Georgia Power Company Plant Yates – Gypsum Stack Landfill

Newnan, Georgia PERMIT #: 038-014D(I) Coweta County

2019 SECOND SEMIANNUAL GROUNDWATER MONITORING REPORT





Evan B. Perly P. G.

Project Manager Date: 2019-02-27

PROFESSIONAL CERTIFICATION

This 2019 Second Semiannual Groundwater Monitoring & Corrective Action Report, Georgia Power Company – Plant Yates Gypsum Stack Landfill has been prepared in compliance with the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4.10 and 391-3-4-.14 by a qualified groundwater scientist or engineer with Atlantic Coast Consulting, Inc (ACC).

ATLANTIC COAST CONSULTING, INC.

William M Mbu

William M. Malone Project Scientist



TABLE OF CONTENTS

<u>Section</u>	n	Page No
1.0	INTRODUCTION	1
1.1	Site Description and Background	1
1.2	Site Geology and Hydrogeologic Setting	1
1.3	Groundwater Monitoring Well Network and CCR Unit Description	2
2.0	GROUNDWATER MONITORING ACTIVITIES	2
2.1	Monitoring Well Installation/Maintenance	2
2.2	Assessment Monitoring Program	3
3.0	SAMPLE METHODOLOGY AND ANALYSIS	3
3.1	Groundwater Flow Direction, Gradient, and Velocity	3
3.2	Groundwater Sampling	3
3.3	Laboratory Analyses	4
3.4	Quality Assurance and Quality Control	4
4.0	STATISTICAL ANALYSIS	5
4.1	Statistical Methods	5
4.	.1.1 Appendix III Constituents	5
4.	.1.2 Permit-Required Appendix I and II Metals	6
4.2	Appendix III Statistical Analyses Results	6
4.3	Appendix IV Statistical Analyses Results	6
4.4	Appendix I and II EPD Permit-Required Metals	7
5.0	MONITORING PROGRAM STATUS	7
6.0	CONCLUSIONS AND FUTURE ACTIONS	7
7.0	REFERENCES	7

Tables

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



Figures

Figure 1 - Site Location Map

Figure 2 - Well Location Map

Figure 3 – October 2019 Water Table Contour Map

Appendices

Appendix A - Laboratory Analytical and Field Sampling Reports

Appendix B - Statistical Analyses



1.0 INTRODUCTION

In accordance with the Georgia Environmental Protection Division (GA EPD) Rules of Solid Waste Management 391-3-4-.10(6)(a)-(c), Atlantic Coast Consulting, Inc. (ACC) has prepared this 2019 Second Semiannual Groundwater Monitoring Report to document groundwater monitoring activities conducted during the second half of 2019 at Georgia Power Company's (GPC's) Plant Yates Gypsum Stack Landfill (Site). To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) § 257 Subpart D. For ease of reference, the US EPA CCR rules are cited within this report.

To comply with GA EPD's rule 391-3-4-.10, a permit application package for Plant Yates Gypsum Stack Landfill was submitted to GA EPD in November 2018 and is currently under review. The list of analytes included in the groundwater monitoring program has been modified to meet the requirements of 40 CFR § 257 into the routine groundwater monitoring program through a minor modification in August 2017. Semiannual Reporting is completed pursuant to GA EPD rule 391-3-4-.10(6)(c). This report documents the two monitoring events conducted during the second half of 2019: (1) an initial assessment monitoring event for Appendix IV constituents in August 2019 as a result of statistical exceedances of Appendix III parameters during the first detection monitoring event, and (2) the subsequent assessment event conducted in October 2019 for Appendix I and II metals required by the existing state permit, Appendix III, and Appendix IV parameters detected during the August 2019 monitoring event.

1.1 Site Description and Background

Plant Yates is located at 708 Dyer Road, on the eastern bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line, 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. The Site ceased accepting CCR prior to 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, and a closure certification report was submitted to GA EPD in January 2017. Figure 1, Site Location Map, depicts the site location relative to the surrounding area.

1.2 Site Geology and Hydrogeologic Setting

Plant Yates is located in the Inner Piedmont Physiographic Province of western Georgia, immediately southeast of the regional zone of deformation referred to as the Brevard Zone. Rock units at Plant Yates are primarily interlayered gneiss and schists. The rocks in the area have been subjected to several episodes of metamorphism and intrusion by igneous bodies. Extensive jointing occurs in the area. Surface expressions of the joints are observed on topographic maps and aerial photos of the Plant Yates area.

A thin layer of soil from one to two feet thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20-40 feet below ground surface, was formed in-place by the physical and chemical weathering of the underlying metamorphic rocks. There is typically a zone of variable thickness (approximately 5-20 feet) of transitionally weathered rock between the saprolite and competent bedrock. Localized alluvial soils consisting of generally coarser material (silty-sand, clayey silt, and silty clay with well-rounded gravel and cobbles) than that 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 increasing 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.

In-situ slug tests were performed in saprolite and weathered bedrock at multiple locations on the site. The average hydraulic conductivity for the unit is 2.3×10^{-4} centimeters per second, based on multiple rising-head and falling-head slug tests (SCS, 1992). The testing indicates a fairly uniform medium across the saprolite and weathered rock horizon. The values from the field testing fall within the standard range of hydraulic conductivity values associated with a silty sand.

1.3 Groundwater Monitoring Well Network and CCR Unit Description

A groundwater monitoring system was installed within the uppermost aquifer at the Site. The monitoring system is designed to monitor groundwater passing the unit boundary within the uppermost aquifer. Figure 2, Well Location Map, shows the monitoring well locations. Wells were located to serve as upgradient and downgradient monitoring points based on groundwater flow direction (Table 1, Monitoring Network Well Summary).

2.0 GROUNDWATER MONITORING ACTIVITIES

The following describes monitoring-related activities performed during the second half of 2019 and discusses any status changes of the monitoring program. Samples were collected from each well in the certified monitoring system shown on Figure 2. Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed at the Site.

Based on results of the Supplemental 2019 First Semiannual Groundwater Monitoring Report, assessment monitoring was initiated at the site. Table 2 presents a summary of groundwater sampling events completed at the Site during the second half of 2019. During the initial assessment monitoring event completed in August 2019, groundwater samples were collected and analyzed for Appendix IV constituents to meet the requirements of § 257.95(b). During the October semiannual (assessment) sampling event, groundwater samples were collected for both Appendix III and the Appendix IV constituents detected during the August event at each monitoring well. Results of sampling activities in the second half of 2019 for the entire site are presented in Appendix A, Laboratory Analytical and Field Sampling Reports.

2.1 Monitoring Well Installation/Maintenance

Monitoring well-related activities were limited to visual inspection of well conditions prior to sampling, recording the site conditions, and performing exterior maintenance to provide safe access for sampling.



2.2 Assessment Monitoring Program

Based on results presented in the *Supplemental 2019 First Semiannual Groundwater Monitoring Report*, GPC has initiated an assessment monitoring program. A notice of assessment monitoring was placed in the operation record on November 13, 2019. Monitoring wells were sampled for Appendix IV parameters in August 2019. Monitoring wells were sampled for Appendix III and Appendix IV parameters detected in the August 2019 initial assessment monitoring event during the October 2019 semiannual assessment monitoring event. A summary of the analytes required by Appendix III, Appendix IV, and the existing permit is provided in Table 3. Summary of Groundwater Monitoring Parameters.

3.0 SAMPLE METHODOLOGY AND ANALYSIS

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

3.1 Groundwater Flow Direction, Gradient, and Velocity

Prior to each assessment sampling event, groundwater elevations were recorded from the certified well network at the Site. Groundwater elevations recorded during the monitoring events are summarized in Table 4A and 4B, Summary of Groundwater Elevations – August 2019 and October 2019, respectively. Groundwater elevation data was used to develop Figure 3, October 2019 Water Table Contour Map. The general direction of groundwater flow across the site is towards the west. The groundwater flow patterns observed during the October 2019 monitoring event is consistent with historical patterns.

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

Equation

$$v = K (dh/dl)$$
 where: $v =$ ground water velocity

 P_e $K =$ hydraulic conductivity

 $dh/dl =$ hydraulic gradient

 $P_e =$ effective porosity

Groundwater flow velocities were calculated for the site based on hydraulic gradients, average permeability based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and Cherry, 1979). An alternate effective porosity value of 0.48 (SCS, 1992) is also used to define the range of groundwater flow velocities. Groundwater flow velocities have been calculated and are tabulated on Table 5, Groundwater Flow Velocity Calculations. The calculated flow velocity is 0.048 to 0.114 feet per day or 17 to 42 feet per year for the most recent sampling event.

3.2 Groundwater Sampling

Groundwater samples were collected using low-flow sampling procedures. For sampling completed 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). Peristaltic pump samples are collected using new disposable polyethylene tubing. All non-disposable equipment was decontaminated before use and between well locations.

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

- ± 0.1 standard units for pH
- ± 10% for specific conductance
- ± 10% for dissolved oxygen (D0) where D0 > 0.5 milligrams per liter (mg/L). No criterion applies if D0 < 0.5 mg/L.
- Turbidity measurements less than 10 nephelometric turbidity units (NTU)

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

3.3 Laboratory Analyses

Groundwater samples were collected during two groundwater monitoring events in the second half of 2019. Mercury and molybdenum were not detected in the initial assessment Appendix IV assessment monitoring event completed in August 2019 and therefore not included in the semiannual monitoring event completed in October 2019. Analytical methods used for groundwater monitoring parameters are provided in laboratory reports in Appendix A. Analytical data collected in monitoring events from the second half of 2019 (August 2019 and October 2019) are summarized in Table 6A, Summary of Groundwater Analytical Data – August 2019, and Table 6B, Summary of Groundwater Analytical Data – October 2019, respectively.

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

3.4 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples are collected at a rate of one QA/QC sample per every 10 groundwater assessment samples. Equipment blanks (where non-dedicated sampling equipment is used) and duplicate samples were collected during each sampling event. QA/QC sample data were evaluated during data validation and are included in Appendix A.

Groundwater quality data in this report was validated in accordance with US EPA guidance (US EPA, 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix



spikes/matrix spike duplicate recoveries and relative percent differences, post digestions spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data using US EPA procedures as guidance (US EPA, 2017).

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

4.0 STATISTICAL ANALYSIS

Statistical analysis of groundwater monitoring data was performed on samples collected from the GA EPD-approved groundwater monitoring network and following the appropriate method. The statistical method used at the site was developed by Groundwater Stats Consulting, LLC (GSC), using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities*, *Unified Guidance*, March 2009, US EPA 530/ R-09-007 (US EPA, 2009).

Pursuant to § 257.95(d)(2) GPC will establish groundwater protection standards for the Appendix IV monitoring parameters and complete statistical analysis of the Appendix IV groundwater monitoring data obtained during the October semiannual assessment monitoring event within 90 days of obtaining the results. GPC will complete the assessment monitoring and statistical analysis in accordance with § 257.95 and report the results in the Annual Groundwater Monitoring and Corrective Action Report, due August 1, 2020.

4.1 Statistical Methods

All screened historical background data through August 2018 were used to construct statistical limits for both Appendix III constituents and permit required Appendix I metals. 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 US EPA regulations.

4.1.1 Appendix III Constituents

Statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits combined with a 1-of-2 verification resample plan for Appendix III parameters boron, calcium, chloride, sulfate, and total dissolved solids (TDS). 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 limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each parameter. Intrawell prediction limits are constructed from historical data within a given well, and the most recent sample is compared to background. If the most recent sample exceeds its respective background statistical limit, an initial statistically significant increase (SSI) is identified. A summary of the statistical methodology used at the Site for routine groundwater monitoring is provided in Table 7, Statistical Method Summary.



4.1.2 Permit-Required Appendix I and II Metals

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

Statistical tests used to evaluate the groundwater monitoring data consist of intrawell prediction limits combined with a 1-of-2 verification resample plan for all required metals. In an intrawell comparison, analytical results from an individual well are compared to historical analytical results in that same well. If data from a sampling event initially exceeds the PL, the resampling strategy may be used to verify the result. In 1-of-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 re-sample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance.

4.2 Appendix III Statistical Analyses Results

Analytical data from the October 2019 monitoring event at the Site was statistically analyzed in accordance with the statistical methods. Resampling to confirm SSIs was not performed; therefore, initial SSIs are treated as verified. Wells and analytes with all data below the reporting limit do not require statistical analysis. A summary of wells exhibiting 100% non-detects is included in Appendix B, Statistical Analyses. The statistical analysis and comparison to prediction limits are included as Appendix B.

Based on review of the Appendix III statistical analyses presented in Appendix C, the following summarizes parameters exhibiting SSIs:

Boron: GWC-4R

Calcium: GWC-1R, GWC-5R, GWC-6R

Chloride: GWC-1R, GWC-2R, GWC-3R, GWC-4R

Sulfate: GWC-1R, GWC-5R, GWC-6R

TDS: GWC-1R, GWC-2R, GWC-5R, GWC-6R

Appendix III constituents have not returned to background levels and assessment monitoring should continue pursuant to 40 CFR § 257.95(f). Statistical analysis of the Appendix IV assessment monitoring results for the October 2019 sampling event will be completed in 2020 following the requirements of 40 CFR 257.95(d).

4.3 Appendix IV Statistical Analyses Results

Pursuant to §257.95, Appendix IV groundwater quality data will be statistically analyzed and compared to groundwater protection standards within 90 days of receiving data from the first (October 2019) assessment monitoring event. GPC will complete the assessment monitoring and statistical analysis in accordance with § 257.95 and report the results in the Semiannual Groundwater Monitoring Report, due August 1, 2020.



4.4 Appendix I and II EPD Permit-Required Metals

Analytes required by the existing state permit were analyzed during this event. Wells and analytes with all data below the reporting limit do not require statistical analysis. A summary of wells exhibiting 100% non-detects is included in Appendix B.

Concentrations of target metals were within their respective intrawell prediction limits during the October 2019 sampling event, except for zinc in the sample from GWC-5R. This detection was reevaluated following a resample collected in January 2020, and the initial exceedance was not confirmed. Therefore, no further action is required. The results of the resample are included in Appendix B.

5.0 MONITORING PROGRAM STATUS

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

6.0 CONCLUSIONS AND FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data for the Site identified SSIs of Appendix III groundwater monitoring constituents. GPC has initiated assessment monitoring pursuant to §257.95. During the next semiannual reporting period of 2020, GPC will establish groundwater protection standards for Appendix IV constituents and complete statistical analysis in accordance with § 257.95 and report the results in the Annual Groundwater Monitoring and Corrective Action Report, due August 1, 2020.

7.0 REFERENCES

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

EPRI, 2015 Technical Report, Groundwater Monitoring Guidance for the Coal Combustion Residuals Rule.

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

Groundwater Stats Consulting, LLC, Statistical Analysis Plan – Plant Yates Ash Pond 1 (AP-1), 2019.

Southern Company Services, Inc., 1992. The Geology and Hydrogeology of the Plant Yates CT-121 Project Gypsum Stacking Area.

Southern Company Services, Inc., 2016. Alternate Source Demonstration – Plant Yates Industrial Solid Waste Landfill – Gypsum Stack.

State Waste Management Board. 2016. State Solid Waste Management Regulations – (9VAC20 81 et seq.). January.

US EPA, 1989 Risk Assessment Guidance for Superfund (RAGS), Vol. I: Human Health Evaluation Manual (Part A) (540-1-89-002).



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

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

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



TABLES



Table 1 **Monitoring Network Well Summary**

Well	Installation Date (mm/dd/yyyy)	Bottom Depth (ft BTOC)	Bottom Elevation (ft MSL)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (ft MSL)	Purpose
GWA-2	2007	52.13	753.18	42.10	763.21	Upgradient
GWC-1R	5/12/2011	36.34	736.94	26.35	746.93	Downgradient
GWC-2R	10/19/2010	43.80	725.61	33.80	735.61	Downgradient
GWC-3R	5/11/2011	38.34	736.94	28.34	746.94	Downgradient
GWC-4R	10/20/2010	31.05	725.97	21.08	735.94	Downgradient
GWC-5R	5/11/2011	42.82	739.72	32.81	749.73	Downgradient
GWC-6R	8/11/2009	51.87	736.73	41.88	746.72	Downgradient

- 1. ft BTOC indicates feet below top of casing.
- 2. ft MSL indicates feet mean sea level.

Table 2 **Groundwater Sampling Event Summary**

Well	Hydraulic Location	Aug. 19-21, 2019	0ct. 8-10, 2019
Purpose	e of Sampling Event	Initial Assessment	Second 2019 Semiannual
GWA-2	Upgradient	SCAN	A-01
GWC-1R	Downgradient	SCAN	A-01
GWC-2R	Downgradient	SCAN	A-01
GWC-3R	Downgradient	SCAN	A-01
GWC-4R	Downgradient	SCAN	A-01
GWC-5R	Downgradient	SCAN	A-01
GWC-6R	Downgradient	SCAN	A-01

Notes:

- Scan = Initial Assessment Sampling. All Appendix IV.
 A-XX = Assessment Event Number (Appendix III and Detected Appendix IV)



Table 3
Summary of Groundwater Monitoring Parameters

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



Table 4A Summary of Groundwater Elevations August 2019

Well ID	TOC Elevation (ft MSL)	Depth-to- Water (ft BTOC)	Groundwater Elevation (ft MSL)
GWA-2	805.31	36.04	769.27
GWC-1R	773.28	22.67	750.61
GWC-2R	769.41	28.70	740.71
GWC-3R	775.28	28.40	746.88
GWC-4R	757.02	16.62	740.40
GWC-5R	782.54	33.25	749.29
GWC-6R	788.60	33.95	754.65

Notes:

- 1. ft BTOC indicates feet below top of casing.
- 2. ft MSL indicates feet mean sea level.
- 3. Depths to water measured August 19-20, 2019.

Table 4B Summary of Groundwater Elevations October 2019

Well ID	TOC Elevation (ft MSL)	Depth-to- Water (ft BTOC)	Groundwater Elevation (ft MSL)
GWA-2	805.31	36.26	769.05
GWC-1R	773.28	24.16	749.12
GWC-2R	769.41	29.73	739.68
GWC-3R	775.28	29.56	745.72
GWC-4R	757.02	17.76	739.26
GWC-5R	782.54	30.22	752.32
GWC-6R	788.60	35.84	752.76

Notes:

- 1. ft BTOC indicates feet below top of casing.
- 2. ft MSL indicates feet mean sea level.
- 3. Depths to water measured October 7, 2019



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

Equation

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

Values Used in Calculation

	Value		Source
K =	2.3E-04 0.66	cm/sec ft/day	See note 1.
i =	0.034	unitless	Hydraulic gradient from GWA-2 to GWC-4R
P _e =	0.48	unitless	See note 1.
P _e =	0.20	unitless	See note 2.

Site-Specific Calculation Using Porosity Value of 0.48

v = (0.66)(0.034)0.48

0.048 ft/day

Literature Calculation Using Porosity Value of 0.20

v = (0.66)(0.034)0.20

0.114 ft/day v =

Notes

- (1) The Geology & Hydrogeology of the Plant Yates CT-121 Project Gypsum Stacking Area (SCS, 1992)
- (2) Default value for silty sands from Interim Final RCRA Investigation (EPA, 1989)

Table 6A Summary of Groundwater Analytical Data August 2019

					Well ID			
	Substance	GWA-2	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
		8/19/2019	8/20/2019	8/20/2019	8/21/2019	8/19/2019	8/21/2019	8/20/2019
	Antimony	ND	ND	ND	ND	ND	ND (0.00054 J)	ND
	Arsenic	ND (0.00095 J)	ND (0.00044 J)	ND (0.00075 J)	ND (0.00061 J)	ND (0.00059 J)	ND (0.00094 J)	ND (0.00072 J)
	Barium	0.065	0.070	0.050	0.020	0.020	0.014	0.060
	Beryllium	ND	ND (0.00010 J)	ND (0.00017 J)	ND (0.00046 J)	ND	ND (0.0028 J)	ND
	Cadmium	ND	ND	ND	ND	ND	ND (0.0012 J)	ND
	Chromium	ND	ND (0.0011 J)	ND	ND (0.0010 J)	ND (0.00051 J)	ND (0.0024 J)	ND (0.0017 J)
≥×	Cobalt	ND (0.0035 J)	ND (0.00079 J)	0.014	ND (0.0016 J)	ND (0.0010 J)	ND (0.00034 J)	ND
Appendix IV	Fluoride	ND	ND	ND	ND (0.037 J)	ND	ND	ND
Арр	Lead	ND	ND	ND (0.000061 J)	ND (0.000082 J)	ND	ND (0.000070 J)	ND
	Lithium	ND (0.0019 J)	ND (0.0012 J)	ND (0.0043 J)	ND	ND (0.00094 J)	ND (0.0015 J)	ND (0.0020 J)
	Mercury	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	ND	ND	ND	ND	ND	ND	ND
	Radium	1.39	1.25 U	1.22	0.774 U	0.637 U	1.82	0.409 U
	Selenium	ND	ND (0.0022 J)	ND (0.0032 J)	ND (0.0040 J)	ND (0.0030 J)	0.037	ND (0.0039 J)
	Thallium	ND (0.000055 J)	ND	ND	ND	ND	ND (0.000053 J)	ND

Notes:

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

Table 6B Summary of Groundwater Analytical Data October 2019

					Well ID			
	Substance	GWA-2	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
		10/8/2019	10/9/2019	10/9/2019	10/10/2019	10/10/2019	10/9/2019	10/8/2019
	Boron	ND	ND (0.029 J)	ND (0.018 J)	ND (0.0061 J)	0.78	ND (0.013 J)	ND
=	Calcium	28.3	59.1	27.8	4.3	18.0	128	115
APPENDIX III	Chloride	5.1	6.9	9.8	5.3	42.8	4.5	4.9
PEN	Fluoride	ND (0.052 J)	ND	ND	ND	ND	0.35	ND
AP	Sulfate	128	318	91.2	48.0	68.7	1180	664
	TDS	276	526	372	109	247	1680	1050
	Antimony	ND	ND	ND	ND	ND	ND	ND
	Arsenic	ND	ND	ND	ND	ND	ND (0.0012 J)	ND (0.00056 J)
	Barium	0.058	0.054	0.045	0.018	0.018	0.015	0.054
	Beryllium	ND	ND (0.00013 J)	ND (0.00014 J)	ND (0.00039 J)	ND	ND (0.0022 J)	ND
	Cadmium	ND	ND	ND	ND (0.00018 J)	ND	ND (0.0011 J)	ND
Ν×	Chromium	ND	ND (0.0012 J)	ND (0.00059 J)	ND (0.0014 J)	ND (0.00057 J)	ND (0.0024 J)	ND (0.0014 J)
APPENDIX IV	Cobalt	ND (0.0039 J)	ND (0.00064 J)	0.024	ND	ND (0.00099 J)	ND (0.00031 J)	ND
APPI	Lead	ND	ND (0.000052 J)	ND (0.000057 J)	ND	ND	ND (0.000059 J)	ND
,	Lithium	ND (0.0015 J)	ND (0.0013 J)	ND (0.0047 J)	ND	ND (0.0013 J)	ND (0.0014 J)	ND (0.0021 J)
	Mercury	ND	ND	ND	ND (0.00043 J)	ND	ND	ND
	Radium	1.32 U	0.482 U	0.710 U	0.433 U	0.525 U	0.498 U	0.910 U
	Selenium	ND	ND (0.0023 J)	ND (0.0026 J)	ND (0.0021 J)	ND (0.0024 J)	0.034	ND (0.0031 J)
	Thallium	ND	ND	ND	ND	ND	ND	ND
	Copper	ND (0.00041 J)	ND (0.00079 J)	ND (0.00024 J)	ND (0.00033 J)	ND	ND (0.00087 J)	ND (0.0011 J)
D B)	Nickel	ND (0.0051 J)	ND (0.0015 J)	ND (0.00058 J)	ND	ND (0.00084 J)	ND (0.0019 J)	ND (0.0021 J)
REQUIRED BY GWMP*	Silver	ND	ND	ND	ND	ND	ND	ND
REQU GV	Vanadium	ND	ND	ND	ND (0.0011 J)	ND	ND	ND
<u>.</u>	Zinc	ND (0.0078 J)	ND (0.0078 J)	ND (0.0069 J)	ND (0.0079 J)	ND (0.0060 J)	0.025	ND (0.0060 J)

Notes:

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

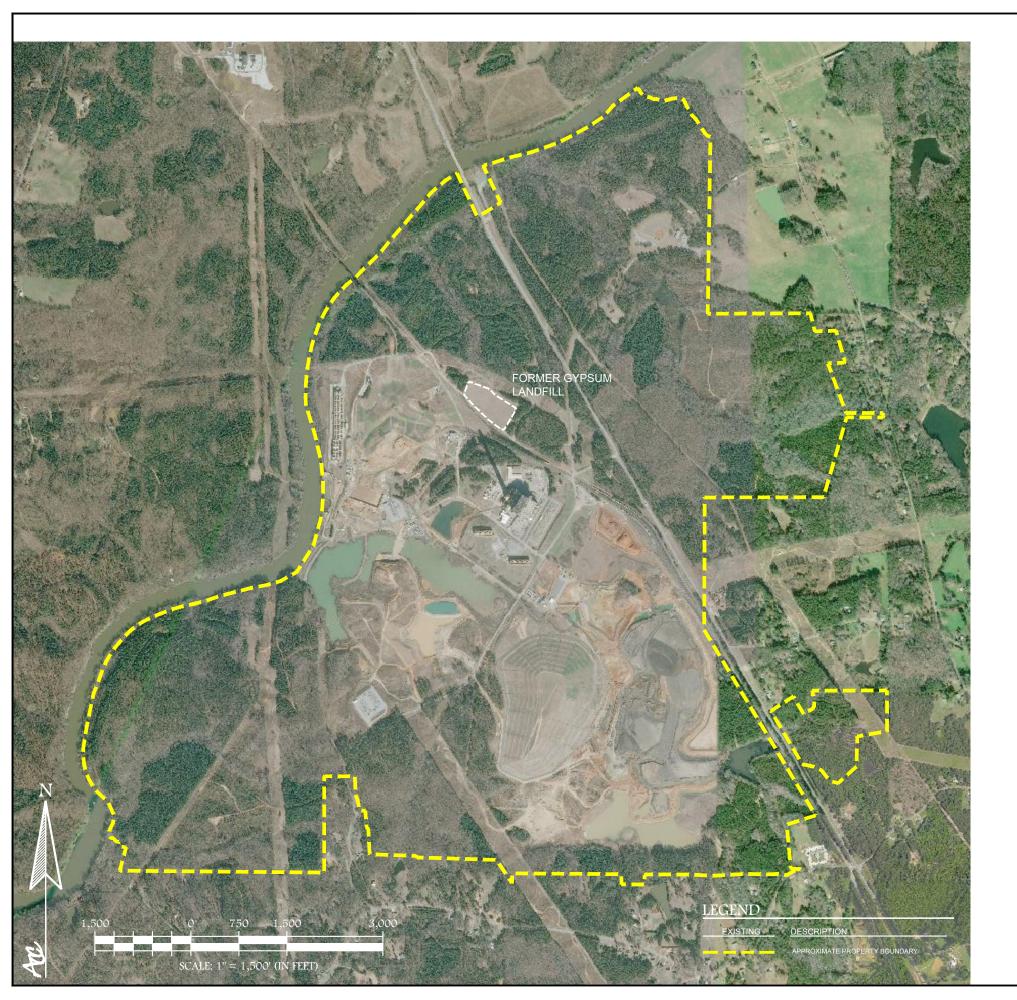


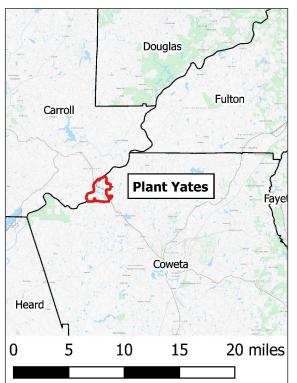
Table 7 Statistical Method Summary

	Statistical Method	l Summary
Monitoring Wall	Upgradient Wells	GWA-2
Monitoring Well Network	Downgradient Wells	GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R
	Appendix III (Detection Monitoring)	Boron, Calcium, Chloride, Fluoride, pH, Sulfate, TDS
CCR Monitoring Parameters	Appendix IV (Assessment Monitoring)	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Combined Radium 226 + 228, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium
EPD Permit	Appendix I (Detection Monitoring)	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc
Metals	Appendix II (Assessment Monitoring)	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc
	Data Screening Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available
Statistical Methodology	Statistical Limits	Interwell (boron, calcium, chloride, sulfate, and TDS) or intrawell (fluoride pH, Appendix I and II) statistical limits are on constituent-specific basis, depending on the appropriateness of the method as determined by the Analysis of Variance



FIGURES







ATLANTIC COAST CONSULTING, INC.

