/2022	<0.001	
2/7/2023		<0.001
2/8/2023	<0.001	
8/15/2023		0.00029 (J)
8/16/2023	<0.001	
Mean	0.0009726	0.0009448
Std. Dev.	0.0001595	0.0002125
Upper Lim.	0.001	0.001
Lower Lim.	0.001	0.00029

ND substitution: RL or RL/2 if <15% NDs.

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