630 Colonial Park Dr. Suite 110 Roswell, GA 30075 o 770.594.5998 www.atlcc.net

PROJECT:

PLANT YATES

708 DYER ROAD NEWNAN, GEORGIA

REVISIONS

awn by: Checked by:

PROJECT NUMBER:

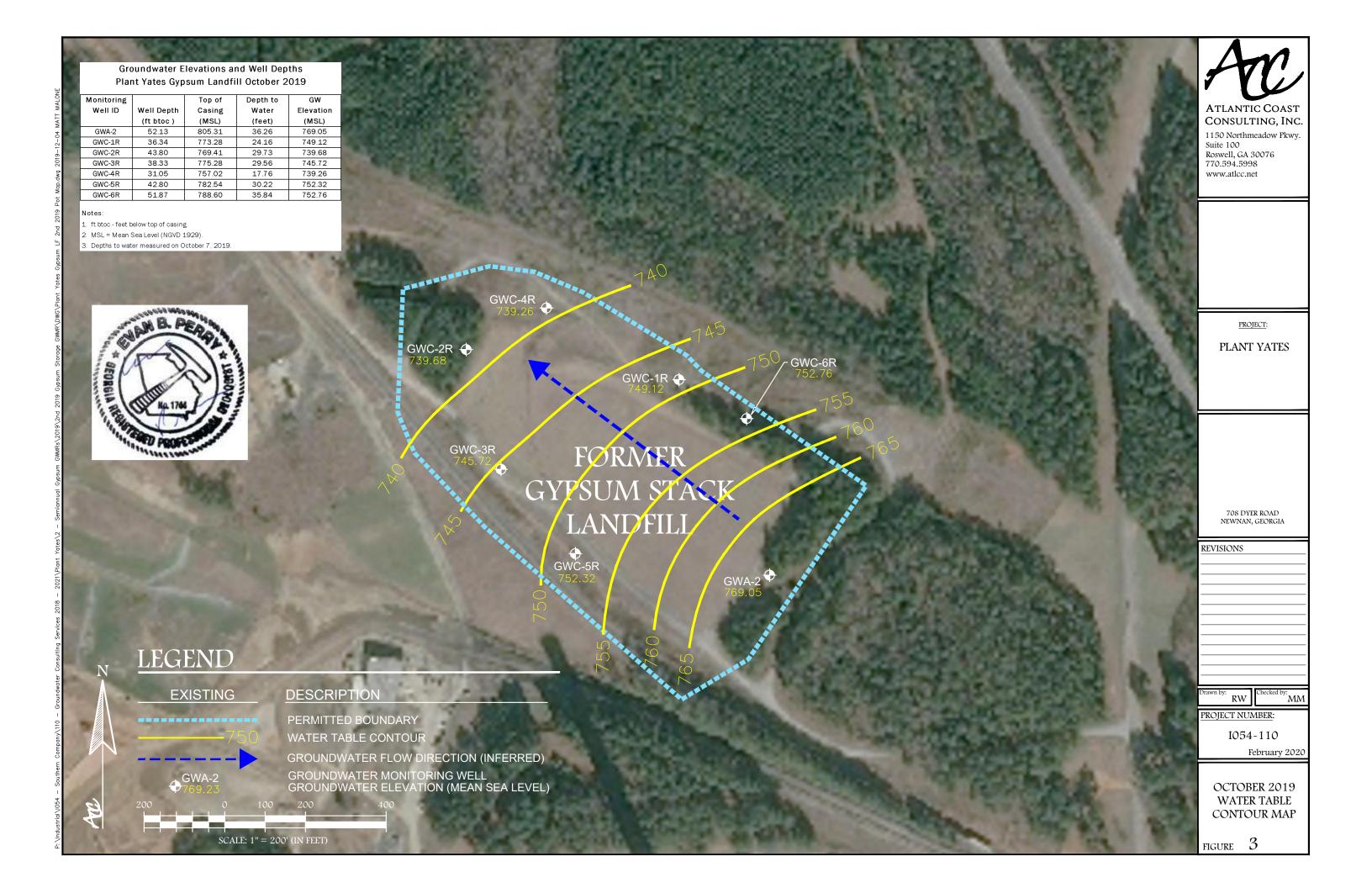
I054~110

February 2020

SITE LOCATION MAP

figure 1







APPENDICES



APPENDIX A

LABORATORY ANALYTICAL AND FIELD SAMPLING REPORTS



December 11, 2019

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

RE: Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This revised report replaces the report issued on 8/29/2019. The report has been revised to correct the project-required RLs per consultant request. No other changes have been made to this report.

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Slern

betsy.mcdaniel@pacelabs.com

(770)734-4200

Project Manager

Enclosures

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







CERTIFICATIONS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092 Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812 Georgia DW Microbiology Certification #: 812 North Carolina Certification #: 381 South Carolina Certification #: 98011001

Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622250001	GWA-2	Water	08/19/19 12:25	08/21/19 16:50
2622250002	GWC-1R	Water	08/20/19 10:10	08/21/19 16:50
2622250003	GWC-2R	Water	08/20/19 13:50	08/21/19 16:50
2622250004	GWC-3R	Water	08/21/19 12:50	08/21/19 16:50
2622250005	GWC-4R	Water	08/19/19 16:00	08/21/19 16:50
2622250006	GWC-5R	Water	08/21/19 10:45	08/21/19 16:50
2622250007	GWC-6R	Water	08/20/19 12:00	08/21/19 16:50
2622250008	EB-1-8-19-19	Water	08/19/19 15:30	08/21/19 16:50
2622250009	Dup-1	Water	08/20/19 00:00	08/21/19 16:50
2622250010	FB-1-8-20-19	Water	08/20/19 13:25	08/21/19 16:50



SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

EPA 7470A DRB 122250002 GWC-1R EPA 6020B CSW 12250002 GWC-1R EPA 6020B CSW 12250003 GWC-2R EPA 7470A DRB 1422250003 GWC-2R EPA 7470A DRB 1422250004 GWC-3R EPA 8020B CSW 12250005 GWC-4R EPA 8020B CSW 12250005 GWC-4R EPA 8020B CSW 12250006 GWC-5R EPA 7470A DRB 1422250006 GWC-5R EPA 8020B CSW 12250006 GWC-5R EPA 8020B CSW 12250007 GWC-6R EPA 8020B CSW 12250009 Dup-1 EPA 8020B CSW 1	Lab ID	Sample ID	Method	Analysts	Analytes Reported
EPA 300.0 MWWB 12 EPA 6020B CSW 12 EPA 7470A DRB 12 EPA 300.0 MWWB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14	2622250001	GWA-2	EPA 6020B	CSW	12
22250002 GWC-1R EPA 6020B CSW 12 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB			EPA 7470A	DRB	1
EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 7470A DRB 12 EPA 7470A DRB 13 EPA 300.0 MWB 13 EPA 300.0 MWB 13 EPA 300.0 MWB 13 EPA 300.0 MWB 14 EPA 30			EPA 300.0	MWB	1
EPA 300.0 MWB 12 EPA 6020B CSW 12 EPA 7470A DRB 14 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 7470A DRB 14 EPA 300.0 MWB 16 EPA 300.0 MWB 17 EPA 300.0 MWB 17 EPA 300.0 MWB 17 EPA 300.0 MWB 17 EPA 4770A DRB 17 EPA 4770A DRB 17 EPA 4770A DRB 17 EPA 4770A DRB 17 EPA 300.0 MWB 17 EPA 300.0 MWB 17 EPA 6020B CSW 12 EPA 7470A DRB 17 EPA 300.0 MWB 17 EPA 30	622250002	GWC-1R	EPA 6020B	CSW	12
### 22250003 GWC-2R			EPA 7470A	DRB	1
EPA 7470A DRB 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			EPA 300.0	MWB	1
EPA 300.0 MWB 122250004 GWC-3R EPA 6020B CSW 122250005 GWC-4R EPA 6020B CSW 122250005 GWC-4R EPA 6020B CSW 122250006 GWC-5R EPA 300.0 MWB 122250006 GWC-5R EPA 6020B CSW 122250007 GWC-6R EPA 300.0 MWB 122250007 GWC-6R EPA 6020B CSW 122250008 EB-1-8-19-19 EPA 6020B CSW 122250008 EB-1-8-19-19 EPA 6020B CSW 12250009 Dup-1 EPA 6020B CSW 12250000 DUP-1 EPA 602	2622250003	GWC-2R	EPA 6020B	CSW	12
22250004 GWC-3R EPA 6020B CSW 12 EPA 7470A DRB 11 EPA 300.0 MWB 11 EPA 300.0 MWB 11 EPA 7470A DRB 11 EPA 6020B CSW 12 EPA 7470A DRB 11 EPA 300.0 MWB 11 EPA 300.0 MWB 11 EPA 7470A DRB 11 EPA 7470A DRB 11 EPA 7470A DRB 11 EPA 7470A DRB 11 EPA 300.0 MWB 11 EPA 7470A DRB 11 EPA 300.0 MWB 11 EPA 300.0 MWB 11 EPA 300.0 MWB 11 EPA 300.0 MWB 11 EPA 7470A DRB 11			EPA 7470A	DRB	1
EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 6020B CSW 12 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 300.0 MWB 1 EPA 300.0 MWB 1 EPA 6020B CSW 12 EPA 6020B CSW 12 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1			EPA 300.0	MWB	1
EPA 300.0 MWB 12 22250005 GWC-4R EPA 6020B CSW 12 EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 7470A DRB 13 EPA 300.0 MWB 14 EPA 300	622250004	GWC-3R	EPA 6020B	CSW	12
22250005 GWC-4R EPA 6020B CSW 12 EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 7470A DRB 12 EPA 7470A DRB 12 EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 7470A DRB 13 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 7470A DRB 14 EPA 7470A DRB 14 EPA 7470A DRB 14 EPA 300.0 MWB 14 EPA 300			EPA 7470A	DRB	1
EPA 7470A DRB 122250006 GWC-5R EPA 6020B CSW 12250007 GWC-6R EPA 6020B CSW 12250007 GWC-6R EPA 6020B CSW 12250007 EPA 7470A DRB 122250008 EB-1-8-19-19 EPA 6020B CSW 12250008 Dup-1 EPA 300.0 MWB 122250009 Dup-1 EPA 6020B CSW 12250009 Dup-1 EPA 6020B CSW 12250000 DRB 1250000 DRB 12500000 DRB 1250000 DRB 12500000 DRB 1250000 DRB 12500000 DRB 125000000 DRB 125000000000000000000000000000000000000			EPA 300.0	MWB	1
EPA 300.0 MWB 12 22250006 GWC-5R EPA 6020B CSW 12 EPA 7470A DRB 11 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 7470A DRB 12 EPA 7470A DRB 12 EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 12 EPA 6020B CSW 12 EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 300.0 MWB 14 EPA 7470A DRB 14 EPA 7470A DRB 14 EPA 7470A DRB 14 EPA 300.0 MWB 14 EPA 300	622250005	GWC-4R	EPA 6020B	CSW	12
22250006 GWC-5R EPA 6020B CSW 12 EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 6020B CSW 12 EPA 7470A DRB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 7470A DRB 14 EPA 7470A DRB 14 EPA 7470A DRB 14 EPA 7470A DRB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 7470A DRB 14			EPA 7470A	DRB	1
EPA 7470A DRB 122250007 GWC-6R EPA 6020B CSW 12250008 EB-1-8-19-19 EPA 6020B CSW 12250009 Dup-1 EPA 6020B CSW 12250009 FB-1-8-20-19 EPA 6020B CSW 12250000 EPA 7470A DRB 122250000 FB-1-8-20-19 EPA 6020B CSW 12250000 Dup-1 EPA 6020B CSW 12500000 DRB 14500000 DRB 145000000000000000000000000000000000000			EPA 300.0	MWB	1
EPA 300.0 MWB 22250007 GWC-6R EPA 6020B EPA 7470A DRB EPA 300.0 MWB 122250008 EB-1-8-19-19 EPA 6020B EPA 7470A DRB 122250009 Dup-1 EPA 6020B EPA 7470A DRB 1322250010 FB-1-8-20-19 EPA 6020B EPA 7470A DRB 1422250010 DRB 1522250010 DRB 15322250010 D	22250006	GWC-5R	EPA 6020B	CSW	12
22250007 GWC-6R EPA 6020B CSW 12 EPA 7470A DRB 11 EPA 300.0 MWB 12 EPA 7470A DRB 12 EPA 6020B CSW 12 EPA 7470A DRB 11 EPA 300.0 MWB 11 EPA 300.0 MWB 11 EPA 300.0 MWB 11 EPA 7470A DRB 11			EPA 7470A	DRB	1
EPA 7470A DRB 12 EPA 300.0 MWB 12 EPA 6020B CSW 12 EPA 300.0 MWB 14 EPA 7470A DRB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 7470A DRB 14 EPA 300.0 MWB 14 EPA 300.0 MWB 14 EPA 7470A DRB 14 EPA 7470A DRB 14			EPA 300.0	MWB	1
EPA 300.0 MWB 122250008 EB-1-8-19-19 EPA 6020B CSW 12 EPA 7470A DRB 14 EPA 300.0 MWB 15 EPA 7470A DRB 16 EPA 7470A DRB 17 EPA 6020B CSW 12 EPA 7470A DRB 16 EPA 7470A DRB 17 EPA 300.0 MWB 17 EPA 7470A DRB 17 EPA	22250007	GWC-6R	EPA 6020B	CSW	12
EPA 6020B CSW 12 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1			EPA 7470A	DRB	1
EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 6020B CSW 12 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 300.0 MWB 1 EPA 300.0 DRB 1 EPA 7470A DRB 1			EPA 300.0	MWB	1
EPA 300.0 MWB 122250009 Dup-1 EPA 6020B CSW 12250009 Dup-1 EPA 7470A DRB 122250010 FB-1-8-20-19 EPA 6020B CSW 12250010 DRB CSW 1250010 EPA 7470A DRB CSW 1250010 DRB CSW 12500	622250008	EB-1-8-19-19	EPA 6020B	CSW	12
Page 22250009 Dup-1 EPA 6020B CSW 12 EPA 7470A DRB 11 EPA 300.0 MWB 11 22250010 FB-1-8-20-19 EPA 6020B CSW 12 EPA 7470A DRB 11			EPA 7470A	DRB	1
EPA 7470A DRB 1 EPA 300.0 MWB 1 EPA 6020B CSW 12 EPA 7470A DRB 1			EPA 300.0	MWB	1
EPA 300.0 MWB 122250010 FB-1-8-20-19 EPA 6020B CSW 12 EPA 7470A DRB 1	622250009	Dup-1	EPA 6020B	CSW	12
22250010 FB-1-8-20-19 EPA 6020B CSW 12 EPA 7470A DRB 1			EPA 7470A	DRB	1
EPA 7470A DRB 1			EPA 300.0	MWB	1
	622250010	FB-1-8-20-19	EPA 6020B	CSW	12
EPA 300.0 MWB			EPA 7470A	DRB	1
			EPA 300.0	MWB	1



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: GWA-2	Lab ID:	Collected: 08/19/19 12:25			Received: 08/	atrix: Water			
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 17:47	7440-36-0	
Arsenic	0.00095J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 17:47	7440-38-2	
Barium	0.065	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 17:47	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 17:47	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 17:47	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 17:47	7440-47-3	
Cobalt	0.0035J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 17:47	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 17:47	7439-92-1	
Lithium	0.0019J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 17:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 17:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 17:47	7782-49-2	
Thallium	0.000055J	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 17:47	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:23	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 00:42	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: GWC-1R	Lab ID:	2622250002	Collecte	ed: 08/20/19	10:10	0 Received: 08/21/19 16:50 Matrix: Water				
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A				
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 18:04	7440-36-0		
Arsenic	0.00044J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 18:04	7440-38-2		
Barium	0.070	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 18:04	7440-39-3		
Beryllium	0.00010J	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 18:04	7440-41-7		
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 18:04	7440-43-9		
Chromium	0.0011J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 18:04	7440-47-3		
Cobalt	0.00079J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 18:04	7440-48-4		
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 18:04	7439-92-1		
Lithium	0.0012J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 18:04	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 18:04	7439-98-7		
Selenium	0.0022J	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 18:04	7782-49-2		
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 18:04	7440-28-0		
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A				
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:25	7439-97-6		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0							
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 02:12	16984-48-8		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: GWC-2R	Lab ID:	Collected: 08/20/19 13:50			Received: 08/21/19 16:50 Matrix: Water				
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 18:10	7440-36-0	
Arsenic	0.00075J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 18:10	7440-38-2	
Barium	0.050	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 18:10	7440-39-3	
Beryllium	0.00017J	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 18:10	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 18:10	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 18:10	7440-47-3	
Cobalt	0.014	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 18:10	7440-48-4	
Lead	0.000061J	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 18:10	7439-92-1	
Lithium	0.0043J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 18:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 18:10	7439-98-7	
Selenium	0.0032J	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 18:10	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 18:10	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Met	hod: EP	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:27	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 02:35	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: GWC-3R	Lab ID:	Collecte	Collected: 08/21/19 12:50			Received: 08/21/19 16:50 Matrix: Water				
			Report							
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A				
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 18:15	7440-36-0		
Arsenic	0.00061J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 18:15	7440-38-2		
Barium	0.020	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 18:15	7440-39-3		
Beryllium	0.00046J	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 18:15	7440-41-7		
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 18:15	7440-43-9		
Chromium	0.0010J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 18:15	7440-47-3		
Cobalt	0.0016J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 18:15	7440-48-4		
Lead	0.000082J	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 18:15	7439-92-1		
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 18:15	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 18:15	7439-98-7		
Selenium	0.0040J	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 18:15	7782-49-2		
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 18:15	7440-28-0		
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A				
Mercury	ND	mg/L	0.00050	0.00014	1	08/26/19 14:21	08/27/19 11:30	7439-97-6		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0							
Fluoride	0.037J	mg/L	0.30	0.029	1		08/29/19 03:20	16984-48-8		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: GWC-4R	Lab ID:	Collected: 08/19/19 16:00			Received: 08/21/19 16:50 Matrix: Water				
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 18:21	7440-36-0	
Arsenic	0.00059J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 18:21	7440-38-2	
Barium	0.020	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 18:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 18:21	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 18:21	7440-43-9	
Chromium	0.00051J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 18:21	7440-47-3	
Cobalt	0.0010J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 18:21	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 18:21	7439-92-1	
Lithium	0.00094J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 18:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 18:21	7439-98-7	
Selenium	0.0030J	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 18:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 18:21	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:32	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 03:43	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: GWC-5R	Lab ID:	Collected: 08/21/19 10:45			Received: 08/21/19 16:50 Matrix: Water				
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	0.00054J	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 18:44	7440-36-0	
Arsenic	0.00094J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 18:44	7440-38-2	
Barium	0.014	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 18:44	7440-39-3	
Beryllium	0.0028J	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 18:44	7440-41-7	
Cadmium	0.0012J	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 18:44	7440-43-9	
Chromium	0.0024J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 18:44	7440-47-3	
Cobalt	0.00034J	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 18:44	7440-48-4	
Lead	0.000070J	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 18:44	7439-92-1	
Lithium	0.0015J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 18:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 18:44	7439-98-7	
Selenium	0.037	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 18:44	7782-49-2	
Thallium	0.000053J	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 18:44	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Met	hod: EP	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:35	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 04:05	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: GWC-6R	Lab ID:	2622250007	Collecte	ed: 08/20/19	12:00	Received: 08/	21/19 16:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 18:50	7440-36-0	
Arsenic	0.00072J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 18:50	7440-38-2	
Barium	0.060	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 18:50	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 18:50	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 18:50	7440-43-9	
Chromium	0.0017J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 18:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 18:50	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 18:50	7439-92-1	
Lithium	0.0020J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 18:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 18:50	7439-98-7	
Selenium	0.0039J	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 18:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 18:50	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:37	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 04:28	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: EB-1-8-19-19	Lab ID:	2622250008	Collecte	ed: 08/19/19	15:30	Received: 08/	21/19 16:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 18:55	7440-36-0	
Arsenic	0.00063J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 18:55	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 18:55	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 18:55	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 18:55	7440-43-9	
Chromium	0.0022J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 18:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 18:55	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 18:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 18:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 18:55	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 18:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 18:55	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:44	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 04:51	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: Dup-1	Lab ID:	2622250009	Collecte	ed: 08/20/19	00:00	Received: 08/	21/19 16:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 19:13	7440-36-0	
Arsenic	0.00069J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 19:13	7440-38-2	
Barium	0.057	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 19:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 19:13	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 19:13	7440-43-9	
Chromium	0.0016J	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 19:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 19:13	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 19:13	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 19:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 19:13	7439-98-7	
Selenium	0.0043J	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 19:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 19:13	7440-28-0	
7470 Mercury	Analytical	Method: EPA 7	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:46	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA 3	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 05:13	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Sample: FB-1-8-20-19	Lab ID:	2622250010	Collecte	ed: 08/20/19	13:25	Received: 08/	21/19 16:50 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	08/23/19 14:17	08/26/19 19:18	7440-36-0	
Arsenic	0.00051J	mg/L	0.0050	0.00035	1	08/23/19 14:17	08/26/19 19:18	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/23/19 14:17	08/26/19 19:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/23/19 14:17	08/26/19 19:18	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/23/19 14:17	08/26/19 19:18	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/23/19 14:17	08/26/19 19:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/23/19 14:17	08/26/19 19:18	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/23/19 14:17	08/26/19 19:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/23/19 14:17	08/26/19 19:18	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/23/19 14:17	08/26/19 19:18	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/23/19 14:17	08/26/19 19:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/23/19 14:17	08/26/19 19:18	7440-28-0	
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	08/26/19 14:21	08/27/19 11:49	7439-97-6	
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Fluoride	ND	mg/L	0.30	0.029	1		08/29/19 05:36	16984-48-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

QC Batch: 34231 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Associated Lab Samples: 2622250001, 2622250002, 2622250003, 2622250004, 2622250005, 2622250006, 2622250007, 2622250008,

2622250009, 2622250010

METHOD BLANK: 154028 Matrix: Water

Associated Lab Samples: 2622250001, 2622250002, 2622250003, 2622250004, 2622250005, 2622250006, 2622250007, 2622250008,

2622250009, 2622250010

ParameterUnitsBlank Reporting ResultReporting LimitMDLAnalyzedQualifiersMercurymg/LND0.000200.0001408/27/19 10:49

LABORATORY CONTROL SAMPLE: 154029

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154030 154031

MS MSD MSD 2622246001 Spike Spike MS MS MSD % Rec Max Conc. Result RPD Parameter Units Result Conc. % Rec % Rec Limits **RPD** Result Qual Mercury ND 0.0025 0.0025 0.0026 0.0025 103 75-125 3 20 mg/L

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.



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

QC Batch: 34176 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2622250001, 2622250002, 2622250003, 2622250004, 2622250005, 2622250006, 2622250007, 2622250008,

2622250009, 2622250010

METHOD BLANK: 153777 Matrix: Water

Associated Lab Samples: 2622250001, 2622250002, 2622250003, 2622250004, 2622250005, 2622250006, 2622250007, 2622250008,

2622250009, 2622250010

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	08/26/19 16:54	
Arsenic	mg/L	ND	0.0050	0.00035	08/26/19 16:54	
Barium	mg/L	ND	0.010	0.00049	08/26/19 16:54	
Beryllium	mg/L	ND	0.0030	0.000074	08/26/19 16:54	
Cadmium	mg/L	ND	0.0025	0.00011	08/26/19 16:54	
Chromium	mg/L	ND	0.010	0.00039	08/26/19 16:54	
Cobalt	mg/L	ND	0.0050	0.00030	08/26/19 16:54	
Lead	mg/L	ND	0.0050	0.000046	08/26/19 16:54	
Lithium	mg/L	ND	0.030	0.00078	08/26/19 16:54	
Molybdenum	mg/L	ND	0.010	0.00095	08/26/19 16:54	
Selenium	mg/L	ND	0.010	0.0013	08/26/19 16:54	
Thallium	mg/L	ND	0.0010	0.000052	08/26/19 16:54	

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 153779 153780												
		2622250005	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Arsenic	mg/L	0.00059J	0.1	0.1	0.098	0.098	97	98	75-125	1	20	
Barium	mg/L	0.020	0.1	0.1	0.12	0.12	95	96	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1537			153780							
Parameter	Units	2622250005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Chromium	mg/L	0.00051J	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Cobalt	mg/L	0.0010J	0.1	0.1	0.10	0.10	100	99	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	0	20	
Lithium	mg/L	0.00094J	0.1	0.1	0.096	0.096	95	95	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Selenium	mg/L	0.0030J	0.1	0.1	0.098	0.10	95	97	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Parameter

Date: 12/11/2019 10:46 AM

Fluoride

QC Batch: 34413 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2622250001, 2622250002, 2622250003, 2622250004, 2622250005, 2622250006, 2622250007, 2622250008,

2622250009, 2622250010

METHOD BLANK: 154817 Matrix: Water

Associated Lab Samples: 2622250001, 2622250002, 2622250003, 2622250004, 2622250005, 2622250006, 2622250007, 2622250008,

2622250009, 2622250010

2622246001

Result

ND

Units

mg/L

Spike

Conc.

10

Blank Reporting MDL Qualifiers Parameter Units Result Limit Analyzed Fluoride mg/L ND 0.30 0.029 08/28/19 20:32 LABORATORY CONTROL SAMPLE: 154818 LCS LCS Spike % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Fluoride mg/L 9.5 95 90-110 10 MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 154820 154819 MS MSD

MS

Result

9.9

MSD

Result

9.8

MS

% Rec

99

MSD

% Rec

% Rec

Limits

90-110

Max RPD

15

Qual

RPD

MATRIX SPIKE SAMPLE:	154821						
		2622246002	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Fluoride	mg/L	ND	10	9.7	97	90-110	

10

Spike

Conc.

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.



QUALIFIERS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

Date: 12/11/2019 10:46 AM



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622250

Date: 12/11/2019 10:46 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622250001	GWA-2	EPA 3005A	34176	EPA 6020B	34193
2622250002	GWC-1R	EPA 3005A	34176	EPA 6020B	34193
2622250003	GWC-2R	EPA 3005A	34176	EPA 6020B	34193
2622250004	GWC-3R	EPA 3005A	34176	EPA 6020B	34193
2622250005	GWC-4R	EPA 3005A	34176	EPA 6020B	34193
2622250006	GWC-5R	EPA 3005A	34176	EPA 6020B	34193
2622250007	GWC-6R	EPA 3005A	34176	EPA 6020B	34193
2622250008	EB-1-8-19-19	EPA 3005A	34176	EPA 6020B	34193
2622250009	Dup-1	EPA 3005A	34176	EPA 6020B	34193
2622250010	FB-1-8-20-19	EPA 3005A	34176	EPA 6020B	34193
2622250001	GWA-2	EPA 7470A	34231	EPA 7470A	34309
2622250002	GWC-1R	EPA 7470A	34231	EPA 7470A	34309
2622250003	GWC-2R	EPA 7470A	34231	EPA 7470A	34309
2622250004	GWC-3R	EPA 7470A	34231	EPA 7470A	34309
2622250005	GWC-4R	EPA 7470A	34231	EPA 7470A	34309
2622250006	GWC-5R	EPA 7470A	34231	EPA 7470A	34309
2622250007	GWC-6R	EPA 7470A	34231	EPA 7470A	34309
2622250008	EB-1-8-19-19	EPA 7470A	34231	EPA 7470A	34309
2622250009	Dup-1	EPA 7470A	34231	EPA 7470A	34309
2622250010	FB-1-8-20-19	EPA 7470A	34231	EPA 7470A	34309
2622250001	GWA-2	EPA 300.0	34413		
2622250002	GWC-1R	EPA 300.0	34413		
2622250003	GWC-2R	EPA 300.0	34413		
2622250004	GWC-3R	EPA 300.0	34413		
2622250005	GWC-4R	EPA 300.0	34413		
2622250006	GWC-5R	EPA 300.0	34413		
2622250007	GWC-6R	EPA 300.0	34413		
2622250008	EB-1-8-19-19	EPA 300.0	34413		
2622250009	Dup-1	EPA 300.0	34413		
2622250010	FB-1-8-20-19	EPA 300.0	34413		

CHAIN OF CUSTODY RECORD / #ace

Face Analytical Pace Analytics 110 TECHNO

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

6

PAGE:

5 - NaOH/ZnAc, <6°C 6 - Na₂S₂O₃, ≤6°C 7 - ≤6°C not frozen REMARKS/ADDITIONAL INFORMATION 2 - H₂SO₄, ≤6°C 4 - NaOH, ≤6°C P - PRODUCT 1 - HCl, ≤6°C SL - SLUDGE L- LIQUID SD - SOLID 3 - HNO3 A- AIR FOR LAB USE ONLY *MATRIX CODES: s S MO#:2622250 DRINKING WATER SW - SURFACE WATER GW - GROUNDWATER STORM WATER A - AMBER GLASS MW - WASTEWATER G - CLEAR GLASS CONTAINER TYPE Entered into LIMS: S - STERILE O - OTHER V - VOA VIAL P - PLASTIC W- WATER Tracking #: LAB#: ST. 1 K B **-** Δ OTHER DATE/TIME: 8-21-19 DATE/TIME: CLIENT / ANALYSIS REQUESTED COURIER # of Cooters (OZE6/9126 978-MS) N ۵. h 7 h 'n N N N Radium 226 & 228 USPS Not Present ۰ Flouride SAMPLE SHIPPED VIA RELINQUISHED BY: (EPA 6020/7470) RELINQUISHED BY ٩ 6 FED-EX VI .qqA sleteM Broken CONTAINER TYPE: Hedgdy Seal: RESERVATION **jo** # U O **- 2 M K の** Į ø 7 1 7 7 J 7 7 FB-1-8-20-19 SAMPLE IDENTIFICATION EB-1-8-19-19 Magr 5wc-2R 6WC-4R 6wc-5R 641-3R 6WC-6R 力コロース GWA-2 0 DATE/TIME Georgia Power Pap-影 DATE/TIME Plant Yates Gypsum Storage CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER PO # 7 7 7 9 24 4 4 υο<u>Σ</u>α 운 REQUESTED COMPLETION DATE: MATRIX CODE: 5 $\mathcal{G}_{\mathcal{D}}$ 3 **%** 3 6.20 3 241 Ralph McGill Blvd SE B10185 } 3 Yes Joju Abraham SAMPLED BY AND, TITLE: 1350 Collection TIME <u>ල</u> දි 1600 9.00-19-325 PROJECT NAME/STATE 0101 052) 1645 1225 1530 Vilanta, GA 30308 CLIENT NAME 104-506-7239 b1-12-8 REPORT TO: 8-20-19 PROJECT # Collection DATE 8-20-19 8-19-19 8-19-19 8-20-19 8-4-19 8-20-PA 8-21-18 ECEIVED

Yates - Gypsum Storage - Blank COCs

Sample Condition Upon Receipt

Face Analytical Client Name	: GA	Power	Project :	#
: Courler: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Clie	nt □ Commercial	☐ Pace Other	WO#	: 2622250
Tracking #:Custody Seal on Cooler/Box Present:		_	PM: BM	Due Date: 08/28/ GAPouer-CCR
Packing Material: Bubble Wrap Bubbl			_ VEIBIU	
Thermometer Used	Type of Ice: Wet	<u> </u>	C Samples of	 n ice, cooling process has begun
		is Frozen: Yes No	Date ar	nd Initials of persøn examining
Cooler Temperature 20	ziologicai riccae	Comments:	conte	ents: 3/21/19 mg
Chain of Custody Present:	ØYes □no □n/A	1.		
Chain of Custody Filled Out:	Pes □No □N/A	2.		
Chain of Custody Relinquished:	Pes Ono On/A	3.		
Sampler Name & Signature on COC:	-EYes □No □N/A	4.		
Samples Arrived within Hold Time:	₽Yes □No □N/A	5.		
Short Hold Time Analysis (<72hr):	□Yes .□No □N/A	6.		
Rush Turn Around Time Requested:	□Yes ØNo □N/A	7.		
Sufficient Volume:	√21Yes □No □N/A	8.		
Correct Containers Used:	√EYes □No □N/A	9.		
-Pace Containers Used:	√EYes □No □N/A			
Containers Intact:	.ØYes □No □N/A	10.		
Filtered volume received for Dissolved tests	□Yes □No .□N/A	11.		
Sample Labels match COC:	Yes ONO ON/A	12.		
-Includes date/time/ID/Analysis Matrix: All containers needing preservation have been checked.	EYes Ono On/A			
All containers needing preservation are found to be in compliance with EPA recommendation.	→ EYes □No □N/A			
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	□Yes ☑1√6	Initial when completed	Lot # of ad preservativ	
Samples checked for dechlorination:	□Yes □No .ÆN/A	14.		
Headspace in VOA Vials (>6mm):	□Yes □No ₽ÑA	15.		
Trip Blank Present:	□Yes □No .ØÑA	16.		
Trip Blank Custody Seals Present	☐Yes ☐No ÆMA	.		
Pace Trip Blank Lot # (if purchased):				
Client Notification/ Resolution:			Field Data	Required? Y / N
Person Contacted:	Date	/Time:		
Commented Depolations				
	<u>-</u>			
- 1				
		<u> </u>		
Project Manager Review:			D	ate:

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



September 19, 2019

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

RE: Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

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



(770)734-4200



CERTIFICATIONS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040 Florida: Cert E871149 SEKS WET

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14

Missouri Certification #: 235

Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617 New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457

New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3 Utah/TNI Certification #: PA014572017-9 USDA Soil Permit #: P330-17-00091 Vermont Dept. of Health: ID# VT-0282 Virgin Island/PADEP Certification Virginia/VELAP Certification #: 9526 Washington Certification #: C868 West Virginia DEP Certification #: 143 West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622251001	GWA-2	Water	08/19/19 12:25	08/21/19 16:50
2622251002	GWC-1R	Water	08/20/19 10:10	08/21/19 16:50
2622251003	GWC-2R	Water	08/20/19 13:50	08/21/19 16:50
2622251004	GWC-3R	Water	08/21/19 12:50	08/21/19 16:50
2622251005	GWC-4R	Water	08/19/19 16:00	08/21/19 16:50
2622251006	GWC-5R	Water	08/21/19 10:45	08/21/19 16:50
2622251007	GWC-6R	Water	08/20/19 12:00	08/21/19 16:50
2622251008	EB-1-8-19-19	Water	08/19/19 15:30	08/21/19 16:50
2622251009	Dup-1	Water	08/20/19 00:00	08/21/19 16:50
2622251010	FB-1-8-20-19	Water	08/20/19 13:25	08/21/19 16:50



SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622251001	GWA-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622251002	GWC-1R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251003	GWC-2R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251004	GWC-3R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251005	GWC-4R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251006	GWC-5R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251007	GWC-6R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251008	EB-1-8-19-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251009	Dup-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
622251010	FB-1-8-20-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Yates Gypsum Storage

Total Radium

Calculation

Pace Project No.: 2622251

Total Radium

Sample: GWA-2 Lab ID: 2622251001 Collected: 08/19/19 12:25 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.729 \pm 0.340 \quad (0.387)$ Radium-226 pCi/L 09/05/19 08:30 13982-63-3 C:91% T:NA EPA 9320 0.662 ± 0.429 (0.809) 09/16/19 12:47 15262-20-1 Radium-228 pCi/L

pCi/L

09/17/19 14:15 7440-14-4

C:67% T:83%

 $1.39 \pm 0.769 \quad (1.20)$



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Sample: GWC-1R Lab ID: 2622251002 Collected: 08/20/19 10:10 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 0.606 ± 0.312 (0.390) Radium-226 pCi/L 09/05/19 08:30 13982-63-3 C:95% T:NA EPA 9320 0.643 ± 0.449 (0.872) 09/16/19 12:47 15262-20-1 Radium-228 pCi/L C:66% T:87% Total Radium Total Radium 1.25 ± 0.761 (1.26) pCi/L 09/17/19 14:15 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Sample: GWC-2R Lab ID: 2622251003 Collected: 08/20/19 13:50 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.849 \pm 0.360 \quad (0.318)$ Radium-226 pCi/L 09/05/19 08:04 13982-63-3 C:94% T:NA EPA 9320 $0.370 \pm 0.395 \quad (0.823)$ Radium-228 pCi/L 09/16/19 12:48 15262-20-1 C:70% T:82% Total Radium Total Radium 1.22 ± 0.755 (1.14) pCi/L 09/17/19 14:15 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Calculation

Pace Project No.: 2622251

Total Radium

Sample: GWC-3R Lab ID: 2622251004 Collected: 08/21/19 12:50 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.625 \pm 0.374 \quad (0.602)$ Radium-226 pCi/L 09/05/19 08:05 13982-63-3 C:90% T:NA 0.149 ± 0.499 (1.12) EPA 9320 Radium-228 pCi/L 09/16/19 12:48 15262-20-1 C:69% T:72% Total Radium

pCi/L

09/17/19 14:15 7440-14-4

0.774 ± 0.873 (1.72)



Project: Plant Yates Gypsum Storage

Calculation

Pace Project No.: 2622251

Sample: GWC-4R Lab ID: 2622251005 Collected: 08/19/19 16:00 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 0.232 ± 0.223 (0.402) Radium-226 pCi/L 09/05/19 08:05 13982-63-3 C:93% T:NA EPA 9320 0.405 ± 0.422 (0.877) Radium-228 pCi/L 09/16/19 12:48 15262-20-1 C:71% T:79% Total Radium Total Radium 0.637 ± 0.645 (1.28) pCi/L 09/17/19 14:15 7440-14-4



Project: Plant Yates Gypsum Storage

Calculation

Pace Project No.: 2622251

Sample: GWC-5R Lab ID: 2622251006 Collected: 08/21/19 10:45 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.358 \pm 0.280 \quad (0.492)$ Radium-226 pCi/L 09/05/19 08:05 13982-63-3 C:96% T:NA EPA 9320 1.46 ± 0.590 (0.939) Radium-228 pCi/L 09/16/19 12:48 15262-20-1 C:60% T:89% Total Radium Total Radium $1.82 \pm 0.870 \quad (1.43)$ pCi/L 09/17/19 14:15 7440-14-4



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Sample: GWC-6R Lab ID: 2622251007 Collected: 08/20/19 12:00 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 0.406 ± 0.336 (0.616) Radium-226 pCi/L 09/05/19 08:05 13982-63-3 C:76% T:NA EPA 9320 0.00258 ± 0.419 (0.972) Radium-228 pCi/L 09/16/19 12:48 15262-20-1 C:63% T:81% Total Radium Total Radium 0.409 ± 0.755 (1.59) pCi/L 09/17/19 14:15 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Total Radium

Calculation

Pace Project No.: 2622251

Total Radium

Sample: EB-1-8-19-19 Lab ID: 2622251008 Collected: 08/19/19 15:30 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.304 \pm 0.259 \quad (0.465)$ Radium-226 pCi/L 09/05/19 08:05 13982-63-3 C:94% T:NA EPA 9320 $0.349 \pm 0.458 \quad (0.977)$ Radium-228 pCi/L 09/16/19 12:48 15262-20-1 C:66% T:74%

pCi/L

09/17/19 14:15 7440-14-4

 $0.653 \pm 0.717 \quad (1.44)$



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Sample: Dup-1 PWS:	Lab ID : 26222510 Site ID:	09 Collected: 08/20/19 00:00 Sample Type:	Received:	08/21/19 16:50	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.360 ± 0.306 (0.578) C:93% T:NA	pCi/L	09/05/19 08:05	13982-63-3	
Radium-228		0.652 ± 0.441 (0.849) C:65% T:90%	pCi/L	09/16/19 12:48	3 15262-20-1	
Total Radium	Total Radium Calculation	1.01 ± 0.747 (1.43)	pCi/L	09/17/19 14:15	5 7440-14-4	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Sample: FB-1-8-20-19 Lab ID: 2622251010 Collected: 08/20/19 13:25 Received: 08/21/19 16:50 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.0279 \pm 0.190 \quad (0.494)$ Radium-226 pCi/L 09/05/19 08:05 13982-63-3 C:96% T:NA EPA 9320 $0.0490 \pm 0.427 \quad (0.976)$ Radium-228 pCi/L 09/16/19 12:48 15262-20-1 C:74% T:74% Total Radium Total Radium 0.0769 ± 0.617 (1.47) pCi/L 09/17/19 14:15 7440-14-4 Calculation



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

QC Batch: 359489 Analysis Method: EPA 9315

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

Associated Lab Samples: 2622251001, 2622251002, 2622251003, 2622251004, 2622251005, 2622251006, 2622251007, 2622251008,

2622251009, 2622251010

METHOD BLANK: 1745578 Matrix: Water

Associated Lab Samples: 2622251001, 2622251002, 2622251003, 2622251004, 2622251005, 2622251006, 2622251007, 2622251008,

2622251009, 2622251010

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.402 ± 0.246 (0.327) C:100% T:NA
 pCi/L
 09/05/19 08:30

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.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

QC Batch: 358894 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2622251001, 2622251002, 2622251003, 2622251004, 2622251005, 2622251006, 2622251007, 2622251008,

2622251009, 2622251010

METHOD BLANK: 1742552 Matrix: Water

Associated Lab Samples: 2622251001, 2622251002, 2622251003, 2622251004, 2622251005, 2622251006, 2622251007, 2622251008,

2622251009, 2622251010

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.862 ± 0.415 (0.695) C:79% T:75%
 pCi/L
 09/16/19 12:47

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.



QUALIFIERS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

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

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

LABORATORIES

Date: 09/19/2019 03:41 PM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Gypsum Storage

Pace Project No.: 2622251

Date: 09/19/2019 03:41 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622251001	GWA-2	EPA 9315	359489		
2622251002	GWC-1R	EPA 9315	359489		
2622251003	GWC-2R	EPA 9315	359489		
2622251004	GWC-3R	EPA 9315	359489		
2622251005	GWC-4R	EPA 9315	359489		
2622251006	GWC-5R	EPA 9315	359489		
2622251007	GWC-6R	EPA 9315	359489		
2622251008	EB-1-8-19-19	EPA 9315	359489		
2622251009	Dup-1	EPA 9315	359489		
2622251010	FB-1-8-20-19	EPA 9315	359489		
2622251001	GWA-2	EPA 9320	358894		
2622251002	GWC-1R	EPA 9320	358894		
2622251003	GWC-2R	EPA 9320	358894		
2622251004	GWC-3R	EPA 9320	358894		
2622251005	GWC-4R	EPA 9320	358894		
2622251006	GWC-5R	EPA 9320	358894		
2622251007	GWC-6R	EPA 9320	358894		
2622251008	EB-1-8-19-19	EPA 9320	358894		
2622251009	Dup-1	EPA 9320	358894		
2622251010	FB-1-8-20-19	EPA 9320	358894		
2622251001	GWA-2	Total Radium Calculation	361774		
2622251002	GWC-1R	Total Radium Calculation	361774		
2622251003	GWC-2R	Total Radium Calculation	361774		
2622251004	GWC-3R	Total Radium Calculation	361774		
2622251005	GWC-4R	Total Radium Calculation	361774		
622251006	GWC-5R	Total Radium Calculation	361774		
622251007	GWC-6R	Total Radium Calculation	361774		
2622251008	EB-1-8-19-19	Total Radium Calculation	361774		
2622251009	Dup-1	Total Radium Calculation	361774		
2622251010	FB-1-8-20-19	Total Radium Calculation	361774		

CHAIN OF CUSTODY RECORD / Pace Analytical

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

PAGE:

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 241 Raiph McGil Blvd SE B10185 Adtanta, GA 30308 404-505-7239 REPORT TO: Joju Abraham REQUESTED COMPLETION DATE: PROJECT NAME/STATE: Plant Yates Gypsum Stora	IE NUMBER B10185	4 × 4 20		CONTAINER TYPE	م م	- d - d			P - PLASTIC	1 - HCl, ≤6°C
LIENT ADDRESSPHON 44 Raiph McGil Blvd SE i 44 Raiph McGil Blvd SE i 46-506-7239 EPORT TO: Joju Abrah EEQUESTED COMPLETR PROJECT NAME/STATE:	E NUMBER B10185	N V V			ŀ			¥		
41 Raiph McGlii Blvd SE Wanta, GA 303 08 (04-508-7239 EEPORT TO: Joju Abrah EEQUESTED COMPLETR PROJECT NAME/STATE:	B10185	<u> </u>		PRESERVATION:	_	7 3		8		2 - H ₂ SO4, ≤6°C
Wanta, GA 303 08 104-505-7239 TEPORT TO: Joju Abrah TEQUESTED COMPLETR PROJECT NAME/STATE:				# of	-		_		G - CLEAR GLASS	3 - HNO3
04-508-7239 LEPORT TO: Joju Abrah REQUESTED COMPLETI PROJECT NAME/STATE:									V - VOA VIAL	4 - NaOH, ≤6°C
LEQUESTED COMPLETI				v					S - STERILE	5 - NaOH/ZnAc, ≤6°C
Joju Abrah FEQUESTED COMPLETI ROJECT NAME/STATE:				0					O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C
EQUESTED COMPLETK ROJECT NAME/STATE:	ıam			z					J.A	7 - <6°C not frozen
ROJECT NAME/STATE:	ON DATE:		PO#	⊢ ∢				2 3		*MATRIX CODES:
# 1/21/0				- :				28 0	SWATER WATER	E S
# TOSI 00	Plant Yate	s Gyps	Plant Yates Gypsum Storage	z w	(850) 88		3 Ü	§	
* CORCO #:				~ v	VI .	19\9: 8 S S			GW - GROUNDWATER SW - SURFACE WATER	SD - SOLID A - AIR
	VIGTOR)	/0Z09	m S2			ST - STORM WATER	L- LIQUID P- PRODUCT
DATE TIME	-3000		SAMPLE IDENTIFICATION	>	Metals (EPA	Flounic Radiu (SW-8			1 1	REMARKS/ADDITIONAL INFORMATION
8-4-19 1225	42	7	6WA-2	4	_	1 2				
0101 H-02-8	6W	7	600-1R	77	_	7				
B-20-19 1350	M9	7		4	1	7				
0521	6W	7		7	-	7				
8-19-19 1600	1. W	7	6wc-4R	7		7 -				
_	6W	7		, h	_	1 2				
8-20-19 1200	M9	7	1 6WC-6R	4	-	1 2				
8-19-19 1530	7	7	FB-1-8-14-19	ď	-	7 (
9-50-19	m9	1	Dup-1	ז	-	1 2			1077797 #OM	
528 1 1328	M	1	P1-92-8-1-85	- d	+	7				
								292		
SAMPLED BY PAD TITLE		700	DATECTIME:	RELINQUISHED BY.	D BX	'lan		DATE/TIME: //65	LAB#: FOR LAE	FOR LAB USE ONLY
				RELINQUISHED BY	:D BY:			DATE/TIME: /	Entered into LIMS:	
RECEIVED BY LAB:	man	>	BATWA 1650	SAMPLE SHIP UPS FEI	SHIPPED VIA: FED-EX	USPS COURIER	RIER CLIENT	NT) OTHER FS	Tracking #:	
ny ched:	Vod No.	Į v	Temperature:	Currory Seat	Ned Present	# of Coolers	J	Deoler ID:		

Yates - Gypsum Storage - Blank COCs

Sample Condition Upon Receipt Client Name: Project # WO#: 2622251 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other Due Date: 09/19/19 Custody Seal on Cooler/Box Present: 🗹 yes 🔲 no Seals intact: yes CLIENT: GAPouer-CCR Packing Material: Bubble Wrap Bubble Bags None Other Samples on ice, cooling process has begun Type of Ice: Wet Thermometer Used Date and initials of person examining Biological Tissue is Frozen: Yes No **Cooler Temperature** contents:_ Comments: Temp should be above freezing to 6°C ØYes □No □N/A 1. Chain of Custody Present: ØYes □No □N/A Chain of Custody Filled Out: ₽Yes □No □N/A Chain of Custody Relinquished: FTYes □No □N/A Sampler Name & Signature on COC: -EYes □No □N/A Samples Arrived within Hold Time: □Yes .□No □N/A Short Hold Time Analysis (<72hr): ☐Yes ☐No □N/A Rush Turn Around Time Requested: √ZÎYes □No □N/A Sufficient Volume: √EYes □No □N/A Correct Containers Used: ∠⊒Yes □No □N/A -Pace Containers Used: ÆYes □No □N/A 10. Containers Intact: ☐Yes ☐No ÆÑ/A Filtered volume received for Dissolved tests EYes QNo QN/A 12. Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: All containers needing preservation have been checked. Yes ONO ON/A 13. All containers needing preservation are found to be in ÆYes □No □N/A compliance with EPA recommendation. Lot # of added Initial when □Yes ☑Ko completed preservative exceptions: VOA, coliform, TOC, O&G, WI-DRO (water) □Yes □No -ÆN/A Samples checked for dechlorination: ☐Yes ☐No ÆÑA 15. Headspace in VOA Vials (>6mm): □Yes □No .□N/A 16. Trip Blank Present: ☐Yes ☐No ÆM7A Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): Field Data Required? Y / N Client Notification/ Resolution: Date/Time: Person Contacted: Comments/ Resolution:

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

Project Manager Review:

Date:

LEVEL 2A LABORATORY DATA VALIDATIONS

Plant Yates Gypsum Storage Scan Event August 2019

Georgia Power Company – Plant Yates Gypsum Storage Quality Control Review of Analytical Data – August 2019

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta and Pittsburgh for groundwater samples collected at Plant Yates Gypsum Storage between August 19, 2019 and August 21, 2019. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 2622250 was revised by the laboratory to correct the reporting limits (RLs) in accordance with project requirements.

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

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

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met.

Accuracy: Laboratory goals for accuracy were met.

Detection Limits: Project goals for detection limits were met.

Completeness: There were no rejected analytical results for this event, resulting

in a completion of 100%.

Holding Times: Holding time requirements were met.

QUALIFICATIONS

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

J: The analyte was positively identified above the method detection

limit; however, the associated numerical value is the approximate

concentration of the analyte in the sample

ND: The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

• Radium-226 data for GWC-2R (2622251003) was qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Yates Gypsum Storage sampled between August 19, 2019 and August 21, 2019 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

REFERENCES

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

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

TABLE 1

Georgia Power Company – Plant Yates Gypsum Storage

Sample Summary Table – August 2019

							Anal	yses	
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (6020B, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
22250	GWA-2	8/19/2019	2622250001	GW		Х	Χ	Χ	
22251	GWA-2	8/19/2019	2622251001	GW					Χ
22250	GWC-1R	8/20/2019	2622250002	GW		Х	Χ	Χ	
22251	GWC-1R	8/20/2019	2622251002	GW					Х
22250	GWC-2R	8/20/2019	2622250003	GW		Х	Χ	Χ	
22251	GWC-2R	8/20/2019	2622251003	GW					Χ
22250	GWC-3R	8/21/2019	2622250004	GW		Х	Χ	Χ	
22251	GWC-3R	8/11/2019	2622251004	GW					Х
22250	GWC-4R	8/19/2019	2622250005	GW		Х	Χ	Χ	
22251	GWC-4R	8/19/2019	2622251005	GW					Χ
22250	GWC-5R	8/21/2019	2622250006	GW		X	Χ	Χ	
22251	GWC-5R	8/21/2019	2622251006	GW					Χ
22250	GWC-6R	8/20/2019	2622250007	GW		X	Χ	Χ	
22251	GWC-6R	8/20/2019	2622251007	GW					Х
22250	EB-1-8-19-19	8/19/2019	2622250008	WQ	EB	Х	Χ	Χ	
22251	EB-1-8-19-19	8/19/2019	2622251008	WQ	EB				Х
22250	DUP-1	8/20/2019	2622250009	GW	FD (GWC-6R)	Х	Χ	Χ	
22251	DUP-1	8/20/2019	2622251009	GW	FD (GWC-6R)				Х
22250	FB-1-8-20-19	8/20/2019	2622250010	WQ	FB	Х	Χ	Χ	
22251	FB-1-8-20-19	8/20/2019	2622251010	WQ	FB				Х

Abbreviations:

EB – Equipment Blank

FB – Field Blank

FD – Field Duplicate

 $\mathsf{GW}-\mathsf{Groundwater}$

QC – Quality Control

TDS – Total Dissolved Solids

WQ – Water Quality Control

TABLE 2

Georgia Power Company – Plant Yates Gypsum Storage

Qualifier Summary Table – August 2019

SDG	Field	Constituent	New RL	New MDL	Qualifier	Reason
	Identification			or MDC		
22251	GWC-2R	Radium-226		0.318	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration
MS/MSD – Matrix Spike / Matrix Spike Duplicate

MDL – Method Detection Limit

RL – Reporting Limit

RPD – Relative Percent Difference

SDG – Sample Delivery Group

Qualifiers:

J – Estimated Result

ND – Non-Detect Result

Date: 2019-08-19 12:27:52

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Tubing Type

Project Information:
Operator Name
Chris Parker

Company Name
Atlantic Coast Consulting
Project Name
Plant Yates Gypsum
Plant Yates

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 642533

Turbidity Make/Model Hach 2100 Q

Pump placement from TOC 47.1 ft

Well Information:

Well IDGWA-2Well diameter2 inWell Total Depth52.13 ftScreen Length10 ftDepth to Water36.04 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.981942 L
Calculated Sample Rate 300 sec
Stabilization Drawdown
Total Volume Pumped 4.5 L

Bladder Pump

Poly

.25 in

52 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:00:34	900.01	21.86	6.27	413.11	6.05	36.70	0.89	108.21
Last 5	12:05:34	1200.01	21.82	6.27	410.78	5.47	36.80	0.74	112.54
Last 5	12:10:34	1500.01	21.85	6.26	406.75	3.23	36.90	0.59	111.74
Last 5	12:15:34	1800.01	22.07	6.24	399.83	3.08	36.90	0.51	108.89
Last 5	12:20:34	2100.00	21.84	6.23	394.29	2.20	36.90	0.44	114.08
Variance 0			0.03	-0.01	-4.03			-0.15	-0.81
Variance 1			0.21	-0.02	-6.93			-0.08	-2.84
Variance 2			-0.23	-0.01	-5.53			-0.07	5.19

Notes

Sampled at 12:25. Cloudy 80s

Date: 2019-08-20 10:07:24

Project Information: Operator Name Chris Parker

Company Name Atlantic Coast Consulting Project Name Plant Yates Gypsum Plant Yates Gypsum Site Name

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 642533 Turbidity Make/Model Hach 2100 Q Pump Information: Pump Model/Type

Peripump **Tubing Type** Poly Tubing Diameter .17 in Tubing Length 36 ft

Pump placement from TOC 31 ft

Pumping Information: Well Information:

Final Pumping Rate 140 mL/min Well ID GWC-1R Well diameter Total System Volume 0.2506832 L 2 in Calculated Sample Rate Well Total Depth 36.34 ft 300 sec Stabilization Drawdown Screen Length 10 ft 5 in Depth to Water 4.2 L 22.67 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:45:25	300.07	23.95	5.36	775.48	2.55	23.10	6.29	86.69
Last 5	09:50:25	600.02	21.81	5.34	826.19	1.43	23.10	6.39	61.15
Last 5	09:55:25	900.01	22.14	5.33	840.12	1.00	23.20	6.23	56.77
Last 5	10:00:25	1200.01	22.03	5.33	841.05	1.07	23.20	6.16	55.14
Last 5	10:05:25	1500.01	21.92	5.33	832.63	0.93	23.20	6.10	54.26
Variance 0			0.32	-0.01	13.94			-0.17	-4.37
Variance 1			-0.11	-0.01	0.93			-0.07	-1.63
Variance 2			-0.11	0.00	-8.43			-0.06	-0.88

Notes

Sampled at 10:10. Sunny 80s

Date: 2019-08-20 13:49:18

Peripump

Project Information:

Operator Name

Chris Parker

Pump Information:

Pump Model/Type

Company NameAtlantic Coast ConsultingTubing TypePolyProject NamePlant Yates GypsumTubing Diameter.17 inSite NamePlant Yates GypsumTubing Length43 ft

 Latitude
 0° 0' 0"

 Longitude
 0° 0' 0"

 Sonde SN
 642533

Turbidity Make/Model Hach 2100 Q Pump placement from TOC 38 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID GWC-2R 150 mL/min Well diameter Total System Volume 0.2819272 L 2 in Calculated Sample Rate Well Total Depth 43.80 ft 300 sec Stabilization Drawdown Screen Length 10 ft 2 in Depth to Water 7.5 L 28.62 ft **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:23:33	1200.01	21.37	5.35	497.88	6.64	28.80	4.14	57.23
Last 5	13:28:33	1500.02	21.34	5.32	503.99	6.37	28.80	4.22	56.43
Last 5	13:33:39	1806.01	21.58	5.34	506.02	5.26	28.80	4.10	56.65
Last 5	13:38:39	2106.00	21.52	5.32	505.84	5.10	28.80	4.27	56.17
Last 5	13:43:39	2405.99	21.76	5.33	503.21	4.92	28.80	4.21	56.24
Variance 0			0.24	0.01	2.03			-0.12	0.22
Variance 1			-0.06	-0.02	-0.18			0.17	-0.48
Variance 2			0.24	0.00	-2.63			-0.06	0.08

Notes

Sampled at 1350. Sunny, 90s. FB -1 here @ 1325.

Date: 2019-08-21 12:52:51

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Tubing Type

Project Information:

Operator Name Chris Parker

Company Name Atlantic Coast Consulting Project Name Plant Yates Gypsum Site Name Plant Yates 0° 0' 0" Latitude 0° 0' 0" Longitude

642533

Turbidity Make/Model Hach 2100 Q Pump placement from TOC

33.3 ft

Poly

.25 in

38.3 ft

QED BLADDER PUMP

Well Information:

Sonde SN

Well ID GWC-3R Well diameter 2 in Well Total Depth 38.34 ft Screen Length 10 ft Depth to Water 28.37 ft

Pumping Information: Final Pumping Rate

260 mL/min Total System Volume 0.8496996 L Calculated Sample Rate 300 sec Stabilization Drawdown 7 in **Total Volume Pumped** 19 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:25:26	2402.99	20.13	5.30	207.14	5.39	29.00	7.12	21.18
Last 5	12:30:26	2702.99	20.08	5.31	201.83	4.41	29.00	7.15	21.38
Last 5	12:35:26	3002.99	20.26	5.31	203.27	4.88	29.00	7.21	22.66
Last 5	12:40:26	3302.98	20.22	5.31	197.45	3.33	29.00	7.13	22.48
Last 5	12:45:32	3608.98	20.26	5.32	194.34	3.30	29.00	7.17	23.02
Variance 0			0.18	0.01	1.44			0.06	1.29
Variance 1			-0.04	-0.00	-5.82			-0.09	-0.18
Variance 2			0.04	0.01	-3.12			0.04	0.54

Notes

Sampled at 1250. Sunny, 80s.

Date: 2019-08-19 15:59:36

Project Information:
Operator Name
Chris Parker
Pump Information:
Pump Model/Type

Operator NameChris ParkerPump Model/TypePeripumpCompany NameAtlantic Coast ConsultingTubing TypePolyProject NamePlant Yates GypsumTubing Diameter.17 inSite NamePlant Yates GypsumTubing Length31.0 ft

Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 642533

Turbidity Make/Model Hach 2100 Q Pump placement from TOC 26.0 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID GWC-4R 190 mL/min Well diameter Total System Volume 0.2283661 L 2 in Well Total Depth 31.05 ft Calculated Sample Rate 300 sec Screen Length 10 ft Stabilization Drawdown 5 in Depth to Water 16.62 ft **Total Volume Pumped** 25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:34:22	7208.85	23.53	5.57	555.51	1.20	17.00	2.55	116.63
Last 5	15:39:22	7508.84	22.67	5.56	560.08	0.69	17.00	2.71	111.97
Last 5	15:44:22	7808.84	22.65	5.56	505.34	0.64	17.00	2.89	104.53
Last 5	15:49:22	8108.83	22.54	5.56	495.13	0.77	17.00	2.95	102.23
Last 5	15:54:23	8409.83	21.94	5.56	506.25	0.85	17.00	3.01	100.41
Variance 0			-0.02	0.01	-54.74			0.17	-7.44
Variance 1			-0.11	0.00	-10.21			0.06	-2.30
Variance 2			-0.60	-0.00	11.12			0.07	-1.82

Notes

Sampled at 16:00. Sunny 90s. EB-1 here at 15:30 - Peripump tubing

Date: 2019-08-21 10:44:09

Project Information:

Operator Name Chris Parker

Company Name
Project Name
Site Name
Latitude
Longitude

Cilis Farker
Atlantic Coast Consulting
Plant Yates Gypsum
Plant Yates
O° 0' 0"

Congitude

Cilis Farker
Atlantic Coast Consulting
Plant Yates Gypsum
Plant Yates
O° 0' 0"

Sonde SN 642533

Turbidity Make/Model Hach 2100 Q

Well Information:

Well ID GWC-5R
Well diameter 2 in
Well Total Depth 42.82 ft
Screen Length 10 ft
Depth to Water 28.8 ft

Pump Information:

Pump Model/Type QED Bladder Pump

Tubing TypePolyTubing Diameter.25 inTubing Length42.8 ft

Pump placement from TOC 37.8 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.8931369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 10 in
Total Volume Pumped 4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:15:04	600.02	21.47	4.85	2201.05	3.37	29.50	7.76	32.64
Last 5	10:20:04	900.01	21.12	4.83	2236.43	3.10	29.60	7.69	36.77
Last 5	10:25:04	1200.00	20.97	4.84	2247.51	3.31	29.60	7.68	39.18
Last 5	10:30:04	1500.00	21.09	4.85	2229.47	2.98	29.60	7.64	41.33
Last 5	10:35:04	1800.00	20.94	4.88	2192.47	3.96	29.60	7.62	43.50
Variance 0			-0.15	0.00	11.08			-0.01	2.41
Variance 1			0.11	0.02	-18.04			-0.04	2.15
Variance 2			-0.15	0.03	-37.00			-0.03	2.17

Notes

Sampled at 1045. Sunny, 70s.

Date: 2019-08-20 12:00:30

Project Information: Operator Name Chris Parker

Company Name Atlantic Coast Consulting Project Name Plant Yates Gypsum Site Name Plant Yates Gypsum

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 642533 Pump Information:

Pump Model/Type Bladder Pump **Tubing Type** Poly Tubing Diameter Tubing Length

.25 in 51 ft

Turbidity Make/Model Hach 2100 Q Pump placement from TOC 46 ft

Well Information:

Well ID GWC-6R Well diameter 2 in Well Total Depth 51.87 ft Screen Length 10 ft Depth to Water 34.88 ft

Pumping Information:

Final Pumping Rate 150 mL/min Total System Volume 0.9722893 L Calculated Sample Rate 300 sec Stabilization Drawdown 5 in 6.4 L **Total Volume Pumped**

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS,	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:35:37	900.02	19.57	5.87	1476.64	0.75	35.30	5.60	52.95
Last 5	11:40:37	1200.01	19.31	5.87	1476.38	0.47	35.30	4.97	55.14
Last 5	11:45:37	1500.01	19.20	5.86	1474.41	0.33	35.30	4.81	56.58
Last 5	11:50:37	1800.00	19.15	5.85	1475.61	0.44	35.30	4.78	57.36
Last 5	11:55:37	2100.00	19.02	5.85	1480.66	0.40	35.30	4.76	57.98
Variance 0			-0.11	-0.01	-1.97			-0.17	1.44
Variance 1			-0.05	-0.01	1.20			-0.03	0.78
Variance 2			-0.13	-0.01	5.05			-0.02	0.62

Notes

Sampled at 12:00. Sunny 80s. DUP 1 here





December 11, 2019

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

RE: Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Dear Joju Abraham:

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

This report was revised 11/12/19 to remove Molybdenum as it was not requested on the COC.

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

Sincerely,

Kevin Herring for Betsy McDaniel

Kein Lung

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

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







CERTIFICATIONS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812 Georgia DW Microbiology Certification #: 812 North Carolina Certification #: 381 South Carolina Certification #: 98011001

Virginia Certification #: 460204



SAMPLE SUMMARY

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624193001	GWA-2	Water	10/08/19 15:15	10/10/19 16:35
2624193002	GWC-1R	Water	10/09/19 16:15	10/10/19 16:35
2624193003	GWC-2R	Water	10/09/19 17:20	10/10/19 16:35
2624193004	GWC-3R	Water	10/10/19 11:00	10/10/19 16:35
2624193005	GWC-4R	Water	10/10/19 13:02	10/10/19 16:35
2624193006	GWC-5R	Water	10/09/19 17:30	10/10/19 16:35
2624193007	GWC-6R	Water	10/08/19 16:45	10/10/19 16:35
2624193008	EB-1-10-9-19	Water	10/09/19 18:00	10/10/19 16:35
2624193009	FB-1-10-8-19	Water	10/08/19 17:10	10/10/19 16:35
2624193010	Dup-1	Water	10/10/19 00:00	10/10/19 16:35



SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624193001	GWA-2	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193002	GWC-1R	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193003	GWC-2R	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193004	GWC-3R	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193005	GWC-4R	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193006	GWC-5R	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193007	GWC-6R	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193008	EB-1-10-9-19	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193009	FB-1-10-8-19	EPA 6020B	CSW	18
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624193010	Dup-1	EPA 6020B	CSW	18

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	DRB	1
		SM 2540C	ALW	1
		EPA 300.0	MWB	3



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: GWA-2	Lab ID:	2624193001	Collecte	ed: 10/08/19	9 15:15	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 17:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 17:55	7440-38-2	
Barium	0.058	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 17:55	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 17:55	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 17:55	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 17:55	7440-43-9	
Calcium	28.3	mg/L	5.0	0.55	50	10/14/19 14:09	10/16/19 18:00	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 17:55	7440-47-3	
Cobalt	0.0039J	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 17:55	7440-48-4	
Copper	0.00041J	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 17:55	7440-50-8	
_ead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 17:55	7439-92-1	
Lithium	0.0015J	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 17:55	7439-93-2	
Nickel	0.0051J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 17:55	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 17:55	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 17:55	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 17:55	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 17:55	7440-62-2	
Zinc	0.0078J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 17:55	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:19	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
Total Dissolved Solids	276	mg/L	10.0	10.0	1		10/14/19 11:51		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	5.1	mg/L	1.0	0.024	1		10/16/19 11:45	16887-00-6	
Fluoride	0.052J	mg/L	0.30	0.029	1		10/16/19 11:45	16984-48-8	
Sulfate	128	mg/L	5.0	0.085	5		10/17/19 05:05	14808-79-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: GWC-1R	Lab ID:	2624193002	Collecte	ed: 10/09/19	9 16:15	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	thod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 18:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 18:06	7440-38-2	
Barium	0.054	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 18:06	7440-39-3	
Beryllium	0.00013J	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 18:06	7440-41-7	
Boron	0.029J	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 18:06	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 18:06	7440-43-9	
Calcium	59.1	mg/L	5.0	0.55	50	10/14/19 14:09	10/16/19 18:12	7440-70-2	
Chromium	0.0012J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 18:06	7440-47-3	В
Cobalt	0.00064J	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 18:06	7440-48-4	
Copper	0.00079J	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 18:06	7440-50-8	
Lead	0.000052J	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 18:06	7439-92-1	
Lithium	0.0013J	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 18:06	7439-93-2	
Nickel	0.0015J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 18:06		
Selenium	0.0023J	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 18:06	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 18:06	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 18:06		
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 18:06	7440-62-2	
Zinc	0.0078J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 18:06	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:26	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
Total Dissolved Solids	526	mg/L	10.0	10.0	1		10/15/19 17:21		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	6.9	mg/L	1.0	0.024	1		10/16/19 13:36	16887-00-6	
Fluoride	ND	mg/L	0.30	0.024	1		10/16/19 13:36		
Sulfate	318	mg/L	20.0	0.029	20		10/16/19 19:08		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: GWC-2R	Lab ID:	2624193003	Collecte	ed: 10/09/19	9 17:20	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 19:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 19:04	7440-38-2	
Barium	0.045	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 19:04	7440-39-3	
Beryllium	0.00014J	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 19:04	7440-41-7	
Boron	0.018J	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 19:04	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 19:04	7440-43-9	
Calcium	27.8	mg/L	5.0	0.55	50	10/14/19 14:09	10/16/19 19:10	7440-70-2	
Chromium	0.00059J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 19:04	7440-47-3	В
Cobalt	0.024	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 19:04	7440-48-4	
Copper	0.00024J	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 19:04	7440-50-8	
Lead	0.000057J	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 19:04	7439-92-1	
Lithium	0.0047J	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 19:04	7439-93-2	
Nickel	0.00058J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 19:04	7440-02-0	
Selenium	0.0026J	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 19:04	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 19:04	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 19:04	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 19:04		
Zinc	0.0069J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 19:04	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:29	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	372	mg/L	10.0	10.0	1		10/15/19 17:22		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	9.8	mg/L	1.0	0.024	1		10/16/19 14:42	16887-00-6	
Fluoride	ND	mg/L	0.30	0.024	1		10/16/19 14:42		
Sulfate	91.2	mg/L	10.0	0.029	10		10/16/19 19:30		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: GWC-3R	Lab ID:	2624193004	Collecte	ed: 10/10/19	11:00	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 19:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 19:15	7440-38-2	
Barium	0.018	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 19:15	7440-39-3	
Beryllium	0.00039J	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 19:15	7440-41-7	
Boron	0.0061J	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 19:15	7440-42-8	
Cadmium	0.00018J	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 19:15	7440-43-9	
Calcium	4.3	mg/L	0.10	0.011	1	10/14/19 14:09	10/16/19 19:15	7440-70-2	
Chromium	0.0014J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 19:15	7440-47-3	В
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 19:15	7440-48-4	
Copper	0.00033J	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 19:15	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 19:15	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 19:15	7439-93-2	
Nickel	ND	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 19:15		
Selenium	0.0021J	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 19:15	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 19:15	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 19:15	7440-28-0	
Vanadium	0.0011J	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 19:15		
Zinc	0.0079J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 19:15	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	0.00043J	mg/L	0.00050	0.00014	1	10/16/19 09:16	10/17/19 10:31	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	109	mg/L	10.0	10.0	1		10/16/19 18:49		D6
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	5.3	mg/L	1.0	0.024	1		10/16/19 15:04	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/16/19 15:04		
Sulfate	48.0	mg/L	1.0	0.017	1		10/16/19 15:04		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: GWC-4R	Lab ID:	2624193005	Collecte	ed: 10/10/19	9 13:02	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 19:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 19:27	7440-38-2	
Barium	0.018	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 19:27	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 19:27	7440-41-7	
Boron	0.78	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 19:27	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 19:27	7440-43-9	
Calcium	18.0	mg/L	5.0	0.55	50	10/14/19 14:09	10/16/19 19:33	7440-70-2	
Chromium	0.00057J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 19:27	7440-47-3	В
Cobalt	0.00099J	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 19:27	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 19:27	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 19:27	7439-92-1	
Lithium	0.0013J	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 19:27	7439-93-2	
Nickel	0.00084J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 19:27	7440-02-0	
Selenium	0.0024J	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 19:27	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 19:27	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 19:27	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 19:27	7440-62-2	
Zinc	0.0060J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 19:27	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:33	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	2540C						
Total Dissolved Solids	247	mg/L	10.0	10.0	1		10/16/19 18:49		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	42.8	mg/L	1.0	0.024	1		10/16/19 15:26	16887-00-6	
Fluoride	ND	mg/L	0.30	0.024	1		10/16/19 15:26		
Sulfate	68.7	mg/L	10.0	0.029	10		10/16/19 10:20		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: GWC-5R	Lab ID:	2624193006	Collecte	ed: 10/09/19	9 17:30	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	thod: Ef	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 19:38	7440-36-0	
Arsenic	0.0012J	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 19:38	7440-38-2	
Barium	0.015	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 19:38	7440-39-3	
Beryllium	0.0022J	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 19:38	7440-41-7	
Boron	0.013J	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 19:38	7440-42-8	
Cadmium	0.0011J	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 19:38	7440-43-9	
Calcium	128	mg/L	5.0	0.55	50	10/14/19 14:09	10/16/19 19:44	7440-70-2	
Chromium	0.0024J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 19:38	7440-47-3	В
Cobalt	0.00031J	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 19:38	7440-48-4	
Copper	0.00087J	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 19:38	7440-50-8	
Lead	0.000059J	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 19:38	7439-92-1	
Lithium	0.0014J	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 19:38	7439-93-2	
Nickel	0.0019J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 19:38	7440-02-0	
Selenium	0.034	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 19:38	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 19:38	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 19:38	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 19:38	7440-62-2	
Zinc	0.025	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 19:38	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:36	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	1680	mg/L	10.0	10.0	1		10/15/19 17:22		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	4.5	mg/L	1.0	0.024	1		10/16/19 15:48	16887-00-6	
Fluoride	0.35	mg/L	0.30	0.029	1		10/16/19 15:48	16984-48-8	
Sulfate	1180	mg/L	50.0	0.85	50		10/16/19 20:36		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: GWC-6R	Lab ID:	2624193007	Collecte	ed: 10/08/19	16:45	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 19:50	7440-36-0	
Arsenic	0.00056J	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 19:50	7440-38-2	
Barium	0.054	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 19:50	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 19:50	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 19:50	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 19:50	7440-43-9	
Calcium	115	mg/L	5.0	0.55	50	10/14/19 14:09	10/16/19 19:55	7440-70-2	
Chromium	0.0014J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 19:50	7440-47-3	В
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 19:50	7440-48-4	
Copper	0.0011J	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 19:50	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 19:50	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 19:50	7439-93-2	
Nickel	0.0021J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 19:50	7440-02-0	
Selenium	0.0031J	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 19:50	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 19:50	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 19:50	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 19:50	7440-62-2	
Zinc	0.0060J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 19:50	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:38	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	1050	mg/L	10.0	10.0	1		10/14/19 11:51		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	4.9	mg/L	1.0	0.024	1		10/16/19 16:11	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/16/19 16:11	16984-48-8	
Sulfate	664	mg/L	50.0	0.85	50		10/16/19 20:58		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: EB-1-10-9-19	Lab ID:	2624193008	Collecte	ed: 10/09/19	9 18:00	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 20:13	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 20:13	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 20:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 20:13	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 20:13	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 20:13	7440-43-9	
Calcium	0.018J	mg/L	0.10	0.011	1	10/14/19 14:09	10/16/19 20:13	7440-70-2	
Chromium	0.00076J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 20:13	7440-47-3	В
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 20:13	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 20:13	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 20:13	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 20:13	7439-93-2	
Nickel	0.00074J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 20:13	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 20:13	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 20:13	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 20:13	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 20:13	7440-62-2	
Zinc	0.0086J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 20:13	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Prej	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:40	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	10.0	mg/L	10.0	10.0	1		10/15/19 17:22		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	0.037J	mg/L	1.0	0.024	1		10/16/19 16:33	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/16/19 16:33	16984-48-8	
Sulfate	0.23J	mg/L	1.0	0.017	1		10/16/19 16:33	14808-79-8	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: FB-1-10-8-19	Lab ID:	2624193009	Collecte	ed: 10/08/19	17:10	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 20:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 20:18	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 20:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 20:18	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 20:18	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 20:18	7440-43-9	
Calcium	ND	mg/L	0.10	0.011	1	10/14/19 14:09	10/16/19 20:18	7440-70-2	
Chromium	0.0029J	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 20:18	7440-47-3	В
Cobalt	ND	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 20:18	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 20:18	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 20:18		
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 20:18		
Nickel	0.0035J	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 20:18	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 20:18	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 20:18		
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 20:18	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 20:18	7440-62-2	
Zinc	0.0051J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 20:18	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Prep	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:43	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		10/14/19 11:51		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	0.030J	mg/L	1.0	0.024	1		10/16/19 16:55	16887-00-6	
Fluoride	ND	mg/L	0.30	0.024	1		10/16/19 16:55		
Sulfate	0.049J	mg/L	1.0	0.029	1		10/16/19 16:55		В



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Sample: Dup-1	Lab ID:	2624193010	Collecte	ed: 10/10/19	00:00	Received: 10/	10/19 16:35 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA	6020B Pre	paration Met	hod: EF	PA 3005A			
Antimony	ND	mg/L	0.0030	0.00027	1	10/14/19 14:09	10/16/19 20:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/14/19 14:09	10/16/19 20:24	7440-38-2	
Barium	0.018	mg/L	0.010	0.00049	1	10/14/19 14:09	10/16/19 20:24	7440-39-3	
Beryllium	0.00037J	mg/L	0.0030	0.000074	1	10/14/19 14:09	10/16/19 20:24	7440-41-7	
Boron	0.0061J	mg/L	0.040	0.0049	1	10/14/19 14:09	10/16/19 20:24	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/14/19 14:09	10/16/19 20:24	7440-43-9	
Calcium	4.4	mg/L	0.10	0.011	1	10/14/19 14:09	10/16/19 20:24	7440-70-2	
Chromium	0.020	mg/L	0.010	0.00039	1	10/14/19 14:09	10/16/19 20:24	7440-47-3	
Cobalt	0.00060J	mg/L	0.0050	0.00030	1	10/14/19 14:09	10/16/19 20:24		
Copper	ND	mg/L	0.025	0.00019	1	10/14/19 14:09	10/16/19 20:24	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	10/14/19 14:09	10/16/19 20:24	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/14/19 14:09	10/16/19 20:24	7439-93-2	
Nickel	0.023	mg/L	0.010	0.00031	1	10/14/19 14:09	10/16/19 20:24	7440-02-0	
Selenium	0.0019J	mg/L	0.010	0.0013	1	10/14/19 14:09	10/16/19 20:24	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	10/14/19 14:09	10/16/19 20:24	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	10/14/19 14:09	10/16/19 20:24	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	10/14/19 14:09	10/16/19 20:24	7440-62-2	
Zinc	0.0064J	mg/L	0.010	0.0015	1	10/14/19 14:09	10/16/19 20:24	7440-66-6	В
7470 Mercury	Analytical	Method: EPA	7470A Pre	paration Met	hod: EF	PA 7470A			
Mercury	ND	mg/L	0.00020	0.00014	1	10/16/19 09:16	10/17/19 10:45	7439-97-6	
2540C Total Dissolved Solids	Analytical	Method: SM 2	540C						
Total Dissolved Solids	123	mg/L	10.0	10.0	1		10/16/19 18:49		
300.0 IC Anions 28 Days	Analytical	Method: EPA	300.0						
Chloride	5.3	mg/L	1.0	0.024	1		10/16/19 18:23	16887-00-6	
Fluoride	0.030J	mg/L	0.30	0.029	1		10/16/19 18:23		
Sulfate	47.8	mg/L	1.0	0.017	1		10/16/19 18:23		



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

QC Batch: 36917 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury

Associated Lab Samples: 2624193001, 2624193002, 2624193003, 2624193004, 2624193005, 2624193006, 2624193007, 2624193008,

2624193009, 2624193010

METHOD BLANK: 166881 Matrix: Water

Associated Lab Samples: 2624193001, 2624193002, 2624193003, 2624193004, 2624193005, 2624193006, 2624193007, 2624193008,

2624193009, 2624193010

 Parameter
 Units
 Blank Reporting Result
 Reporting Limit
 MDL
 Analyzed
 Qualifiers

 Mercury
 mg/L
 ND
 0.00020
 0.00014
 10/17/19 09:58

LABORATORY CONTROL SAMPLE: 166882

LCS LCS Spike % Rec Parameter Units Conc. Result % Rec Limits Qualifiers mg/L 0.0024 97 80-120 Mercury 0.0025

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 166883 166884

MS MSD MSD 2624187021 Spike Spike MS MS MSD % Rec Max Conc. Result Result **RPD** RPD Parameter Units Result Conc. % Rec % Rec Limits Qual Mercury ND 0.0025 0.0025 0.0025 0.0024 100 75-125 5 20 mg/L

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.



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

QC Batch: 36894 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET

Associated Lab Samples: 2624193001, 2624193002, 2624193003, 2624193004, 2624193005, 2624193006, 2624193007, 2624193008,

2624193009, 2624193010

METHOD BLANK: 166799 Matrix: Water

Associated Lab Samples: 2624193001, 2624193002, 2624193003, 2624193004, 2624193005, 2624193006, 2624193007, 2624193008,

2624193009, 2624193010

		Blank	Reporting			
Parameter	Units	Result	Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/16/19 16:16	
Arsenic	mg/L	ND	0.0050	0.00035	10/16/19 16:16	
Barium	mg/L	ND	0.010	0.00049	10/16/19 16:16	
Beryllium	mg/L	ND	0.0030	0.000074	10/16/19 16:16	
Boron	mg/L	ND	0.040	0.0049	10/16/19 16:16	
Cadmium	mg/L	ND	0.0025	0.00011	10/16/19 16:16	
Calcium	mg/L	ND	0.10	0.011	10/16/19 16:16	
Chromium	mg/L	0.00056J	0.010	0.00039	10/16/19 16:16	
Cobalt	mg/L	ND	0.0050	0.00030	10/16/19 16:16	
Copper	mg/L	ND	0.025	0.00019	10/16/19 16:16	
Lead	mg/L	ND	0.0050	0.000046	10/16/19 16:16	
Lithium	mg/L	ND	0.030	0.00078	10/16/19 16:16	
Nickel	mg/L	ND	0.010	0.00031	10/16/19 16:16	
Selenium	mg/L	ND	0.010	0.0013	10/16/19 16:16	
Silver	mg/L	ND	0.010	0.00028	10/16/19 16:16	
Thallium	mg/L	ND	0.0010	0.000052	10/16/19 16:16	
Vanadium	mg/L	ND	0.010	0.00071	10/16/19 16:16	
Zinc	mg/L	0.0050J	0.010	0.0015	10/16/19 16:16	

LABORATORY CONTROL SAMPLE	E: 166800					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Calcium	mg/L	1	0.95	95	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Copper	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Nickel	mg/L	0.1	0.095	95	80-120	
Selenium	mg/L	0.1	0.094	94	80-120	
Silver	mg/L	0.1	0.092	92	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

LABORATORY CONTROL SAMPLE: 166800

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vanadium	mg/L	0.1	0.096	96	80-120	
Zinc	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE D	JPLICATE: 166	801		166802							
Parameter Ur	2624187021 ts Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	
Antimony mg	/L ND	0.1	0.1	0.089	0.097	89	96	75-125	8	20	
Arsenic mg	/L 0.0053J	0.1	0.1	0.096	0.098	91	93	75-125	3	20	
Barium mç	/L 0.13	0.1	0.1	0.21	0.22	87	96	75-125	4	20	1
Beryllium mg	/L ND	0.1	0.1	0.092	0.091	92	91	75-125	2	20	1
Boron mg	/L 6.8	1	1	8.0	7.5	121	71	75-125	6	20	M1
Cadmium mg	/L ND	0.1	0.1	0.090	0.092	90	92	75-125	2	20	1
Calcium mg	/L 17.7	1	1	19.4	18.5	163	79	75-125	4	20	M1
Chromium mg	/L 0.012J	0.1	0.1	0.11	0.10	95	91	75-125	4	20	1
Cobalt mg	/L 0.0037J	0.1	0.1	0.092	0.092	88	88	75-125	0	20	1
Copper mg	/L	0.1	0.1	0.091J	0.091J	90	89	75-125	1	20	1
Lead mg	/L 0.0025J	0.1	0.1	0.089	0.091	86	89	75-125	3	20	1
Lithium mg	/L ND	0.1	0.1	0.092J	0.092J	92	91	75-125		20	1
Nickel mg	/L	0.1	0.1	0.12	0.11	92	89	75-125	3	20	1
Selenium mg		0.1	0.1	0.088	0.10	81	95	75-125	15	20	1
Silver mg		0.1	0.1	0.087	0.092	87	92	75-125	6	20	1
Thallium mg		0.1	0.1	0.088	0.089	87	89	75-125	1	20	1
Vanadium mg		0.1	0.1	0.14	0.14	104	103	75-125	1	20	ı
Zinc mg		0.1	0.1	0.11	0.10	98	93	75-125	6	20	1

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.



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

QC Batch: 36914 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2624193001, 2624193007, 2624193009

LABORATORY CONTROL SAMPLE: 166870

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 366 92 84-108

SAMPLE DUPLICATE: 166871

2624187005 Dup Max RPD RPD Units Result Qualifiers Parameter Result **Total Dissolved Solids** 526 532 1 10 mg/L

SAMPLE DUPLICATE: 166872

Date: 12/11/2019 10:43 AM

2624140004 Dup Max Result RPD RPD Qualifiers Parameter Units Result 18.0 **Total Dissolved Solids** mg/L 13.0 32 10 D6

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

QC Batch: 36986 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2624193002, 2624193003, 2624193006, 2624193008

LABORATORY CONTROL SAMPLE: 167157

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 400 100 84-108

SAMPLE DUPLICATE: 167158

2624142008 Dup Max RPD RPD Qualifiers Units Result Parameter Result **Total Dissolved Solids** 115 101 13 10 D6 mg/L

SAMPLE DUPLICATE: 167159

Date: 12/11/2019 10:43 AM

2624187019 Dup Max Result RPD RPD Qualifiers Parameter Units Result mg/L 211 **Total Dissolved Solids** 210 0 10

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

QC Batch: 37083 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2624193004, 2624193005, 2624193010

LABORATORY CONTROL SAMPLE: 167558

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Dissolved Solids** mg/L 400 404 101 84-108

SAMPLE DUPLICATE: 167559

2624193004 Dup Max RPD RPD Qualifiers Units Result Parameter Result **Total Dissolved Solids** 109 135 21 10 D6 mg/L

SAMPLE DUPLICATE: 167560

Date: 12/11/2019 10:43 AM

Parameter Units 2624262004 Dup Max
Result Result RPD RPD Qualifiers

Total Dissolved Solids mg/L 484 491 1 10

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

QC Batch: 36992 QC Batch Method: EPA 300.0 Analysis Method: Analysis Description: EPA 300.0

300.0 IC Anions

Associated Lab Samples: 2624193001

METHOD BLANK: 167194

Date: 12/11/2019 10:43 AM

Matrix: Water

Associated Lab Samples: 2624193001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.024	10/16/19 00:42	
Fluoride	mg/L	ND	0.30	0.029	10/16/19 00:42	
Sulfate	mg/L	ND	1.0	0.017	10/16/19 00:42	

LABORATORY CONTROL SAMPLE:	16/195	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L	10	10.0	100	90-110	
Fluoride	mg/L	10	10.3	103	90-110	
Sulfate	ma/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 1671	96		167197							
			MS	MSD								
		2624187006	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	40.2	10	10	44.8	44.5	47	43	90-110	1	15	M1
Fluoride	mg/L	ND	10	10	10.1	10.4	101	104	90-110	3	15	

MATRIX SPIKE SAMPLE:	167198						
		2624187015	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Fluoride	mg/L	ND	10	10.4	104	90-110	

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

QC Batch: 36994 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2624193002, 2624193003, 2624193004, 2624193005, 2624193006, 2624193007, 2624193008, 2624193009,

2624193010

METHOD BLANK: 167201 Matrix: Water

Associated Lab Samples: 2624193002, 2624193003, 2624193004, 2624193005, 2624193006, 2624193007, 2624193008, 2624193009,

2624193010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.024	10/16/19 12:51	
Fluoride	mg/L	ND	0.30	0.029	10/16/19 12:51	
Sulfate	mg/L	0.019J	1.0	0.017	10/16/19 12:51	

LABORATORY CONTROL SAMPLE:	167202	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Chloride	mg/L		10.1	101	90-110	
Fluoride	mg/L	10	10.3	103	90-110	
Sulfate	mg/L	10	10.1	101	90-110	

MATRIX SPIKE & MATRIX SI	PIKE DUPL	ICATE: 1672	.03		167204							
			MS	MSD								
		2624193002	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	6.9	10	10	16.6	16.6	96	97	90-110	0	15	
Fluoride	mg/L	ND	10	10	9.9	10.1	99	101	90-110	1	15	

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



QUALIFIERS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 12/11/2019 10:43 AM

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624193

Date: 12/11/2019 10:43 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
2624193001	GWA-2	EPA 3005A	36894	EPA 6020B	36932
2624193002	GWC-1R	EPA 3005A	36894	EPA 6020B	36932
2624193003	GWC-2R	EPA 3005A	36894	EPA 6020B	36932
2624193004	GWC-3R	EPA 3005A	36894	EPA 6020B	36932
2624193005	GWC-4R	EPA 3005A	36894	EPA 6020B	36932
2624193006	GWC-5R	EPA 3005A	36894	EPA 6020B	36932
2624193007	GWC-6R	EPA 3005A	36894	EPA 6020B	36932
2624193008	EB-1-10-9-19	EPA 3005A	36894	EPA 6020B	36932
2624193009	FB-1-10-8-19	EPA 3005A	36894	EPA 6020B	36932
624193010	Dup-1	EPA 3005A	36894	EPA 6020B	36932
624193001	GWA-2	EPA 7470A	36917	EPA 7470A	37089
2624193002	GWC-1R	EPA 7470A	36917	EPA 7470A	37089
2624193003	GWC-2R	EPA 7470A	36917	EPA 7470A	37089
2624193004	GWC-3R	EPA 7470A	36917	EPA 7470A	37089
624193005	GWC-4R	EPA 7470A	36917	EPA 7470A	37089
2624193006	GWC-5R	EPA 7470A	36917	EPA 7470A	37089
2624193007	GWC-6R	EPA 7470A	36917	EPA 7470A	37089
624193008	EB-1-10-9-19	EPA 7470A	36917	EPA 7470A	37089
624193009	FB-1-10-8-19	EPA 7470A	36917	EPA 7470A	37089
624193010	Dup-1	EPA 7470A	36917	EPA 7470A	37089
624193001	GWA-2	SM 2540C	36914		
624193002	GWC-1R	SM 2540C	36986		
624193003	GWC-2R	SM 2540C	36986		
2624193004	GWC-3R	SM 2540C	37083		
624193005	GWC-4R	SM 2540C	37083		
2624193006	GWC-5R	SM 2540C	36986		
2624193007	GWC-6R	SM 2540C	36914		
2624193008	EB-1-10-9-19	SM 2540C	36986		
2624193009	FB-1-10-8-19	SM 2540C	36914		
2624193010	Dup-1	SM 2540C	37083		
2624193001	GWA-2	EPA 300.0	36992		
2624193002	GWC-1R	EPA 300.0	36994		
2624193003	GWC-2R	EPA 300.0	36994		
2624193004	GWC-3R	EPA 300.0	36994		
2624193005	GWC-4R	EPA 300.0	36994		
624193006	GWC-5R	EPA 300.0	36994		
2624193007	GWC-6R	EPA 300.0	36994		
2624193008	EB-1-10-9-19	EPA 300.0	36994		
2624193009	FB-1-10-8-19	EPA 300.0	36994		
2624193010	Dup-1	EPA 300.0	36994		

CHAIN OF CUSTODY RECORD

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

CLIENT NAME:				Georgia Power				ANALYSIS REQUESTED	IS RE	SHOC	回		F	CONTAINER TYPE	PRESERVATION	1
					CONTAINER TYPE:	FE:	H	_	۵	-	a.		_ T	P - PLASTIC	1 - HCL <6°C	
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:	PHONE NI	JMBER	VFAX	NUMBER:	PRESERVATION:	ä	က	7	6	3	က			A - AMBER GLASS	2 - H.SO. <6°C	
241 Raiph McGill Blvd SE B10185 Atlanta, GA 30308	lvd SE B101	185			# of									G - CLEAR GLASS	3 - HNO ₃	
404-506-7239					ပ					(M				S-STERILE	5 - NaOH/ZnAc. <6°C	
REPORT TO:	loir Abraham				0 2				82	/oled			_	O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C	
REQUESTED COMPLETION DATE:	PLETION)ATE:		PO#:	z			_	289	teil e			Z	- 944	7 - ≤6°C not frozen	
PROJECT NAME/STATE	TATE:				∢ -			(၁	SS m	eS) :	(//		> <u>\$</u>	-MATRI)	MATRIX CODES:	
		nt Yate:	s - Gyl	Plant Yates - Gypsum Storage	ZW				Radiu So)	elsteN	voled e		ទួល រា	DW - DRINKING WATER	S - SOIL	
PROJECT #:					~	11	wr		€6/9 `∧ı ¢	M	es)		1 65		SD - SOLID	
_	-		-		ဟ	uu	alcir		idA rEe	ηqΑ	:sle)				A- AIR	
Collection Colle	Collection MAT	MATRIX CODE*	0 2	SAMPLE IDENTIFICATION		A slet	On, C:	30€ ∀c	betted 048-W	tected	ite Mer			SI - STORM WATER W- WATER	L - LIQUID P - PRODUCT	
_	+		-		•	ο(N)	BOI		(SA	ĐΘ	st2		<u> </u>	REMARKS/ADDITIO	REMARKS/ADDITIONAL INFORMATION	
10-8-49 1515	5 GW	3	,~	x (50) 4-2	4	_	/	_	7	7	7		14.8			
91 6-5-01	(5 Pm	3	_	K CWC-IR	7		/		>	/	/					ſ
10-6-19 17	720 GW	3		x Cwc-2R	ጉ	_	/		>	<u> </u>	/	!				
10-0-19 110	1100 Per	3	_	x 6.00-3R	h		1		/	7	/					T
10-0-01	302 GW	3	.x	x 1 5 JC - 4R	9	-3	\ ,		>	7	\		************************************	extra Rad	here	Т
10-9-19 Pecl	11-20 C-W	3	$\stackrel{\times}{\dashv}$	(Cwc-5R	۲		/		>	1				time 1737		1
31 61-8-01	649 GW	60	<u> </u>	x 6 wc-6R	۲	-	/		>	1	7					Ī
Cas 1 61-7-01	50 GW	7 1	_	x EB-1-10-d-16	ጉ		/		>	1	1					T
10-8-13	DUS 012	B		61-6-01-1-8-1 x	7	H			>	1	/		<u> </u>	MO#:2624193	J	T
10-10-6	<u>ئي</u> ا	3	<u> </u>	1-0.0	h			_		1	\				!	T
			\vdash													
			\dashv			\dashv	\dashv						2624193	S		
SAMPLED BY AND TITLE	STITLE: R. Weller	1	AC	Secabine	RELINOU	QUISHED BY:	BY:	1	7	ı		DATE/TIME: /	1635	FOR LAB	FOR LAB USE ONLY	Т
1	<	ا			RELINQUISHED BY	ISHED	BY:		1			╄-				20.0
RESENTED BY LAB	1	man	۱ ۶	PARTME/19 16.75	SAMPLE	SHIPPED FFD-FX	Š	SdSI	COURIER	315.2	\\ \\ \\ \\ \\ \	CI IENT	ű	Tracking #:		1
Yes No NA		cN (A	Temperaturey 0'9 Max.	2	seat: Broken	T TO	esent	# of Coolers	ders	ケ	é	1			7. 3
Chatested App IV Metals:		ony, An	senic,	Cadmium, Chromium,	Cobalt, L	ead, Lit	hium, Se	t, Lead, Lithium, Selenium, Thallium	hallium							7
State metals list of	pper, mercu	전 전		State, Wetals list copper, mercury, nickel, sliver, vanadium, znc		-	Yates -	Yates - Blank COCs	30Cs							
of 27																

Sai	mple Condition	Upon Receipt		
Pace Analytical Client Name	: GA	 .	Project #	
Courier: Fed Ex UPS USPS Clie		Li race outer	WO#: 262419 PM: BM Due Date	3 :: 10/17/1
Custody Seal on Cooler/Box Present: yes	no Seals	intact: yes	CLIENT: GAPower-CCR	
Packing Material: Bubble Wrap Bubble	Bags None	☐ Other		
Thermometer Used83	Type of Ice: Wet	Blue None	Samples on ice, cooling process h	as begun
Cooler Temperature 0 9 Temp should be above freezing to 6°C	Biological Tissue	is Frozen: Yes No Comments:	Date and Initials of berson e contents:	camining
Chain of Custody Present:	Yes ONO ON/A	1.	· · · · · · · · · · · · · · · · · · ·	
Chain of Custody Filled Out:	√Ves □No □N/A	2.		
Chain of Custody Relinquished:	ØYes □No □N/A	3.		
Sampler Name & Signature on COC:	Pres Ono On/A	4.		
Samples Arrived within Hold Time:	→ PYes □No □N/A	5.		
Short Hold Time Analysis (<72hr):	□Yes □N⁄A	6.		
Rush Turn Around Time Requested:	□Yes □N/A	7.		
Sufficient Volume:	→ DYes □No □N/A	8.		
Correct Containers Used:	_⊟Yes □No □N/A	9.		
-Pace Containers Used:	ÆYes □No □N/A			
Containers Intact:	√DYes □No □N/A	10.		
Filtered volume received for Dissolved tests	□Yes □No ☑N/A	11.		
Sample Labels match COC:	_Dres □no □n/A	12.		
-Includes date/time/ID/Analysis Matrix:	$\underline{\hspace{1cm}}$			
All containers needing preservation have been checked.	₽Yes □No □N/A	13.		
All containers needing preservation are found to be in compliance with EPA recommendation.	∠ZYes □No □N/A		•	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	□Yes ☑No	Initial when completed	Lot # of added preservative	
Samples checked for dechlorination:	□Yes □No →□N/A	14.		
Headspace in VOA Vials (>6mm):	□Yes □No ☑Ñ/A	15.		
Trip Blank Present:	□Yes □No .ÆNÆ	16.		
Trip Blank Custody Seals Present	□Yes □No -□N/A]		
Pace Trip Blank Lot # (if purchased):				
Client Notification/ Resolution:			Field Data Required? Y	/ N
Person Contacted:	Date/	Time:	· 	
Comments/ Resolution:				

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

Project Manager Review:

Date:_





November 07, 2019

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

RE: Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Dear Joju Abraham:

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

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

Sincerely,

Betsy McDaniel

Beton M Damil

betsy.mcdaniel@pacelabs.com

(770)734-4200 Project Manager

Enclosures

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



(770)734-4200



CERTIFICATIONS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

Delaware Certification EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040 Florida: Cert E871149 SEKS WET

Guam Certification Hawaii Certification Idaho Certification Illinois Certification Indiana Certification Iowa Certification #: 391

Kansas/TNI Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221 KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012 Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572018-1 New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190 Ohio EPA Rad Approval: #41249

Missouri Certification #: 235

Oregon/TNI Certification #: PA200002-010 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification
Tennessee Certification #: 02867

Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Texas/TNI Certification #: T104704188-17-3

Wisconsin Approve List for Rad Wyoming Certification #: 8TMS-L



SAMPLE SUMMARY

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624195001	GWA-2	Water	10/08/19 15:15	10/10/19 16:35
2624195002	GWC-1R	Water	10/09/19 16:15	10/10/19 16:35
2624195003	GWC-2R	Water	10/09/19 17:20	10/10/19 16:35
2624195004	GWC-3R	Water	10/10/19 11:00	10/10/19 16:35
2624195005	GWC-4R	Water	10/10/19 13:02	10/10/19 16:35
2624195006	GWC-5R	Water	10/09/19 17:30	10/10/19 16:35
2624195007	GWC-6R	Water	10/08/19 16:45	10/10/19 16:35
2624195008	EB-1-10-9-19	Water	10/09/19 18:00	10/10/19 16:35
2624195009	FB-1-10-8-19	Water	10/08/19 17:10	10/10/19 16:35
2624195010	Dup-1	Water	10/10/19 00:00	10/10/19 16:35



SAMPLE ANALYTE COUNT

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

_ab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2624195001	GWA-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624195002	GWC-1R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195003	GWC-2R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195004	GWC-3R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195005	GWC-4R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195006	GWC-5R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195007	GWC-6R	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195008	EB-1-10-9-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195009	FB-1-10-8-19	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
624195010	Dup-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA



Project: Plant Yates Gypsum Storage

Calculation

Pace Project No.: 2624195

Sample: GWA-2 Lab ID: 2624195001 Collected: 10/08/19 15:15 Received: 10/10/19 16:35 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.909 \pm 0.414 \quad (0.545)$ Radium-226 pCi/L 10/25/19 08:20 13982-63-3 C:91% T:NA EPA 9320 0.411 ± 0.421 (0.873) 10/29/19 15:28 15262-20-1 Radium-228 pCi/L C:74% T:82% Total Radium **Total Radium** 1.32 ± 0.835 (1.42) pCi/L 11/04/19 14:35 7440-14-4



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: GWC-1R Lab ID: 2624195002 Collected: 10/09/19 16:15 Received: 10/10/19 16:35 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.458 \pm 0.278 \quad (0.386)$ Radium-226 pCi/L 10/25/19 08:20 13982-63-3 C:93% T:NA EPA 9320 0.0239 ± 0.454 (1.04) 10/29/19 15:28 15262-20-1 Radium-228 pCi/L C:72% T:78% Total Radium **Total Radium** 0.482 ± 0.732 (1.43) pCi/L 11/04/19 14:35 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: GWC-2R Lab ID: 2624195003 Collected: 10/09/19 17:20 Received: 10/10/19 16:35 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.707 \pm 0.347 \quad (0.428)$ Radium-226 pCi/L 10/25/19 09:17 13982-63-3 C:92% T:NA 0.00320 ± 0.332 (0.779) EPA 9320 10/29/19 15:28 15262-20-1 Radium-228 pCi/L C:73% T:81% Total Radium **Total Radium** 0.710 ± 0.679 (1.21) pCi/L 11/05/19 14:23 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: GWC-3R Lab ID: 2624195004 Collected: 10/10/19 11:00 Received: 10/10/19 16:35 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.433 \pm 0.271 \quad (0.386)$ Radium-226 pCi/L 10/25/19 08:20 13982-63-3 C:96% T:NA EPA 9320 -0.158 ± 0.614 (1.46) Radium-228 pCi/L 10/29/19 18:12 15262-20-1 C:70% T:79% Total Radium **Total Radium** 0.433 ± 0.885 (1.85) pCi/L 11/05/19 14:23 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: GWC-4R PWS:	Lab ID: 26241950 Site ID:	O5 Collected: 10/10/19 13:02 Sample Type:	Received:	10/10/19 16:35	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.525 ± 0.287 (0.333) C:93% T:NA	pCi/L	10/25/19 08:20	13982-63-3	
Radium-228		-0.306 ± 0.505 (1.25) C:76% T:72%	pCi/L	10/29/19 18:13	3 15262-20-1	
Total Radium	Total Radium Calculation	0.525 ± 0.792 (1.58)	pCi/L	11/05/19 14:23	3 7440-14-4	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: GWC-5R Lab ID: 2624195006 Collected: 10/09/19 17:30 Received: 10/10/19 16:35 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.333 \pm 0.236 \quad (0.335)$ Radium-226 pCi/L 10/25/19 08:20 13982-63-3 C:99% T:NA EPA 9320 $0.165 \pm 0.528 \quad (1.19)$ Radium-228 pCi/L 10/29/19 18:15 15262-20-1 C:72% T:83% Total Radium **Total Radium** 0.498 ± 0.764 (1.53) pCi/L 11/05/19 14:23 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: GWC-6R Lab ID: 2624195007 Collected: 10/08/19 16:45 Received: 10/10/19 16:35 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual EPA 9315 $0.652 \pm 0.320 \quad (0.358)$ Radium-226 pCi/L 10/25/19 09:17 13982-63-3 C:94% T:NA 0.258 ± 0.512 (1.13) EPA 9320 10/29/19 18:17 15262-20-1 Radium-228 pCi/L C:73% T:85% Total Radium **Total Radium** 0.910 ± 0.832 (1.49) pCi/L 11/05/19 14:24 7440-14-4 Calculation



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: EB-1-10-9-19 PWS:	Lab ID: 26241950 Site ID:	O8 Collected: 10/09/19 18:00 Sample Type:	Received:	10/10/19 16:35	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.370 ± 0.239 (0.305) C:94% T:NA	pCi/L	10/25/19 08:24	13982-63-3	
Radium-228		-0.238 ± 0.460 (1.12) C:73% T:92%	pCi/L	10/29/19 18:11	15262-20-1	
Total Radium	Total Radium Calculation	0.370 ± 0.699 (1.43)	pCi/L	11/05/19 14:24	7440-14-4	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: FB-1-10-8-19 PWS:	Lab ID: 26241950 Site ID:	O9 Collected: 10/08/19 17:10 Sample Type:	Received:	10/10/19 16:35	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.427 ± 0.294 (0.490) C:96% T:NA	pCi/L	10/25/19 08:15	13982-63-3	
Radium-228		0.458 ± 0.565 (1.19) C:71% T:83%	pCi/L	10/29/19 18:11	15262-20-1	
Total Radium	Total Radium Calculation	0.885 ± 0.859 (1.68)	pCi/L	11/05/19 14:24	7440-14-4	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Sample: Dup-1 PWS:	Lab ID: 26241950 Site ID:	Collected: 10/10/19 00:00 Sample Type:	Received:	10/10/19 16:35	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226		0.450 ± 0.222 (0.259) C:85% T:NA	pCi/L	11/04/19 08:31	1 13982-63-3	
Radium-228		0.529 ± 0.425 (0.849) C:75% T:75%	pCi/L	11/01/19 15:45	5 15262-20-1	
Total Radium	Total Radium Calculation	0.979 ± 0.647 (1.11)	pCi/L	11/05/19 14:24	4 7440-14-4	



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

QC Batch: 366966 Analysis Method: EPA 9315

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

Associated Lab Samples: 2624195010

METHOD BLANK: 1780028 Matrix: Water

Associated Lab Samples: 2624195010

Parameter Act ± Unc (MDC) Carr Trac Units Analyzed Qualifiers

Radium-226 0.371 \pm 0.194 (0.239) C:96% T:NA pCi/L 11/04/19 08:29

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.



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

QC Batch: 366498 Analysis Method: EPA 9315

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

Associated Lab Samples: 2624195001, 2624195002, 2624195003, 2624195004, 2624195005, 2624195006, 2624195007, 2624195008,

2624195009

METHOD BLANK: 1777737 Matrix: Water

Associated Lab Samples: 2624195001, 2624195002, 2624195003, 2624195004, 2624195005, 2624195006, 2624195007, 2624195008,

2624195009

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.599 ± 0.309 (0.395) C:98% T:NA
 pCi/L
 10/25/19 09:42

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



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

QC Batch: 366967 Analysis Method: EPA 9320

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

Associated Lab Samples: 2624195010

METHOD BLANK: 1780030 Matrix: Water

Associated Lab Samples: 2624195010

Parameter Act ± Unc (MDC) Carr Trac Units Analyzed Qualifiers

Radium-228 0.0313 \pm 0.302 (0.696) C:73% T:90% pCi/L 11/01/19 12:27

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.



Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

QC Batch: 366499 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228

Associated Lab Samples: 2624195001, 2624195002, 2624195003, 2624195004, 2624195005, 2624195006, 2624195007, 2624195008,

2624195009

METHOD BLANK: 1777739 Matrix: Water

Associated Lab Samples: 2624195001, 2624195002, 2624195003, 2624195004, 2624195005, 2624195006, 2624195007, 2624195008,

2624195009

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.720 ± 0.387 (0.688) C:72% T:87%
 pCi/L
 10/29/19 12:24

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.



QUALIFIERS

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Act - Activity

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

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

LABORATORIES

Date: 11/07/2019 03:11 PM

PASI-PA Pace Analytical Services - Greensburg



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Yates Gypsum Storage

Pace Project No.: 2624195

Date: 11/07/2019 03:11 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624195001	GWA-2	EPA 9315	366498		
2624195002	GWC-1R	EPA 9315	366498		
2624195003	GWC-2R	EPA 9315	366498		
2624195004	GWC-3R	EPA 9315	366498		
2624195005	GWC-4R	EPA 9315	366498		
2624195006	GWC-5R	EPA 9315	366498		
2624195007	GWC-6R	EPA 9315	366498		
2624195008	EB-1-10-9-19	EPA 9315	366498		
2624195009	FB-1-10-8-19	EPA 9315	366498		
2624195010	Dup-1	EPA 9315	366966		
2624195001	GWA-2	EPA 9320	366499		
2624195002	GWC-1R	EPA 9320	366499		
2624195003	GWC-2R	EPA 9320	366499		
2624195004	GWC-3R	EPA 9320	366499		
2624195005	GWC-4R	EPA 9320	366499		
2624195006	GWC-5R	EPA 9320	366499		
2624195007	GWC-6R	EPA 9320	366499		
2624195008	EB-1-10-9-19	EPA 9320	366499		
2624195009	FB-1-10-8-19	EPA 9320	366499		
2624195010	Dup-1	EPA 9320	366967		
2624195001	GWA-2	Total Radium Calculation	369282		
2624195002	GWC-1R	Total Radium Calculation	369282		
2624195003	GWC-2R	Total Radium Calculation	369490		
2624195004	GWC-3R	Total Radium Calculation	369490		
2624195005	GWC-4R	Total Radium Calculation	369490		
2624195006	GWC-5R	Total Radium Calculation	369490		
2624195007	GWC-6R	Total Radium Calculation	369493		
2624195008	EB-1-10-9-19	Total Radium Calculation	369493		
2624195009	FB-1-10-8-19	Total Radium Calculation	369493		
2624195010	Dup-1	Total Radium Calculation	369493		

CHAIN OF CUSTODY RECORD / Pace Analytical

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

P

PAGE:

5 - NaOH/ZnAc, ≤6°C 6 - Na₂S₂O₃, ≤6°C 7 - ≤6°C not frozen 2 - H₂SO₄, ≤6°C 4 - NaOH, ≤6°C REMARKS/ADDITIONAL INFORMATION P - PRODUCT **PRESERVATION** 1 - HCl, ≤6°C St. SLUDGE L- LIQUID SD - SOLID 3- HNO3 A- AIR FOR LAB USE ONLY *MATRIX CODES: となる MO#: 2624195 DRINKING WATER SW - SURFACE WATER extra Rad GW - GROUNDWATER **MW- WASTEWATER** STORM WATER the 1730 A - AMBER GLASS G - CLEAR GLASS CONTAINER TYPE Entered into LIMS: V - VOA VIAL S - STERILE P - PLASTIC W- WATER Tracking #: LAB# **4** 0 $z \supset \Xi m m \alpha$ 1635 OTHER DATE/TIME: 10 -19 DATE/TIME: CLIENT) Φ က State Metals: (see below) ANALYSIS REQUES COURIER of Cooters Detected App IV Metals: (See list below) Sched App IV Metals: Yorkmony, Arsenic, Barlum, Beryllium, Cadmium, Chromikm, Cobelt, Lead, Lithium, Selenium, Thallium (OZE6/9126 978-MS) Detected App IV: Radium 226 & 228 USPS Not Present (EPA 300.0 & SM 2540C) ے CI, F, 504 & TDS SAMPLE SHIPPED VIA: UPS FED-EX RELINQUISHED BY: Boron, Calcium RELINQUISHED BY Metals App. III Curtory Seal: Infact Broken CONTAINER TYPE: PRESERVATION: **#** 7 J J 7 Z I ¥ 3 SAMPLE IDENTIFICATION Secabine b)-b-0)-1-83 6-6-01-1-8-10 0,0 0 26-4R Gwc -5R 6. WC-6R ruc-1R Georgia Power 1,00 FUA. DATE/TIME: DATE/TIME Plant Yates - Gypsum Storage CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER ₩ 0-4 9 2 4 6 No NA an 0024 The state of the s 3 REQUESTED COMPLETION DATE: MATRIX CODE* الج 241 Ralph McGill Blvd SE B10185 ج 1 - EF アラ 18-56 J.C.W Z Z ટે Joju Abraham . Wal 1270 **6**#4 SAMPLED BY AND TITLE PROJECT NAME/STATE Collection 014 8 307 1 800 TIME Atlanta, GA 30308 P. (6 / loc. CLIENT NAME: 404-506-7239 REPORT TO: 91-5-0 67.60 b1-6-0 6-6-19 61-01-0 9-8-0 61-01-01 PROJECT #: 12-9-61 5-8-0 Collection DATE 5)-01-0

ar, Lead, Lighton, Selemon, Mainon X-1- Class Company

Yates - Blank COCs

State Metals list: copper, mercury, nickel, silver, vanadium, zinc

Sar	nple Condition	Upon Receipt	
Pace Analytical Client Name	: GRA	Powere	Project #
Courier: Fed Ex UPS USPS Clien			WO#: 2624195 PM: BM
Custody Seal on Cooler/Box Present: yes	no Seals	intact: yes	CLIENT: GAPouer-CCR
Packing Material: Bubble Wrap Bubble	Bags None [Other	
Thermometer Used 83	Type of Ice: Wet		Samples on ice, cooling process has begun
Cooler Temperature 0 9	4	is Frozen: Yes No	Date and initials of person examining contents: 10/10/19 ML
Temp should be above freezing to 6°C		Comments:	
Chain of Custody Present:	Yes ONO ON/A	1.	
Chain of Custody Filled Out:	Yes ONO ON/A	2.	
Chain of Custody Relinquished:	ØYes □No □N/A	3.	
Sampler Name & Signature on COC:	No □N/A	4.	
Samples Arrived within Hold Time:	-ETYes ONO ON/A	5.	
Short Hold Time Analysis (<72hr):	□Yes □N/A	6.	
Rush Turn Around Time Requested:	□Yes □N/A □N/A	7.	
Sufficient Volume:	JEYes □No □N/A	8.	
Correct Containers Used:	JEYes □No □N/A	9.	1
-Pace Containers Used:	ÆYes □No □N/A		
Containers Intact:	ÆYes □No □N/A	10.	
Filtered volume received for Dissolved tests	□Yes □No ÆÑ/A	11.	
Sample Labels match COC:	Tes □No □N/A	12.	
-Includes date/time/ID/Analysis Matrix:	$\underline{\hspace{1cm}}\mathcal{W}_{\underline{\hspace{1cm}}}$		
All containers needing preservation have been checked.	₩Yes □No □N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	₽Yes □No □N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	□Yes ☑No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	□Yes □No □N/A	14.	
Headspace in VOA Vials (>6mm):	□Yes □No ☑N/A		
Trip Blank Present:	□Yes □No ÆÑÃ	.i	
Trip Blank Custody Seals Present	□Yes □No ┛N/A	1	
Pace Trip Blank Lot # (if purchased):			
Client Notification/ Resolution:			Field Data Required? Y / N
Person Contacted:	Date/	Time:	- <u></u>
Comments/ Resolution:			

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

Project Manager Review:

Date:

LEVEL 2A LABORATORY DATA VALIDATIONS

Plant Yates Gypsum Storage 2nd Semi-Annual Event October 2019

Georgia Power Company – Plant Yates Gypsum Storage Quality Control Review of Analytical Data – October 2019

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Pace Analytical Services, Atlanta and Pittsburgh for groundwater samples collected at Plant Yates Gypsum Storage between October 8, 2019 and October 10, 2019. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDG 2624193 was revised by the laboratory to remove a non-target analyte that was not requested on the chain of custody (COC).

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

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

DATA QUALITY OBJECTIVES

Laboratory Precision: Laboratory goals for precision were met, with the exceptions of

Total Dissolved Solids (TDS) on GWC-3R (2624193004) and Radium-226 on GWC-4R (2624195005) as described in the

qualifications section below. Radium-228 in SDG 2624195 yielded a relative percent difference (RPD) for the laboratory control samples/laboratory control sample duplicates that exceeded the QC criteria (53.11% above the limit of 36); this batch was passed on the individual recoveries, and no qualification was necessary.

Field Precision: Field goals for precision were met, with the exception of

Chromium on GWC-3R (2624193004) and DUP-1 (2624193010) as

described in the qualifications section below.

Accuracy: Laboratory goals for accuracy were met.

Detection Limits: Project goals for detection limits were met.

Completeness: There were no rejected analytical results for this event, resulting

in a completion of 100%.

Holding Times: Holding time requirements were met.

QUALIFICATIONS

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

J: The analyte was positively identified above the method detection

limit; however, the associated numerical value is the approximate

concentration of the analyte in the sample

ND: The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Sample GWC-3R (2624193004) was qualified as estimated (J) for TDS as the laboratory RPD exceeded QC criteria (21% above limit of 10).
- Sample GWC-4R (2624195005) was qualified as estimated (J) for Radium-226 as the laboratory RPD exceeded QC criteria (34.24% above limit of 25).
- Samples GWC-3R (2624193004) and DUP-1 (2624193010) were qualified as estimated (J) for Chromium as the field RPD exceeded QC criteria (173.8% above limit of 25).
- Certain Chromium and Zinc results in SDG 2624193 were qualified as non-detect (ND) due to the analyte being detected at a similar concentration in an associated blank sample. As shown in Table 2, when the original sample result was above the reporting limit (RL), both the RL and method detection limit (MDL) were raised to the sample result as part of the qualification process. When the original sample result was between the RL and MDL, only the MDL was raised to the sample result as part of the qualification process.
- Certain radium results in SDG 2624195 were qualified as non-detect (ND) due to the
 analyte being detected at a similar concentration in an associated blank sample. As
 shown in Table 2, the minimum detectable concentration (MDC) was raised to the
 sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Yates Gypsum Storage sampled between October 8, 2019 and October 10, 2019 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

REFERENCES

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

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

TABLE 1

Georgia Power Company – Plant Yates Gypsum Storage

Sample Summary Table – October 2019

						Analyses			
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (60208, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
24193	GWA-2	10/8/2019	2624193001	GW		Х	Χ	Χ	
24195	GWA-2	10/8/2019	2624195001	GW					Χ
24193	GWC-1R	10/9/2019	2624193002	GW		Χ	Χ	Χ	
24195	GWC-1R	10/9/2019	2624195002	GW					Χ
24193	GWC-2R	10/9/2019	2624193003	GW		Χ	Χ	Χ	
24195	GWC-2R	10/9/2019	2624195003	GW					Χ
24193	GWC-3R	10/10/2019	2624193004	GW		Χ	Χ	Χ	
24195	GWC-3R	10/10/2019	2624195004	GW					Χ
24193	GWC-4R	10/10/2019	2624193005	GW		Х	Χ	Χ	
24195	GWC-4R	10/10/2019	2624195005	GW					Х
24193	GWC-5R	10/9/2019	2624193006	GW		Х	Χ	Χ	
24195	GWC-5R	10/9/2019	2624195006	GW					X
24193	GWC-6R	10/8/2019	2624193007	GW		Х	Χ	Χ	
24195	GWC-6R	10/8/2019	2624195007	GW					X
24193	EB-1-10-9-19	10/9/2019	2624193008	WQ	EB	Х	Χ	Χ	
24195	EB-1-10-9-19	10/9/2019	2624195008	WQ	EB				X
24193	FB-1-10-8-19	10/8/2019	2624193009	WQ	FB	Χ	Χ	Χ	
24195	FB-1-10-8-19	10/8/2019	2624195009	WQ	FB				Х
24193	DUP-1	10/10/2019	2624193010	GW	FD (GWC-3R)	Х	Χ	Χ	
24195	DUP-1	10/10/2019	2624195010	GW	FD (GWC-3R)				X

Abbreviations:

EB – Equipment Blank

FB – Field Blank

FD – Field Duplicate

GW – Groundwater

QC – Quality Control

TDS – Total Dissolved Solids

WQ – Water Quality Control

TABLE 2

Georgia Power Company – Plant Yates Gypsum Storage

Qualifier Summary Table – October 2019

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
24193	GWA-2	Zinc		0.0078	ND	Blank detection
24193	GWC-1R	Chromium		0.0012	ND	Blank detection
24193	GWC-1R	Zinc		0.0078	ND	Blank detection
24193	GWC-2R	Chromium		0.00059	ND	Blank detection
24193	GWC-2R	Zinc		0.0069	ND	Blank detection
24193	GWC-3R	Chromium			J	RPD exceeds field goal
24193	DUP-1	Chromium			J	RPD exceeds field goal
24193	GWC-3R	Zinc		0.0079	ND	Blank detection
24193	GWC-3R	TDS			J	RPD exceeds laboratory goal
24193	GWC-4R	Chromium		0.00057	ND	Blank detection
24193	GWC-4R	Zinc		0.006	ND	Blank detection
24193	GWC-5R	Chromium		0.0024	ND	Blank detection
24193	GWC-5R	Zinc	0.025	0.025	ND	Blank detection
24193	GWC-6R	Chromium		0.0014	ND	Blank detection
24193	GWC-6R	Zinc		0.006	ND	Blank detection
24195	GWC-1R	Radium-226		0.386	ND	Blank detection
24195	GWC-3R	Radium-226		0.386	ND	Blank detection
24195	GWC-4R	Radium-226			J	RPD exceeds laboratory goal
24195	GWC-5R	Radium-226		0.335	ND	Blank detection
24195	GWC-6R	Radium-226		0.358	ND	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration
MS/MSD – Matrix Spike / Matrix Spike Duplicate

MDL – Method Detection Limit

RL – Reporting Limit

RPD – Relative Percent Difference

SDG – Sample Delivery Group

Qualifiers:

J – Estimated Result

ND – Non-Detect Result

Date: 2019-10-08 15:16:08

Project Information:

Operator Name Ryan Walker
Company Name ACC
Project Name Plant Yates
Site Name Gypsum
Latitude 0° 0' 0"

Pump Information:
Pump Model/Type
Tubing Type
Tubing Diameter
Tubing Length

QED poly .25 in 52 ft

Longitude 0° 0' 0"
Sonde SN 643819

Turbidity Make/Model Hach 2100Q

Pump placement from TOC

47 ft

Well Information:

Well ID GWA-2
Well diameter 2 in
Well Total Depth 52.13 ft
Screen Length 10 ft
Depth to Water 36.25 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.891942 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8 in
Total Volume Pumped 3.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS/cmTurb NTU		SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10		
Last 5	14:55:30	900.01	21.77	6.26	423.93	8.94	36.80	1.21	80.74		
Last 5	15:00:30	1200.00	22.46	6.26	431.92	7.95	36.90	1.05	78.83		
Last 5	15:05:30	1500.00	23.25	6.29	429.24	6.09	36.90	1.05	76.71		
Last 5	15:10:30	1799.99	23.45	6.29	424.23	4.60	36.90	1.14	76.01		
Last 5	15:15:30	2099.98	23.52	6.28	416.33	4.29	36.90	1.11	77.85		
Variance 0			0.79	0.02	-2.68			0.00	-2.12		
Variance 1			0.19	0.00	-5.01			0.09	-0.70		
Variance 2			0.08	-0.01	-7.89			-0.03	1.84		

Notes

Sampled at 15:15. Sunny, 80's.

Date: 2019-10-09 16:16:00

Project Information:

Pump Information: **Operator Name** Ryan Walker Pump Model/Type

Peristaltic Pump Company Name ACC **Tubing Type** poly Project Name Tubing Diameter .17 in Gypsum Tubing Length Site Name Plant Yates 36 ft

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 643819

Turbidity Make/Model Hach 2100 Q Pump placement from TOC 31 ft

Pumping Information: Well Information:

Final Pumping Rate 150 mL/min Well ID GWC-1R Well diameter Total System Volume 0.2506832 L 2 in Calculated Sample Rate Well Total Depth 36.34 ft 300 sec Screen Length 10 ft Stabilization Drawdown 9 in Depth to Water **Total Volume Pumped** 4.75 L 24.23 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS/cmTurb NTU		SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10		
Last 5	15:55:20	600.02	20.48	5.34	752.82	7.33	25.00	6.83	80.71		
Last 5	16:00:20	900.01	20.35	5.34	741.70	6.97	25.00	6.90	81.32		
Last 5	16:05:20	1200.01	20.45	5.34	736.97	5.80	25.00	6.77	81.76		
Last 5	16:10:20	1500.00	20.04	5.35	725.06	4.92	25.00	6.92	82.41		
Last 5	16:15:20	1800.00	19.59	5.37	709.79	4.61	25.00	6.94	83.17		
Variance 0			0.09	0.01	-4.73			-0.13	0.44		
Variance 1			-0.41	0.01	-11.91			0.15	0.65		
Variance 2			-0.44	0.02	-15.27			0.02	0.76		

Notes

Sampled at 16:15. Sunny, 80's.

Date: 2019-10-09 17:21:26

Project Information:

Pump Information: Operator Name Pump Model/Type Ryan Walker

Peristaltic Pump Company Name ACC Tubing Type poly Project Name Tubing Diameter .17 in Gypsum Tubing Length Site Name Plant Yates 43 ft

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 643819

Turbidity Make/Model Hach 2100 Q Pump placement from TOC 38 ft

Pumping Information: Well Information:

Final Pumping Rate 100 mL/min Well ID GWC-2R Well diameter Total System Volume 0.2819272 L 2 in Calculated Sample Rate Well Total Depth 43.80 ft 300 sec Screen Length 10 ft Stabilization Drawdown 2 in Depth to Water **Total Volume Pumped** 29.79 ft 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	17:00:45	600.02	19.55	5.42	445.89	6.91	29.90	4.32	95.86
Last 5	17:05:45	900.02	19.32	5.41	446.41	6.26	29.90	4.35	95.87
Last 5	17:10:45	1200.01	19.33	5.39	453.76	3.95	29.90	4.55	95.22
Last 5	17:15:45	1500.00	19.46	5.39	457.67	3.47	29.90	4.45	94.74
Last 5	17:20:45	1800.00	19.32	5.39	456.56	3.65	29.90	4.66	94.63
Variance 0			0.01	-0.02	7.35			0.20	-0.65
Variance 1			0.13	-0.00	3.91			-0.10	-0.47
Variance 2			-0.14	-0.00	-1.11			0.21	-0.11

Notes

Sampled at 17:20. Sunny, 80's. EB-1 here.

Date: 2019-10-10 10:59:22

Project Information:

Operator Name Chris Parker

Company Name Atlantic Coast Consulting Project Name R6

Site Name Plant Yates
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058

Turbidity Make/Model Hach 2100 Q

Well Information:

Well ID GWC-3R
Well diameter 2 in
Well Total Depth 38.34 ft
Screen Length 10 ft
Depth to Water 29.70 ft

Pump Information:

Pump Model/Type Bladder Pump

33 ft

Tubing TypePolyTubing Diameter.25 inTubing Length38 ft

Pump placement from TOC

Pumping Information:

Final Pumping Rate 300 mL/min
Total System Volume 0.8518038 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 13 in
Total Volume Pumped 27 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed Temp C pH SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV			
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:35:35	3601.94	48.29	5.38	93.69	4.57	30.80	2.88	143.25
Last 5	10:40:36	3902.93	51.60	5.39	89.82	3.61	30.80	2.59	142.54
Last 5	10:45:36	4202.92	55.64	5.39	85.47	3.78	30.80	2.09	139.84
Last 5	10:50:36	4502.91	56.32	5.40	85.69	3.18	30.80	2.07	139.72
Last 5	10:55:36	4802.91	55.79	5.40	83.95	3.26	30.80	2.08	138.07
Variance 0			4.04	0.01	-4.35			-0.50	-2.70
Variance 1			0.68	0.00	0.22			-0.02	-0.12
Variance 2			-0.53	0.00	-1.73			0.00	-1.65

Notes

Sampled at 11:00. Sunny 70s. DUP 1 here.

Date: 2019-10-10 13:04:12

Project Information:

Pump Information: **Operator Name** Ryan Walker Pump Model/Type

Peristaltic Pump Company Name ACC **Tubing Type** poly Project Name Tubing Diameter .17 in Gypsum Tubing Length 31 ft Site Name Plant Yates

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 643819

Turbidity Make/Model Hach 2100 Q Pump placement from TOC 26 ft

Pumping Information: Well Information:

Final Pumping Rate 170 mL/min Well ID GWC-4R Well diameter Total System Volume 0.2283661 L 2 in Calculated Sample Rate Well Total Depth 31.05 ft 300 sec Screen Length 10 ft Stabilization Drawdown 4 in Depth to Water **Total Volume Pumped** 40 L 17.84 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	12:42:39	12000.79	20.40	5.54	357.39	1.07	18.20	3.55	94.42
Last 5	12:47:39	12300.89	20.31	5.55	353.88	1.17	18.20	3.52	94.16
Last 5	12:52:39	12600.78	20.48	5.54	350.12	0.92	18.20	3.59	94.84
Last 5	12:57:39	12900.78	20.44	5.54	358.47	0.89	18.20	3.59	95.47
Last 5	13:02:39	13200.77	21.07	5.55	355.28	0.75	18.20	3.58	94.70
Variance 0			0.17	-0.01	-3.76			0.07	0.68
Variance 1			-0.05	0.00	8.35			0.01	0.63
Variance 2			0.63	0.01	-3.19			-0.01	-0.77

Notes

Sampled at 13:02. Sunny, 80's. Extra rad here.

Date: 2019-10-09 17:27:32

Project Information:

Operator Name Chris Parker

Company Name Atlantic Coast Consulting Project Name Gypsum Site Name Plant Yates 0° 0' 0" Latitude 0° 0' 0" Longitude

Pump Information:

Pump Model/Type Bladder Pump **Tubing Type** Tubing Diameter Tubing Length

Poly .25 in 43 ft

Sonde SN 466058

Turbidity Make/Model Hach 2100 Q Pump placement from TOC

38 ft

Well Information:

Well ID GWC-5R Well diameter 2 in Well Total Depth 42.82 ft Screen Length 10 ft Depth to Water 30.30 ft

Pumping Information:

Final Pumping Rate 100 mL/min Total System Volume 0.9000674 L Calculated Sample Rate 300 sec Stabilization Drawdown 7 in **Total Volume Pumped** 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS/cmTurb NTU		DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	17:03:03	2699.96	23.62	4.87	1875.47	7.22	30.80	7.19	272.09
Last 5	17:08:04	3000.96	23.53	4.88	1867.34	6.67	30.80	7.23	267.45
Last 5	17:13:04	3300.95	22.53	4.87	1953.41	5.78	30.90	7.84	255.86
Last 5	17:18:04	3600.94	22.08	4.88	1883.54	5.14	30.90	7.46	235.01
Last 5	17:23:04	3900.93	22.28	4.89	1869.87	4.35	30.90	7.43	219.76
Variance 0			-1.00	-0.01	86.08			0.61	-11.59
Variance 1			-0.45	0.01	-69.87			-0.38	-20.85
Variance 2			0.20	0.01	-13.67			-0.03	-15.25

Notes

Sampled at 17:30. Cloudy 70s

Date: 2019-10-08 16:46:44

Pump Information:

Project Information:

Operator Name
Company Name
ACC
Project Name
Site Name
Latitude
Ryan Walker
ACC
Plant Yates
Gypsum
0° 0' 0"

Pump Model/Type Tubing Type Tubing Diameter Tubing Length QED poly .25 in 51 ft

Longitude 0° 0' 0" Sonde SN 643819

Turbidity Make/Model Hach 2100Q

Pump placement from TOC 46 ft

Well Information:

Well ID GWC-6R
Well diameter 2 in
Well Total Depth 51.87 ft
Screen Length 10 ft
Depth to Water 35.86 ft

Pumping Information:

Final Pumping Rate 160 mL/min
Total System Volume 0.8822893 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 9 in

Stabilization Drawdown 9 in Total Volume Pumped 7.15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed Temp C pH SpCond μS/cmTurb NTU		/cmTurb NTU	DTW ft	RDO mg/L	ORP mV		
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.3	+/- 10
Last 5	16:25:28	600.02	18.26	5.94	1226.82	0.85	36.60	4.72	70.14
Last 5	16:30:28	900.01	18.13	5.94	1243.64	1.21	36.60	4.70	70.96
Last 5	16:35:28	1200.00	18.11	5.92	1260.06	0.98	36.60	4.74	70.57
Last 5	16:40:28	1500.00	18.05	5.91	1270.27	0.93	36.60	4.73	70.88
Last 5	16:45:28	1799.99	18.07	5.91	1279.33	0.80	36.60	4.77	70.99
Variance 0			-0.02	-0.02	16.42			0.04	-0.39
Variance 1			-0.05	-0.01	10.21			-0.01	0.31
Variance 2			0.01	0.00	9.06			0.04	0.11

Notes

Sampled at 16:45. Sunny, 80's. FB-1 here





January 28, 2020

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

RE: Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com

Ken Len

(704)875-9092

HORIZON Database Administrator

Enclosures

cc: Kristen Jurinko

Matt Malone, Atlantic Coast Consulting
Betsy McDaniel, Atlantic Coast Consulting
Chris Parker, Atlantic Coast Consulting
Evan Perry, Atlantic Coast Consulting
Lauren Petty, Southern Company Services, Inc.
Ryan Walker







CERTIFICATIONS

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Pace Analytical Services Atlanta

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

Georgia DW Microbiology Certification #: 812

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

Virginia Certification #: 460204





SAMPLE SUMMARY

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2628071001	GWC-5R	Water	01/21/20 12:15	01/21/20 14:18



SAMPLE ANALYTE COUNT

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2628071001	GWC-5R	EPA 6020B	CSW	1



SUMMARY OF DETECTION

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2628071001	GWC-5R					



ANALYTICAL RESULTS

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Date: 01/28/2020 02:57 PM

Sample: GWC-5R Lab ID: 2628071001 Collected: 01/21/20 12:15 Received: 01/21/20 14:18 Matrix: Water

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A

Zinc 0.015 mg/L 0.010 1 01/26/20 17:57 01/27/20 18:12 7440-66-6



QUALITY CONTROL DATA

EPA 6020B

6020B MET

Analysis Method:

Analysis Description:

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Date: 01/28/2020 02:57 PM

QC Batch: 42403
QC Batch Method: EPA 3005A

Associated Lab Samples: 2628071001

METHOD BLANK: 193552 Matrix: Water

Associated Lab Samples: 2628071001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Zinc mg/L ND 0.010 01/27/20 15:39

LABORATORY CONTROL SAMPLE: 193553

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Zinc mg/L 0.11 107 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 193554 193555

MS MSD MSD 2628071001 Spike Spike MS MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Zinc 98 75-125 20 mg/L 0.015 0.1 0.1 0.11 0.11 98

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.



QUALIFIERS

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

Date: 01/28/2020 02:57 PM





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GP Plant Yates Gypsum

Pace Project No.: 2628071

Date: 01/28/2020 02:57 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2628071001	GWC-5R	EPA 3005A	42403	EPA 6020B	42413

Non Conformance(s): Page: of:	PM:	Date/Time:	nature)	Received by/Company: (Signature)	Date/Time:	Date	Relinquished by/Company: (Signature)	Relinquished by/C
Trip Blank Received: Y N NA HCL MeOH TSP Other	Template: Pretogin:	Date/Time:	nature)	Received by/Combany: (Signature)	Date/Time: /	Date	relinquished by/Company: (Signature)	relinquished by/C
	Table #:	1 14/20 1400	Muca	Church rule	1-21-20/1400	ACC 1-2	1	18
Comments:	MTJL LAB USE ONLY	Date/Time:	A.	ecowed by/Company: (Signati	Date/Time: R	Date	uished by/Company: (Signature)	Relipquished by/C
Cooler 1 Therm Corr. Factor: 1 oC Cooler 1 Corrected Temp: 114 oC	Courier Pace Courier	Samples received via: FEDEX UPS Client	N NA	eened (<500 cpm): Y	Radchem sample(s) screened (<500 cpm):	7 m		TAMES:
Therm ID#: Therm ID# OC	2433223				Packing Material Used:	=00		
Lab Sample Temperature Info:)	nours): Y N N/A	SHORT HOLDS PRESENT (<72 hours): Y N	None	Wet Blue Dry	Type of Ice Used:	ossible Hazards:	Customer Remarks / Special Conditions / Possible Hazards:	Customer Remark
	$\overline{}$							72.2
		7:44			5			
	11.9 14.1							
day TAT	\$		-		1-21-20 /2/5	8	.5R 6W	600
ic			010	Date Time	Date Time	ļi.		
TOD SOUTH # / COMMENTED:	Light So		th of	Composite End CJ	Collected (or Composite Start)	Comp / Matrix * Grab		Customer Sample ID
LAB USE ONLY:	LAB US		in	apor (V), Other (OT)	sue (TS), Bioassay (B), V	(WP), Air (AR), Tis	Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (OW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)	Product (P), Soil
Sulfide Present V V NA Lead Acetate Strips:	Sulfid Lead A			Al) Wastemater (W/W)	'ges Apply'	. Orinting Water (DW) Gr		I JHoid:
Acceptable ON	Cl Strips: Sample pH pH Strips:			[] Yes \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	X 5 Day	4 = 1		[XDispose as appropriate [] Return
in Holding Time	Samples			Yes [] No	11/1	& Day	and the	6
ptable Y N	VOA -			Immediately Packed on Ice:	1	round Date Required:	two: Tyrnaro	S
Samples Received on Ice VI NA	Correc Suffic	Ш	tyc	DW PWS ID #: DW Location Code:		Purchase Order #: Quote #:	3	Collected By (print):
Custody Signature Present (3) NA Collector Signature Present (3) NA Bottles Intact	Custody Collecto Bottles			Compliance Monitoring? [] Yes [] No		Site/Facility ID #:		Phone: Email:
Custody Seals Present/Intact N NA	Custod		1 XI ET	[]PT[]MT[]CT	bA'		Įč.	Vates
Lab Sample Receipt Checklist:	Lab Sa	The latest and the la		œ	State: County/City:		Name/Number:	Customer Project Name/Number:
e/Line:	preserved, (O) Other Lab Profile/Line:	(C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other Analyses	<u> </u>	Mess rea	Site Collection Info/Address:	Ç.		Copy To:
sodium hydroxide, (5) zinc acetate, bic acid, (B) ammonium sulfate,	ulfuric acid, (3) hydrochloric acid, (4) s lium thiosulfate, (9) hexane, (A) ascorl	rreservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate,	(6)	100	Email To:		Remy	I [™] .
			26280		u bA	Roswe	North meadow 1KBY	Address: M/+
Page 1	CLIENT: ACC			OII	Billing Information:	ine,	Coast Consulting	Company:
01/28/20	PM: MZP	. 202	#OM	Chain-of-Custody is a tEGAL DOCUMENT - Complete all relevent fie	is a LEGAL DOCUMENT -	Chain-of-Custody i	Pace Analytical	Pace A
₩0#:2628071	WO# : 2	nt 1.2628071	ent	CHAIN-OF-CUSTODY Analytical Request Document	TODY Analytica	AIN-OF-CUS		3

Product Name: Low-Flow System

Date: 2020-01-21 12:12:09

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Tubing Type

Project Information:

Operator Name Chris Parker

Company Name
Project Name
Site Name
Latitude
Longitude
Sonde SN

Atlantic Coast Consulting
Plant Yates
Plant Yates
O° 0' 0"

573204

Turbidity Make/Model Hach 2100Q

Pump placement from TOC

n TOC 38 ft

QED Bladders Pump

Poly

.25 in

43 ft

Well Information:

Well IDGWC-5RWell diameter2 inWell Total Depth42.82 ftScreen Length10 ftDepth to Water30.45 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.9000674 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 9 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS,	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:48:39	3311.99	15.48	4.99	1819.87	6.50	31.20	7.87	187.78
Last 5	11:53:39	3611.98	15.33	4.99	1812.54	6.40	31.20	7.81	184.88
Last 5	11:58:39	3911.96	14.66	5.00	1809.34	5.60	31.20	7.80	183.36
Last 5	12:03:39	4211.96	14.38	5.00	1807.44	2.80	31.20	7.82	178.34
Last 5	12:08:40	4512.96	14.57	4.99	1796.99	2.40	31.20	7.83	177.61
Variance 0			-0.67	0.01	-3.20			-0.01	-1.51
Variance 1			-0.28	0.00	-1.90			0.02	-5.03
Variance 2			0.19	-0.01	-10.45			0.01	-0.72

Notes

Sample: 12:15. Cloudy 30s

Grab Samples



APPENDIX B

STATISTICAL ANALYSES

Sanitas™ v.9.6.23 Sanitas software licensed to ACC. U

Page 1

100% ND

Date: 12/5/2019 11:19 AM

Antimony (mg/L)

GWC-1R, GWC-2R, GWC-6R

Beryllium (mg/L)

GWA-2, GWC-4R, GWC-6R

Cadmium (mg/L)

GWA-2, GWC-6R

Lead (mg/L)

GWA-2, GWC-4R, GWC-6R

Selenium (mg/L)

GWA-2

Silver (mg/L)

GWA-2, GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R

Thallium (mg/L)

GWC-1R, GWC-3R, GWC-4R, GWC-6R

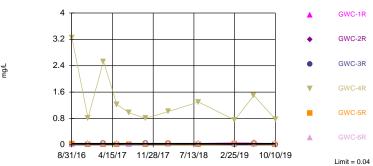
Interwell Prediction Limits Significant Results Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/20/2020, 5:45 PM

		Plant Yates	Client: Southern	n Company	Data: Yate	s Gypsi	um Landfill	Printed 2/20	/2020, 5:45 PM	
Constituent	<u>Well</u>	Upper Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Boron (mg/L)	GWC-4R	0.04	10/10/2019	0.78	Yes	11	63.64	n/a	0.01058	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1R	27.86	10/9/2019	59.1	Yes	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Calcium (mg/L)	GWC-5R	27.86	10/9/2019	128	Yes	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Calcium (mg/L)	GWC-6R	27.86	10/8/2019	115	Yes	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-1R	5.187	10/9/2019	6.9	Yes	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-2R	5.187	10/9/2019	9.8	Yes	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-3R	5.187	10/10/2019	5.3	Yes	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-4R	5.187	10/10/2019	42.8	Yes	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-1R	126.5	10/9/2019	318	Yes	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-5R	126.5	10/9/2019	1180	Yes	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-6R	126.5	10/8/2019	664	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-1R	308.5	10/9/2019	526	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-2R	308.5	10/9/2019	372	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-5R	308.5	10/9/2019	1680	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-6R	308.5	10/8/2019	1050	Yes	11	0	No	0.001254	Param 1 of 2

Interwell Prediction Limits All Results

		Plant Yates	Client: Southern	n Company	Data: Yate	s Gypsi	um Landfill	Printed 2/20	/2020, 5:45 PM	
Constituent	<u>Well</u>	Upper Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	Transform	<u>Alpha</u>	Method
Boron (mg/L)	GWC-1R	0.04	10/9/2019	0.029	No	11	63.64	n/a	0.01058	NP (NDs) 1 of 2
Boron (mg/L)	GWC-2R	0.04	10/9/2019	0.018	No	11	63.64	n/a	0.01058	NP (NDs) 1 of 2
Boron (mg/L)	GWC-3R	0.04	10/10/2019	0.0061	No	11	63.64	n/a	0.01058	NP (NDs) 1 of 2
Boron (mg/L)	GWC-4R	0.04	10/10/2019	0.78	Yes	11	63.64	n/a	0.01058	NP (NDs) 1 of 2
Boron (mg/L)	GWC-5R	0.04	10/9/2019	0.013	No	11	63.64	n/a	0.01058	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6R	0.04	10/8/2019	0.04ND	No	11	63.64	n/a	0.01058	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1R	27.86	10/9/2019	59.1	Yes	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Calcium (mg/L)	GWC-2R	27.86	10/9/2019	27.8	No	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Calcium (mg/L)	GWC-3R	27.86	10/10/2019	4.3	No	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Calcium (mg/L)	GWC-4R	27.86	10/10/2019	18	No	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Calcium (mg/L)	GWC-5R	27.86	10/9/2019	128	Yes	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Calcium (mg/L)	GWC-6R	27.86	10/8/2019	115	Yes	11	9.091	sqrt(x)	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-1R	5.187	10/9/2019	6.9	Yes	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-2R	5.187	10/9/2019	9.8	Yes	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-3R	5.187	10/10/2019	5.3	Yes	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-4R	5.187	10/10/2019	42.8	Yes	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-5R	5.187	10/9/2019	4.5	No	11	0	No	0.001254	Param 1 of 2
Chloride (mg/L)	GWC-6R	5.187	10/8/2019	4.9	No	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-1R	126.5	10/9/2019	318	Yes	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-2R	126.5	10/9/2019	91.2	No	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-3R	126.5	10/10/2019	48	No	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-4R	126.5	10/10/2019	68.7	No	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-5R	126.5	10/9/2019	1180	Yes	11	0	No	0.001254	Param 1 of 2
Sulfate (mg/L)	GWC-6R	126.5	10/8/2019	664	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-1R	308.5	10/9/2019	526	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-2R	308.5	10/9/2019	372	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-3R	308.5	10/10/2019	109	No	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-4R	308.5	10/10/2019	247	No	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-5R	308.5	10/9/2019	1680	Yes	11	0	No	0.001254	Param 1 of 2
TDS (mg/L)	GWC-6R	308.5	10/8/2019	1050	Yes	11	0	No	0.001254	Param 1 of 2

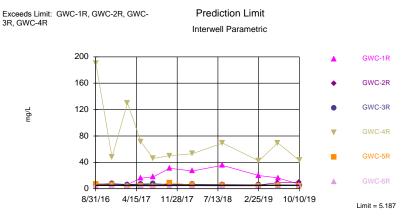
Exceeds Limit: GWC-4R Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Annual per-constituent alpha = 0.1199. Individual comparison alpha = 0.01058 (1 of 2). Comparing 6 points to limit.

Constituent: Boron Analysis Run 2/20/2020 5:43 PM View: Appendix III Interwell PL
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

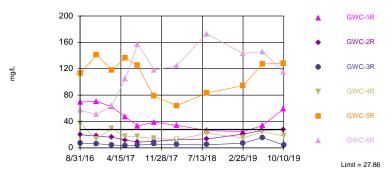


Background Data Summary: Mean=4.191, Std. Dev.=0.411, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8972, critical = 0.792. Kappa = 2.424 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Exceeds Limit: GWC-1R, GWC-5R, GWC-

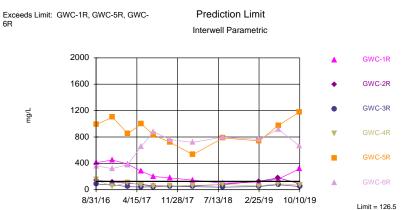
Prediction Limit
Interwell Parametric



Background Data Summary (based on square root transformation): Mean=3.701, Std. Dev.=0.6508, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8337, critical = 0.792. Kappa = 2.424 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: Calcium Analysis Run 2/20/2020 5:43 PM View: Appendix III Interwell PL
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

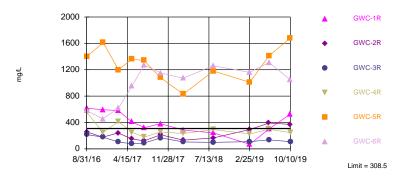


Background Data Summary: Mean=59.38, Std. Dev.=27.69, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8462, critical = 0.792. Kappa = 2.424 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

Exceeds Limit: GWC-1R, GWC-2R, GWC-5R, GWC-6R

Prediction Limit Interwell Parametric



Background Data Summary: Mean=177.1, Std. Dev.=54.21, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9765, critical = 0.792. Kappa = 2.424 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: TDS Analysis Run 2/20/2020 5:43 PM View: Appendix III Interwell PL Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Constituent: Boron (mg/L) Analysis Run 2/20/2020 5:45 PM View: Appendix III Interwell PL Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-3R	GWC-2R	GWC-1R	GWC-5R	GWC-6R	GWC-4R
8/31/2016	0.0315 (J)	0.0315 (J)	0.0305 (J)	0.0553 (J)			
9/1/2016					0.0191 (J)	0.0108 (J)	3.25
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		<0.04		0.0082 (J)		<0.04	
2/24/2017					0.0067 (J)		2.53
5/8/2017	0.0084 (J)						
5/9/2017		0.0077 (J)		0.0097 (J)			
5/10/2017			0.0179 (J)		0.0068 (J)	<0.04	1.22
7/17/2017	0.0092 (J)				0.0102 (J)		
7/18/2017		0.0073 (J)	0.0169 (J)	0.0123 (J)		0.0061 (J)	0.97
10/16/2017	<0.04				0.0066 (J)		
10/17/2017			0.0168 (J)	0.0513			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		0.0399 (J)		0.0378 (J)	0.0268 (J)		
8/6/2018	<0.04					<0.04	
8/7/2018		0.0049 (J)		0.043	0.012 (J)		
8/8/2018			0.017 (J)				1.3
2/25/2019	<0.04					<0.04	
2/26/2019		0.0053 (J)	0.017 (J)	0.062	0.033 (J)		0.75
6/12/2019	<0.04		0.013 (J)				1.5
6/13/2019		<0.04		0.057	0.03 (J)	<0.04	
10/8/2019	<0.04					<0.04	
10/9/2019			0.018 (J)	0.029 (J)	0.013 (J)		
10/10/2019		0.0061 (J)					0.78

Constituent: Calcium (mg/L) Analysis Run 2/20/2020 5:45 PM View: Appendix III Interwell PL Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-3R	GWC-2R	GWC-1R	GWC-5R	GWC-6R	GWC-4R
8/31/2016	9.31	7.23	19.9	69.4			
9/1/2016					113	56.8	37.1
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		4.25		62.4		63.5	
2/24/2017					118		29.5
5/8/2017	14.2						
5/9/2017		3.56		47.4			
5/10/2017			11.8		136	105	17
7/17/2017	14.1				125		
7/18/2017		4.16	8.69	33.2		157	16.8
10/16/2017	13.6				78.2		
10/17/2017			9.77	38.7			14.3
10/18/2017		5.67				118	
2/19/2018	<25					124	
2/20/2018			<25				<25
2/21/2018		4.76		34.3	64		
8/6/2018	11.4 (J)					173	
8/7/2018		4.7		26.2	83		
8/8/2018			13.4 (J)				22.1 (J)
2/25/2019	12.7 (J)					143	
2/26/2019		7.1	20.9 (J)	24.7 (J)	94.4		15.1 (J)
6/12/2019	18.9		26.6				24.2
6/13/2019		15.7		33.8	127	146	
10/8/2019	28.3					115	
10/9/2019			27.8	59.1	128		
10/10/2019		4.3					18

Constituent: Chloride (mg/L) Analysis Run 2/20/2020 5:45 PM View: Appendix III Interwell PL Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-3R	GWC-2R	GWC-1R	GWC-5R	GWC-6R	GWC-4R
8/31/2016	4	6.7	6.3	7.6			
9/1/2016					6.6	4.4	190
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		6.5		6.2		4.4	
2/24/2017					3.4		130
5/8/2017	4.2						
5/9/2017		7.2		16			
5/10/2017			7.1		4.5	3.9	71
7/17/2017	3.8				3.2		
7/18/2017		7.7	6	18		4	46
10/16/2017	4.2				9		
10/17/2017			6.1	31			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		6.7		27	5.6		
8/6/2018	3.8					3.9	
8/7/2018		6.3		35.4	4.7		
8/8/2018			4.7				69.3
2/25/2019	4.1					4.4	
2/26/2019		5.7	5.7	20	4.2		42.2
6/12/2019	4.7		9.1				69.5
6/13/2019		5		16.4	5.5	6.2	
10/8/2019	5.1					4.9	
10/9/2019			9.8	6.9	4.5		
10/10/2019		5.3					42.8

Constituent: Sulfate (mg/L) Analysis Run 2/20/2020 5:45 PM View: Appendix III Interwell PL Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-3R	GWC-2R	GWC-1R	GWC-5R	GWC-6R	GWC-4R
8/31/2016	29	87	140	410			
9/1/2016					990	360	150
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		47		390		380	
2/24/2017					850		110
5/8/2017	60						
5/9/2017		41		280			
5/10/2017			80		1000	660	70
7/17/2017	63				830		
7/18/2017		44	57	200		880	50
10/16/2017	62				720		
10/17/2017			59	180			58
10/18/2017		53				760	
2/19/2018	64.6					718	
2/20/2018			55.9				64.6
2/21/2018		46.7		146	533		
8/6/2018	42.1					797	
8/7/2018		38.8		100	784		
8/8/2018			81.1				79.5
2/25/2019	42.1					763	
2/26/2019		49.3	129	118	742		55.8
6/12/2019	83.4		180				92.8
6/13/2019		77.1		163	976	918	
10/8/2019	128					664	
10/9/2019			91.2	318	1180		
10/10/2019		48					68.7

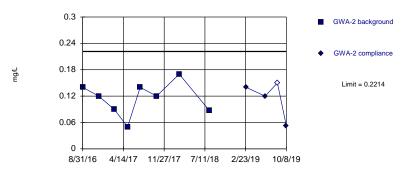
Constituent: TDS (mg/L) Analysis Run 2/20/2020 5:45 PM View: Appendix III Interwell PL Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-3R	GWC-2R	GWC-1R	GWC-5R	GWC-6R	GWC-4R
8/31/2016	209	216	257	616			
9/1/2016					1400	578	553
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		105		581		614	
2/24/2017					1200		414
5/8/2017	145						
5/9/2017		77		410			
5/10/2017			149		1360	955	251
7/17/2017	185				1340		
7/18/2017		89	122	322		1270	179
10/16/2017	218				1080		
10/17/2017			214	381			256
10/18/2017		166				1150	
2/19/2018	173					1070	
2/20/2018			131				233
2/21/2018		105		285	830		
8/6/2018	158					1260	
8/7/2018		99		242	1180		
8/8/2018			166				292
2/25/2019	92					1160	
2/26/2019		109	293	69	1010		226
6/12/2019	226		391				298
6/13/2019		136		301	1410	1310	
10/8/2019	276					1050	
10/9/2019			372	526	1680		
10/10/2019		109					247

Intrawell Prediction Limit

		Plant Yates	Client: Southern 0	Company Da	ata: Yates Gyps	sum Lan	dfill F	rinted 2/12	2020, 7:10 PM		
Constituent	<u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	Transform	<u>Alpha</u>	Method
Fluoride (mg/L)	GWA-2	0.2214	n/a	10/8/2019	0.052	No	8	0	No	0.001254	Param 1 of 2
Fluoride (mg/L)	GWC-1R	0.07289	n/a	10/9/2019	0.15ND	No	8	50	sqrt(x)	0.001254	Param 1 of 2
Fluoride (mg/L)	GWC-2R	0.103	n/a	10/9/2019	0.15ND	No	8	50	No	0.001254	Param 1 of 2
Fluoride (mg/L)	GWC-3R	0.2823	n/a	10/10/2019	0.15ND	No	8	50	No	0.001254	Param 1 of 2
Fluoride (mg/L)	GWC-4R	0.2004	n/a	10/10/2019	0.15ND	No	8	50	No	0.001254	Param 1 of 2
Fluoride (mg/L)	GWC-5R	0.37	n/a	10/9/2019	0.35	No	8	62.5	n/a	0.02144	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-6R	0.3627	n/a	10/8/2019	0.15ND	No	8	50	No	0.001254	Param 1 of 2
pH (S.U.)	GWA-2	7.118	5.435	10/8/2019	6.28	No	20	0	sqrt(x)	0.000	Param 1 of 2
pH (S.U.)	GWC-1R	5.873	4.019	10/9/2019	5.37	No	8	0	x^6	0.000	Param 1 of 2
pH (S.U.)	GWC-2R	6.8	4.35	10/9/2019	5.39	No	15	0	n/a	0.01507	NP (normality) 1 of 2
pH (S.U.)	GWC-3R	5.632	4.007	10/10/2019	5.4	No	8	0	x^5	0.000	Param 1 of 2
pH (S.U.)	GWC-4R	6.334	4.763	10/10/2019	5.55	No	9	0	No	0.000	Param 1 of 2
pH (S.U.)	GWC-5R	5.759	4.756	1/21/2020	4.99	No	8	0	No	0.000	Param 1 of 2
pH (S.U.)	GWC-6R	6.719	5.14	10/8/2019	5.91	No	18	0	No	0.000	Param 1 of 2

Within Limit Prediction Limit
Intrawell Parametric

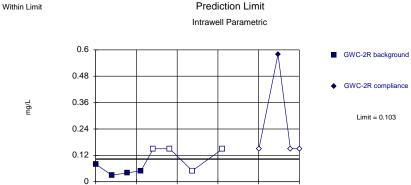


Background Data Summary: Mean=0.1146, Std. Dev.=0.03772, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9666, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.01254

Constituent: Fluoride Analysis Run 2/12/2020 7:09 PM View: Time Series

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.05, Std. Dev.=0.01871, n=8, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7947, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

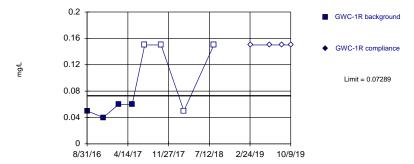
10/9/19

8/31/16 4/14/17 11/27/17 7/12/18 2/24/19

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit



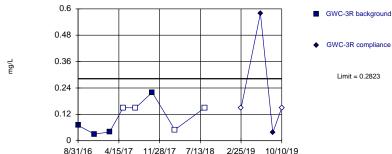


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.2201, Std. Dev.=0.01762, n=8, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7605, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: Fluoride Analysis Run 2/12/2020 7:09 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

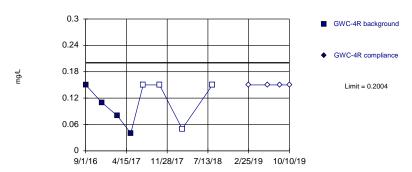
Sanitas[™] v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.





Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.08133, Std. Dev.=0.07098, n=8, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8841, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Within Limit Prediction Limit
Intrawell Parametric

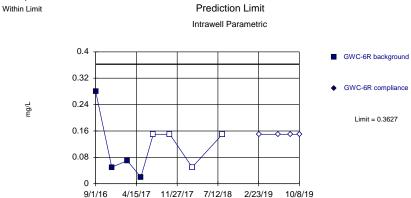


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.088, Std. Dev.=0.0397, n=8, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8033, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.05132). Report alpha = 0.05132).

Constituent: Fluoride Analysis Run 2/12/2020 7:09 PM View: Time Series

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

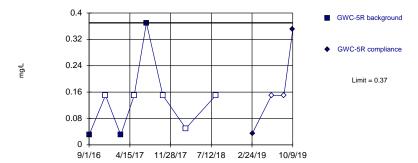


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.09333, Std. Dev.=0.09513, n=8, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8826, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

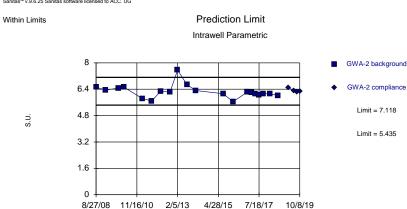
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Fluoride Analysis Run 2/12/2020 7:09 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

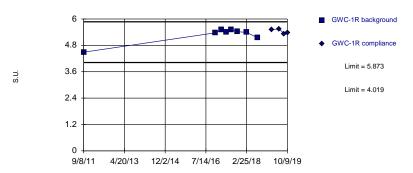
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG



Background Data Summary (based on square root transformation): Mean=2.5, Std. Dev.=0.07984, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8832, critical = 0.868. Kappa = 2.108 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

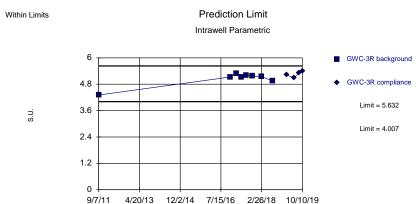
Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary (based on x^6 transformation): Mean=22615, Std. Dev.=6500, n=8. Normality test: Shapiro Wilk @alpha = 0.0769, calculated = 0.7595, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.0125). Report alpha = 0.001251.

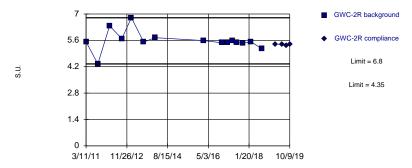
Constituent: pH Analysis Run 2/12/2020 7:09 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG



Background Data Summary (based on x^5 transformation): Mean=3349, Std. Dev.=817.8, n=8. Normality test: Shapiro Wilk @alpha = 0.07, calculated = 0.7648, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

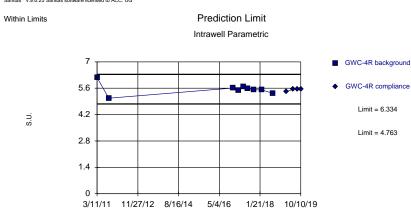
Within Limits Prediction Limit
Intrawell Non-parametric



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 15 background values. Well-constituent pair annual alpha = 0.03002. Individual comparison alpha = 0.01507 (1 of 2).

Constituent: pH Analysis Run 2/12/2020 7:09 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG



Background Data Summary: Mean=5.549, Std. Dev.=0.292, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9166, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. U

Within Limits Prediction Limit
Intrawell Parametric

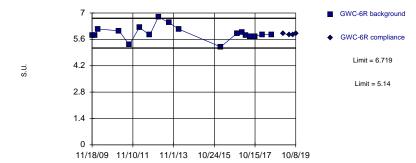


Background Data Summary: Mean=5.258, Std. Dev.=0.177, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.837, critical = 0.749. Kappa = 2.831 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 2/12/2020 7:09 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

Within Limits Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=5.929, Std. Dev.=0.3662, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.929, 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 2/12/2020 7:09 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Constituent: Fluoride Analysis Run 2/12/2020 7:10 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

						• •		
	GWA-2	GWA-2	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R
8/31/2016	0.14 (J)		0.05 (J)		0.08 (J)		0.07 (J)	
11/28/2016	0.12 (J)				0.03 (J)			
11/29/2016			0.04 (J)					
11/30/2016							0.03 (J)	
2/22/2017	0.09 (J)				0.04 (J)			
2/23/2017			0.06 (J)				0.04 (J)	
5/8/2017	0.05 (J)							
5/9/2017			0.06 (J)				<0.3	
5/10/2017					0.05 (J)			
7/17/2017	0.14 (J)							
7/18/2017			<0.3		<0.3		<0.3	
10/16/2017	0.12 (J)							
10/17/2017			<0.3		<0.3			
10/18/2017							0.22 (J)	
2/19/2018	0.17							
2/20/2018					<0.1			
2/21/2018			<0.1				<0.1	
8/6/2018	0.087 (J)							
8/7/2018			<0.3				<0.3	
8/8/2018					<0.3			
2/25/2019		0.14 (J)						
2/26/2019				<0.3		<0.3		<0.3
6/12/2019		0.12 (J)				0.58		
6/13/2019				<0.3				0.58
8/19/2019		<0.3						
8/20/2019				<0.3		<0.3		
8/21/2019								0.037 (J)
10/8/2019		0.052 (J)						
10/9/2019				<0.3		<0.3		
10/10/2019								<0.3

Constituent: Fluoride, pH Analysis Run 2/12/2020 7:10 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Fidili Tales	S Client. Southern	Company Data.	rates Gypsuin Land	1111	
	GWC-4R	GWC-4R	GWC-5R	GWC-5R	GWC-6R	GWC-6R	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	
9/1/2016	0.15 (J)		0.03 (J)		0.28 (J)			
11/28/2016							6.23	
11/29/2016					0.05 (J)			
11/30/2016	0.11 (J)							
12/1/2016			<0.3					
2/22/2017							6.21	
2/23/2017					0.07 (J)			
2/24/2017	0.08 (J)		0.03 (J)					
5/8/2017							6.12	
5/10/2017	0.04 (J)		<0.3		0.02 (J)			
7/17/2017			0.37				6.03	
7/18/2017	<0.3				<0.3			
10/16/2017			<0.3				6.12	
10/17/2017	<0.3							
10/18/2017					<0.3			
2/19/2018					<0.1		6.13	
2/20/2018	<0.1							
2/21/2018			<0.1					
8/6/2018					<0.3		6.01	
8/7/2018			<0.3					
8/8/2018	<0.3							
2/25/2019						<0.3		6.51
2/26/2019		<0.3		0.035 (J)				
6/12/2019		<0.3						6.3
6/13/2019				<0.3		<0.3		
8/19/2019		<0.3						6.23
8/20/2019						<0.3		
8/21/2019				<0.3				
10/8/2019						<0.3		6.28
10/9/2019				0.35				
10/10/2019		<0.3						

Constituent: pH Analysis Run 2/12/2020 7:10 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

						• •		
T	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R
3/11/2011			5.52				6.16	
9/7/2011			4.35		4.31		5.07	
9/8/2011	4.49							
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					
11/29/2016	5.37							
11/30/2016					5.13		5.61	
2/22/2017			5.48					
2/23/2017	5.5				5.28			
2/24/2017							5.47	
5/9/2017	5.41				5.12			
5/10/2017			5.6				5.68	
7/18/2017	5.5		5.49		5.21		5.59	
10/17/2017	5.42		5.45				5.52	
10/18/2017					5.17			
2/20/2018			5.52				5.51	
2/21/2018	5.39				5.15			
8/7/2018	5.14				4.95			
8/8/2018			5.15				5.33	
2/26/2019		5.52		5.4		5.22		5.42
6/12/2019				5.38				5.54
6/13/2019		5.55				5.08		
8/19/2019								5.56
8/20/2019		5.33		5.33				
8/21/2019						5.32		
10/9/2019		5.37		5.39				
10/10/2019						5.4		5.55

Constituent: pH Analysis Run 2/12/2020 7:10 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

					 · ·		
	GWC-5R	GWC-5R	GWC-6R	GWC-6R			
11/18/2009			5.82				
1/5/2010			5.8				
3/3/2010			6.15				
3/10/2011			6.05				
9/7/2011	5.64						
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				
12/1/2016	5.24						
2/23/2017			5.97				
2/24/2017	5.37						
5/10/2017	5.2		5.82				
7/17/2017	5.21						
7/18/2017			5.76				
10/16/2017	5.16						
10/18/2017			5.76				
2/19/2018			5.86				
2/21/2018	5.18						
8/6/2018			5.84				
8/7/2018	5.06						
2/25/2019				5.91			
2/26/2019		5.08					
6/13/2019		5.01		5.84			
8/20/2019				5.85			
8/21/2019		4.88					
10/8/2019				5.91			
10/9/2019		4.89					
1/21/2020		4.99					

Intrawell Prediction Limit

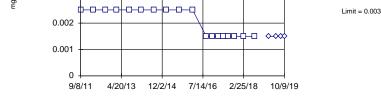
		Plant Yates	Client: Southern	Company Da	ata: Yates Gyp	sum Lar	ndfill F	Printed 2/12	2/2020, 7:24 PM		
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
Antimony (mg/L)	GWC-1R	0.003	n/a	10/9/2019	0.0015ND	No	18	100	n/a	0.005373	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-2R	0.003	n/a	10/9/2019	0.0015ND	No	23	100	n/a	0.003415	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-6R	0.003	n/a	10/8/2019	0.0015ND	No	24	100	n/a	0.003124	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-1	0.009	n/a	n/a	1 future	n/a	7	100	n/a	0.02765	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-2	0.005	n/a	10/8/2019	0.0025ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-1R	0.0025	n/a	10/9/2019	0.0025ND	No	18	88.89	n/a	0.005373	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-2R	0.005	n/a	10/9/2019	0.0025ND	No	23	100	n/a	0.003415	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-3R	0.005	n/a	10/10/2019	0.0025ND	No	18	100	n/a	0.005373	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-4R	0.005	n/a	10/10/2019	0.0025ND	No	23	100	n/a	0.003415	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-5R	0.0025	n/a	10/9/2019	0.0012	No	18	72.22	n/a	0.005373	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-6R	0.0025	n/a	10/8/2019	0.00056	No	24	83.33	n/a	0.003124	NP (NDs) 1 of 2
Barium (mg/L)	GWA-1	0.04688	n/a	n/a	1 future	n/a	7	0	No	0.000	Param 1 of 2
Barium (mg/L)	GWA-2	0.0797	n/a	10/8/2019	0.058	No	27	0	No	0.000	Param 1 of 2
Barium (mg/L)	GWC-1R	0.09247	n/a	10/9/2019	0.054	No	18	0	No	0.000	Param 1 of 2
Barium (mg/L)	GWC-2R	0.13	n/a	10/9/2019	0.045	No	23	0	n/a	0.003415	NP (normality) 1 of 2
Barium (mg/L)	GWC-3R	0.1081	n/a	10/10/2019	0.018	No	18	0	sqrt(x)	0.000	Param 1 of 2
Barium (mg/L)	GWC-4R	0.07836	n/a	10/10/2019	0.018	No	19	0	sqrt(x)	0.000	Param 1 of 2
Barium (mg/L)	GWC-5R	0.06342	n/a	10/9/2019	0.015	No	14	0	No	0.000	Param 1 of 2
Cobalt (mg/L)	GWA-1	0.013	n/a	n/a	1 future	n/a	7	57.14	n/a	0.02765	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-2	0.006993	n/a	10/8/2019	0.0039	No	27	40.74	No	0.000	Param 1 of 2
Cobalt (mg/L)	GWC-1R	0.005	n/a	10/9/2019	0.00064	No	17	52.94	n/a	0.005914	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-2R	0.04763	n/a	10/9/2019	0.024	No	23	4.348	No	0.000	Param 1 of 2
Cobalt (mg/L)	GWC-3R	0.01	n/a	10/10/2019	0.0025ND	No	18	100	n/a	0.005373	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-4R	0.008261	n/a	10/10/2019	0.00099	No	23	34.78	sqrt(x)	0.000	Param 1 of 2
Cobalt (mg/L)	GWC-5R	0.01	n/a	10/9/2019	0.00031	No	18	100	n/a	0.005373	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-6R	0.005	n/a	10/8/2019	0.0025ND	No	24	95.83	n/a	0.003124	` '
Copper (mg/L)	GWA-1	0.03108	n/a	n/a	1 future	n/a	7	28.57	In(x)	0.000	Param 1 of 2
Copper (mg/L)	GWA-2	0.0125	n/a	10/8/2019	0.00041	No	22	54.55	n/a	0.003707	NP (NDs) 1 of 2
Copper (mg/L)	GWC-1R	0.0125	n/a	10/9/2019	0.00079	No	13	92.31	n/a	0.009692	NP (NDs) 1 of 2
Copper (mg/L)	GWC-2R	0.025	n/a	10/9/2019	0.00024	No	18	100	n/a	0.005373	NP (NDs) 1 of 2
Copper (mg/L)	GWC-3R	0.016	n/a	10/10/2019	0.00033	No	13	76.92	n/a	0.009692	NP (NDs) 1 of 2
Copper (mg/L)	GWC-4R	0.0125	n/a	10/10/2019	0.0125ND	No	18	88.89	n/a	0.005373	NP (NDs) 1 of 2
Copper (mg/L)	GWC-5R	0.0125	n/a	10/9/2019	0.00087	No	13	92.31	n/a	0.009692	NP (NDs) 1 of 2
Copper (mg/L)	GWC-6R	0.0065	n/a	10/8/2019	0.0011	No	19	57.89	n/a	0.004832	NP (NDs) 1 of 2
Lead (mg/L)	GWA-1	0.015	n/a	n/a	1 future	n/a	7	57.14	n/a	0.02765	NP (NDs) 1 of 2
Lead (mg/L)	GWC-1R	0.005	n/a	10/9/2019	0.000052	No	18	100	n/a	0.005373	NP (NDs) 1 of 2
Lead (mg/L)	GWC-2R	0.0065	n/a	10/9/2019	0.000057	No	23	91.3	n/a	0.003415	NP (NDs) 1 of 2
Lead (mg/L)	GWC-3R	0.0065	n/a	10/10/2019	0.0025ND	No	18	88.89	n/a	0.005373	, ,
Lead (mg/L)	GWC-5R	0.005	n/a	10/9/2019	0.000059	No	18	100	n/a	0.005373	
Mercury (mg/L)	GWA-2	0.0002955	n/a	10/8/2019	0.0001ND	No	27	96.3	n/a	0.002502	
Mercury (mg/L)	GWC-1R	0.0005	n/a	10/9/2019	0.0001ND	No	18	100	n/a	0.005373	
Mercury (mg/L)	GWC-2R	0.0005	n/a	10/9/2019	0.0001ND	No	23	100	n/a	0.003415	, ,
Mercury (mg/L)	GWC-3R	0.00025	n/a	10/10/2019	0.00043	No	18	94.44	n/a	0.005373	, ,
Mercury (mg/L)	GWC-4R	0.00025	n/a	10/10/2019	0.0001ND	No	23	95.65	n/a	0.003415	,
Mercury (mg/L)	GWC-5R	0.0005	n/a	10/9/2019	0.0001ND	No	18	100	n/a	0.005373	
Mercury (mg/L)	GWC-6R	0.0002955	n/a	10/8/2019	0.0001ND	No	24	95.83	n/a	0.003124	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-1	0.0061	n/a	n/a	1 future	n/a	7	85.71	n/a	0.02765	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-2	0.02197	n/a	10/8/2019	0.0051	No	22	13.64	sqrt(x)	0.000	Param 1 of 2
Nickel (mg/L)	GWC-1R	0.008517	n/a	10/9/2019	0.0031	No	13	38.46	sqrt(x)	0.000	Param 1 of 2
Nickel (mg/L)	GWC-1R GWC-2R	0.008317	n/a	10/9/2019	0.0015	No	18	44.44	sqrt(x)	0.000	Param 1 of 2
THORSE (Hig/L)	3440 ZIX	0.01211	11/4	10/3/2013	0.00000	140	10		3411(A)	0.000	. alam i Ol Z

Intrawell Prediction Limit

		Plant Yates	Client: Southern	Company Da	ata: Yates Gyps	sum Lar	ndfill F	Printed 2/12	/2020, 7:24 PM		
Constituent	<u>Well</u>	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	Transform	<u>Alpha</u>	Method
Nickel (mg/L)	GWC-3R	0.0054	n/a	10/10/2019	0.005ND	No	13	69.23	n/a	0.009692	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-4R	0.0033	n/a	10/10/2019	0.00084	No	18	77.78	n/a	0.005373	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-5R	0.006522	n/a	10/9/2019	0.0019	No	13	30.77	sqrt(x)	0.000	Param 1 of 2
Nickel (mg/L)	GWC-6R	0.0026	n/a	10/8/2019	0.0021	No	19	89.47	n/a	0.004832	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-1	0.015	n/a	n/a	1 future	n/a	7	85.71	n/a	0.02765	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-1R	0.0097	n/a	10/9/2019	0.0023	No	18	66.67	n/a	0.005373	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-2R	0.0065	n/a	10/9/2019	0.0026	No	23	69.57	n/a	0.003415	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-3R	0.0065	n/a	10/10/2019	0.0021	No	18	61.11	n/a	0.005373	NP (NDs) 1 of 2
Barium (mg/L)	GWC-6R	0.103	n/a	10/8/2019	0.054	No	24	0	No	0.000	Param 1 of 2
Beryllium (mg/L)	GWA-1	0.001	n/a	n/a	1 future	n/a	7	100	n/a	0.02765	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-1R	0.0015	n/a	10/9/2019	0.00013	No	18	66.67	n/a	0.005373	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-2R	0.0015	n/a	10/9/2019	0.00014	No	23	95.65	n/a	0.003415	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-3R	0.001136	n/a	10/10/2019	0.00039	No	18	38.89	No	0.000	Param 1 of 2
Beryllium (mg/L)	GWC-5R	0.001003	n/a	10/9/2019	0.0022	No	18	38.89	sqrt(x)	0.000	Param 1 of 2
Cadmium (mg/L)	GWC-1R	0.00065	n/a	10/9/2019	0.00125ND	No	18	94.44	n/a	0.005373	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-2R	0.00065	n/a	10/9/2019	0.00125ND	No	23	91.3	n/a	0.003415	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-3R	0.00065	n/a	10/10/2019	0.000123112	No	18	88.89	n/a	0.005473	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-4R	0.00065	n/a	10/10/2019	0.00010 0.00125ND	No	23	95.65	n/a	0.003375	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-5R	0.00104	n/a	10/9/2019	0.00125110	No	18	44.44	No	0.000413	Param 1 of 2
Chromium (mg/L)	GWA-1	0.01	n/a	n/a	1 future	n/a	7	71.43	n/a	0.02765	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-2	0.0084	n/a	10/8/2019	0.005ND	No	, 27	70.37	n/a	0.02703	NP (NDs) 1 of 2
Chromium (mg/L) Chromium (mg/L)	GWC-1R	0.0064	n/a	10/8/2019	0.003ND 0.0012	No	18	61.11	n/a	0.002302	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-1R GWC-2R	0.005	n/a	10/9/2019	0.0012	No	23	91.3	n/a	0.003373	NP (NDs) 1 of 2
Chromium (mg/L) Chromium (mg/L)	GWC-2R GWC-3R	0.005	n/a	10/9/2019	0.00039		23 18	33.33		0.003413	Param 1 of 2
	GWC-3R GWC-4R	0.002398	n/a	10/10/2019	0.0014	No No	23	82.61	x^(1/3) n/a	0.000	
Chromium (mg/L)											NP (NDs) 1 of 2
Chromium (mg/L)	GWC-5R	0.003114	n/a	10/9/2019	0.0024	No	18 24	27.78	No In(x)	0.000	Param 1 of 2
Chromium (mg/L)	GWC-6R	0.002532	n/a	10/8/2019	0.0014	No		41.67	In(x)	0.000	Param 1 of 2
Selenium (mg/L)	GWC-4R	0.01742	n/a	10/10/2019	0.0024	No	23	34.78	sqrt(x)	0.000	Param 1 of 2
Selenium (mg/L)	GWC-5R	0.04174	n/a	10/9/2019	0.034	No	18	5.556	No	0.000	Param 1 of 2
Selenium (mg/L)	GWC-6R	0.0065	n/a	10/8/2019	0.0031	No	24	70.83	n/a	0.003124	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-2	0.001	n/a	10/8/2019	0.0005ND	No	26	88.46	n/a	0.002667	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-2R	0.001	n/a	10/9/2019	0.0005ND	No	21	95.24	n/a	0.003999	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-5R	0.001	n/a	10/9/2019	0.0005ND	No	17	100	n/a	0.005914	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-2	0.0055	n/a	10/8/2019	0.005ND	No	24	83.33	n/a	0.003124	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-1R	0.0051	n/a	10/9/2019	0.005ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-2R	0.01	n/a	10/9/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-3R	0.01	n/a	10/10/2019	0.0011	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-4R	0.01	n/a	10/10/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-5R	0.005	n/a	10/9/2019	0.005ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-6R	0.005	n/a	10/8/2019	0.005ND	No	21	76.19	n/a	0.003999	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-1	0.03637	n/a	n/a	1 future	n/a	7	14.29	No	0.000	Param 1 of 2
Zinc (mg/L)	GWA-2	0.00866	n/a	10/8/2019	0.0078	No	23	4.348	No	0.000	Param 1 of 2
Zinc (mg/L)	GWC-1R	0.006764	n/a	10/9/2019	0.0078	No	15	20	sqrt(x)	0.000	Param 1 of 2
Zinc (mg/L)	GWC-2R	0.01019	n/a	10/9/2019	0.0069	No	20	10	sqrt(x)	0.000	Param 1 of 2
Zinc (mg/L)	GWC-3R	0.01414	n/a	10/10/2019	0.0079	No	14	7.143	No	0.000	Param 1 of 2
Zinc (mg/L)	GWC-4R	0.005	n/a	10/10/2019	0.006	No	19	63.16	n/a	0.004832	NP (NDs) 1 of 2
Zinc (mg/L)	GWC-5R	0.01808	n/a	1/21/2020	0.015	No	15	0	No	0.000	Param 1 of 2
Zinc (mg/L)	GWC-6R	0.005076	n/a	10/8/2019	0.006	No	21	33.33	No	0.000	Param 1 of 2

Within Limit Prediction Limit
Intrawell Non-parametric

0.005
0.004
GWC-1R compliance

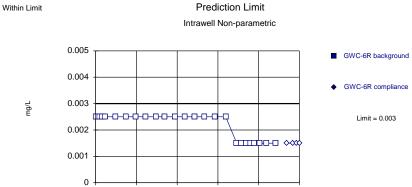


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Antimony Analysis Run 2/12/2020 7:19 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

9/9/09



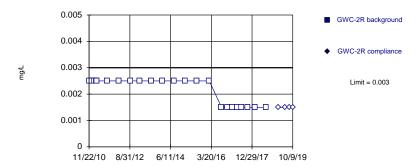
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 24) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

9/15/11 9/20/13 9/26/15 10/1/17 10/8/19

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

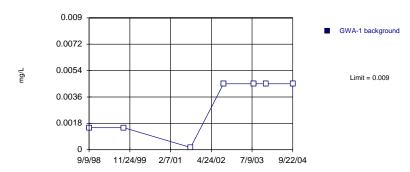


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 23) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Antimony Analysis Run 2/12/2020 7:19 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Prediction Limit Intrawell Non-parametric, GWA-1 (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2). Assumes 1 future value.

0

Within Limit Prediction Limit
Intrawell Non-parametric

0.005
0.004
0.004
0.003
0.002
0.0002
0.0001

□ GWA-2 background
□ GWA-2 compliance

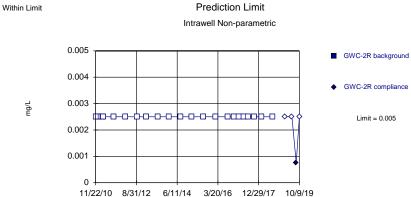
Limit = 0.005

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

5/1/07 10/25/09 4/21/12 10/16/14 4/12/17

Constituent: Arsenic Analysis Run 2/12/2020 7:20 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

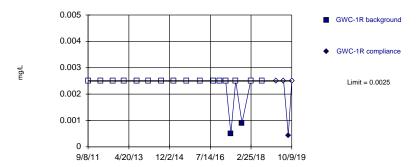


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 23) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

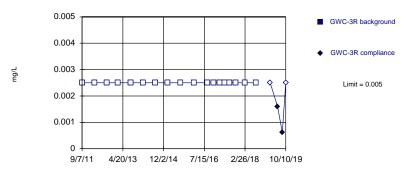


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Arsenic Analysis Run 2/12/2020 7:20 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas $^{\text{\tiny{TM}}}$ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Within Limit

0.005
0.004
0.004
0.003
0.002
0.001

Intrawell Non-parametric

GWC-4R background

GWC-4R compliance

Limit = 0.005

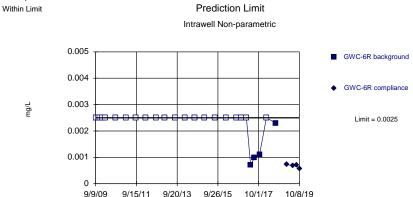
Prediction Limit

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 23) were censored: limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

11/22/10 8/31/12 6/11/14 3/21/16 12/30/17 10/10/19

Constituent: Arsenic Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

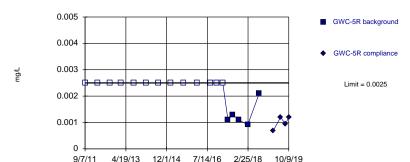


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

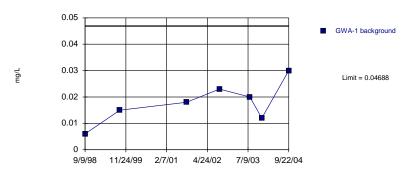


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 72.22% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Arsenic Analysis Run 2/12/2020 7:20 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

Prediction Limit Intrawell Parametric, GWA-1 (bg)



Background Data Summary: Mean=0.01771, Std. Dev.=0.007761, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9982, critical = 0.73. Kappa = 3.758 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Within Limit



0.08
0.064
0.064
0.048
0.048
0.032
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0.016
0

Prediction Limit

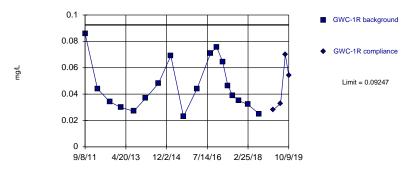
Background Data Summary: Mean=0.05023, Std. Dev.=0.01305, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.924, critical = 0.894. Kappa = 2.257 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

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 = 0.008819. Individual comparison alpha = 0.003415 (1 of 2).

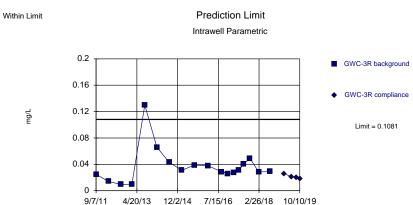
Within Limit Prediction Limit Intrawell Parametric



Background Data Summary: Mean=0.04614, Std. Dev.=0.01903, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9026, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486, 0.0005486.

Constituent: Barium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG



Background Data Summary (based on square root transformation): Mean=0.1832, Std. Dev.=0.05976, n=18. Normality test: Shapiro Wlik @alpha = 0.01, calculated = 0.8697, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.005486.

Within Limit

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG

Intrawell Parametric

0.09
0.072
0.054
0.036
0.018

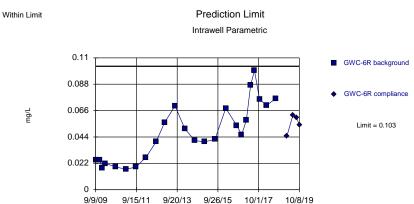
Prediction Limit

Background Data Summary (based on square root transformation): Mean=0.1732, Std. Dev.=0.04443, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8913, critical = 0.863. Kappa = 2.403 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.005486.

11/22/10 8/31/12 6/11/14 3/21/16 12/30/17 10/10/19

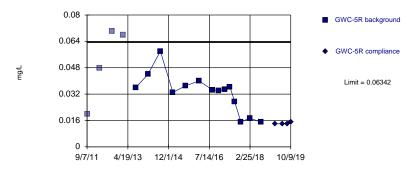
Constituent: Barium Analysis Run 2/12/2020 7:20 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG



Background Data Summary: Mean=0.04776, Std. Dev.=0.02401, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9379, critical = 0.884. Kappa = 2.299 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Within Limit Prediction Limit
Intrawell Parametric

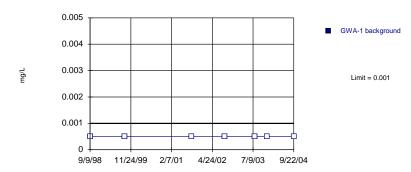


Background Data Summary: Mean=0.03304, Std. Dev.=0.01162, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.911, critical = 0.825. Kappa = 2.613 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.005486

Constituent: Barium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Prediction Limit Intrawell Non-parametric, GWA-1 (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 7) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2). Assumes 1 future value.

9/8/11

Within Limit

0.005
0.004
0.004
0.004
0.003
0.002
0.002
0.001
0.001
0.001

Prediction Limit

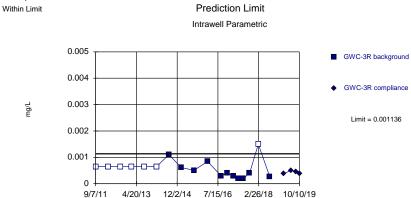
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

10/9/19

4/20/13 12/2/14 7/14/16 2/25/18

Constituent: Beryllium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IV}}}} \mbox{\ensuremath{^{\text{IV}}}}$

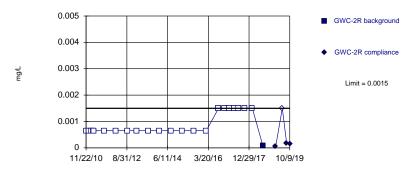


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0004433, Std. Dev.=0.0002845, n=18, 38.89% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8679, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

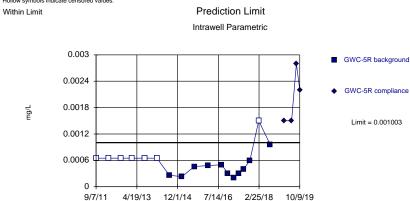
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 95.65% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Beryllium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{1N}}} \ \mbox{v.9.6.25} \ \mbox{Sanitas} \ \mbox{software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values}.$



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.01992, Std. Dev.=0.004826, n=18, 38.89% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.914, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

0

9/8/11

Within Limit

Intrawell Non-parametric

0.005
0.004
0.004
← GWC-1R background
← GWC-1R compliance
Limit = 0.00065

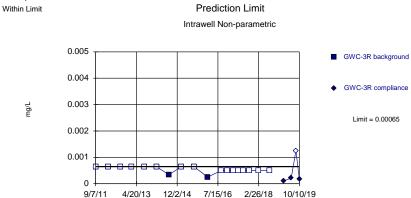
Prediction Limit

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 94.44% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

4/20/13 12/2/14 7/14/16 2/25/18

Constituent: Cadmium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IV}}}} \mbox{\ensuremath{^{\text{IV}}}}$

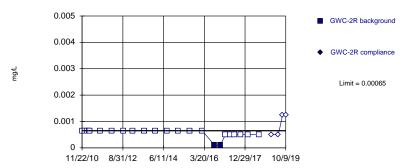


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

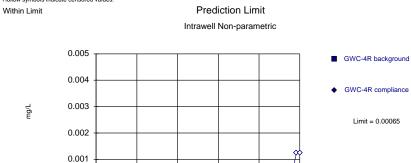
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 91.3% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Cadmium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IV}}}} \mbox{\ensuremath{^{\text{IV}}}}$



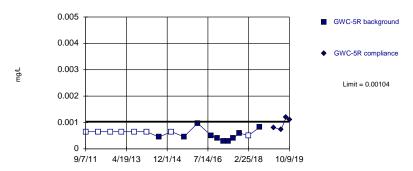
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 95.65% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

11/22/10 8/31/12 6/11/14 3/21/16 12/30/17 10/10/19

Hollow symbols indicate censored values.

Within Limit

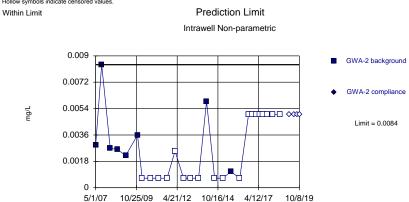




Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.000511, Std. Dev.=0.0002174, n=18, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9265, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

> Constituent: Cadmium Analysis Run 2/12/2020 7:20 PM View: Time Series

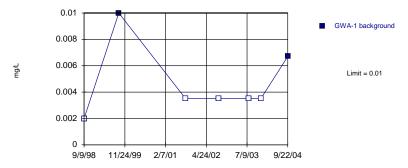
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

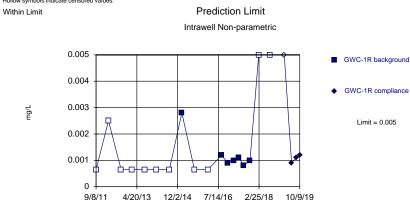
Prediction Limit Intrawell Non-parametric, GWA-1 (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2). Assumes 1 future value.

> Constituent: Chromium Analysis Run 2/12/2020 7:20 PM View: Time Series

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 61.11% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Within Limit

0.005
0.004
0.003
0.002
0.001
0.001
0.005
0.001
0.005
0.006

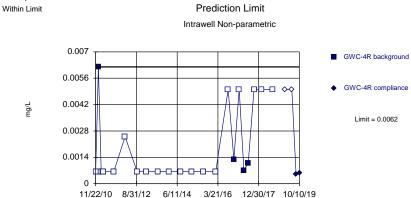
Prediction Limit

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 91.3% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

11/22/10 8/31/12 6/11/14 3/20/16 12/29/17 10/9/19

Constituent: Chromium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

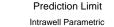
 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

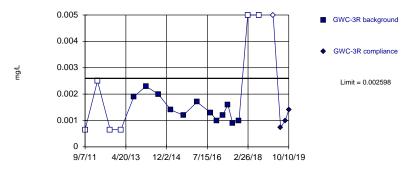


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 82.61% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IV}}}} \mbox{\ensuremath{^{\text{IV}}}}$

Within Limit

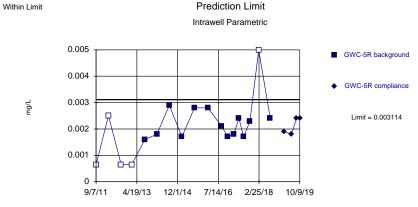




Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.1093, Std. Dev.=0.01157, n=18, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8884, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

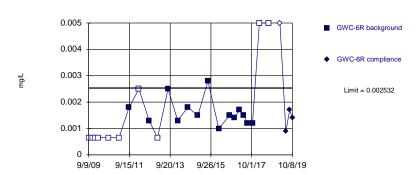
Constituent: Chromium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{1N}}} \ \mbox{v.9.6.25} \ \mbox{Sanitas} \ \mbox{software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values}.$



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001808, Std. Dev.=0.0005362, n=18, 27.78% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8848, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

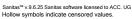
Within Limit Prediction Limit

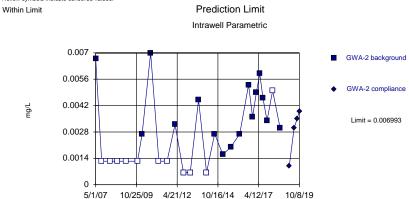


Intrawell Parametric

Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.65, Std. Dev=0.2919, n=24, 4.1.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9017, critical = 0.884. Kappa = 2.299 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Chromium Analysis Run 2/12/2020 7:20 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

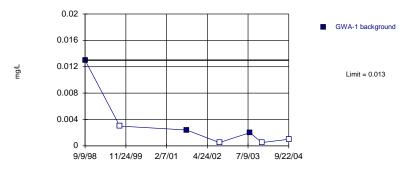




Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002915, Std. Dev.=0.001806, n=27, 40.74% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9019, critical = 0.894. Kappa = 2.257 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

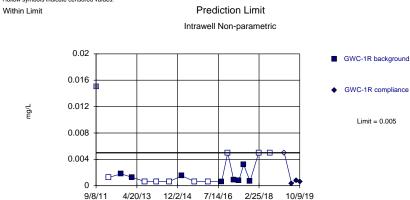
Prediction Limit Intrawell Non-parametric, GWA-1 (bg)



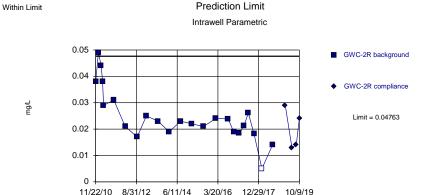
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2). Assumes 1 future value.

Constituent: Cobalt Analysis Run 2/12/2020 7:20 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

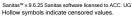


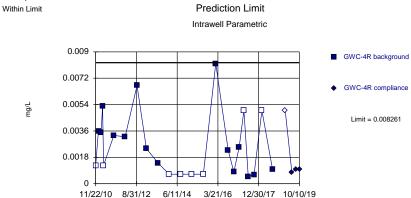
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 52.94% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).



Background Data Summary: Mean=0.02477, Std. Dev.=0.009863, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9174, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.005132). Report alpha = 0.0005486.

Constituent: Cobalt Analysis Run 2/12/2020 7:20 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

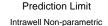


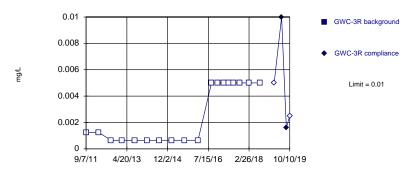


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.04474, Std. Dev.=0.01992, n=23, 34.78% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9142, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit



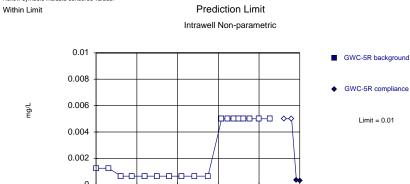


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Cobalt Analysis Run 2/12/2020 7:20 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{1N}}} \ \mbox{v.9.6.25} \ \mbox{Sanitas} \ \mbox{software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values}.$

9/7/11



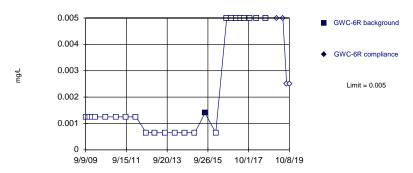
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

10/9/19

4/19/13 12/1/14 7/14/16 2/25/18

Hollow symbols indicate censored values
Within Limit

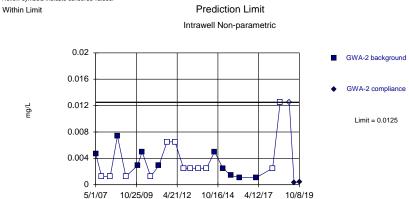




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 95.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Cobalt Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

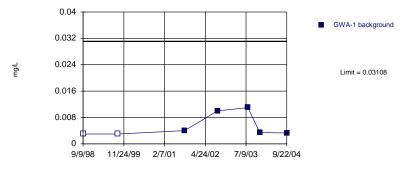
 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IV}}}} \mbox{\ensuremath{^{\text{IV}}}}$



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Prediction Limit Intrawell Parametric, GWA-1 (bg)



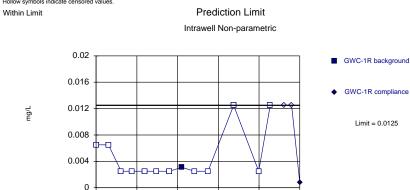
Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.331, Std. Dev.=0.4948, n=7, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7407, critical = 0.73. Kappa = 3.758 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.005486. Assumes 1 future value.

Constituent: Copper Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas $^{\text{\tiny{TM}}}$ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

9/8/11

4/20/13



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

12/2/14 7/14/16 2/25/18

10/9/19

Within Limit

Intrawell Non-parametric

0.03

0.024

→ GWC-2R background

→ GWC-2R compliance

Limit = 0.025

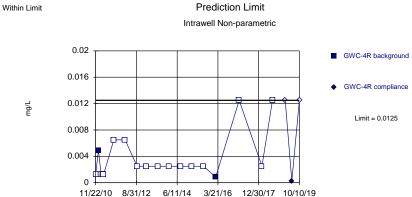
Prediction Limit

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005373 (1 of 2). Individual comparison alpha = 0.005373 (1 of 2).

11/22/10 8/31/12 6/11/14 3/20/16 12/29/17 10/9/19

Constituent: Copper Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

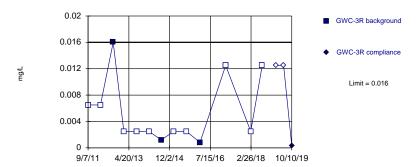


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

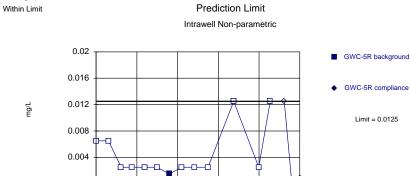
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 76.92% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Copper Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

12/1/14 7/14/16 2/25/18

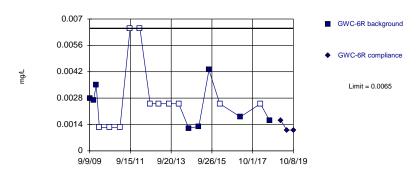
10/9/19

4/19/13

9/7/11

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 57.89% NDs. Well-constituent pair annual alpha = 0.00482 (1 of 2).

Constituent: Copper Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

9/8/11

Within Limit

0.007
0.0056
0.0042
0.0028
0.0014
0.0014
0.0014
0.0014
0.0014
0.0014
0.0014
0.0014
0.0014
0.0014
0.0014
0.0014

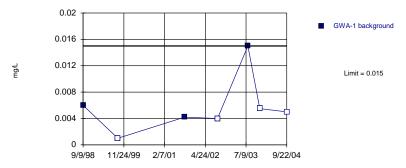
4/20/13 12/2/14 7/14/16 2/25/18

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

10/9/19

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Prediction Limit Intrawell Non-parametric, GWA-1 (bg)

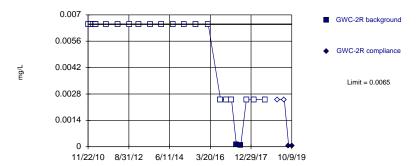


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2). Assumes 1 future value.

Constituent: Lead Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas $^{\text{TM}}$ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

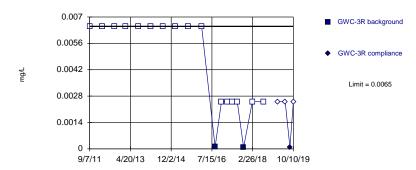
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 91.3% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Within Limit

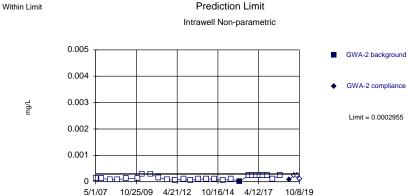
Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha =

> Constituent: Lead Analysis Run 2/12/2020 7:21 PM View: Time Series

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



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).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Within Limit

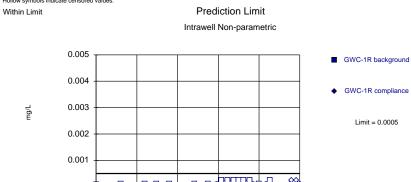




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

> Constituent: Lead Analysis Run 2/12/2020 7:21 PM View: Time Series

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

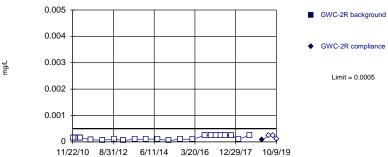


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

10/9/19

4/20/13 12/2/14 7/14/16 2/25/18

Within Limit Prediction Limit
Intrawell Non-parametric

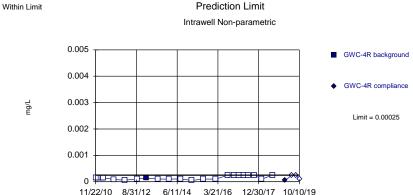


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 23) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003415, Individual comparison alpha = 0.003415, Individual comp

Constituent: Mercury Analysis Run 2/12/2020 7:21 PM View: Time Series

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IV}}}} \mbox{\ensuremath{^{\text{IV}}}}$

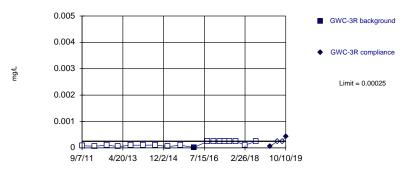


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 95.65% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

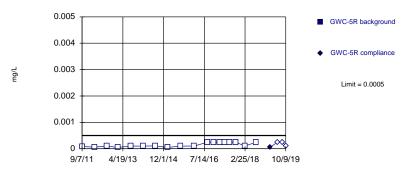


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 94.44% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Mercury Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit Prediction Limit Intrawell Non-parametric

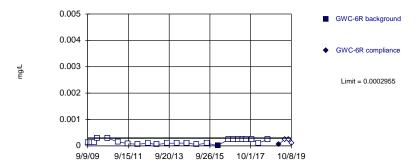


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Hollow symbols indicate censored values.

Within Limit

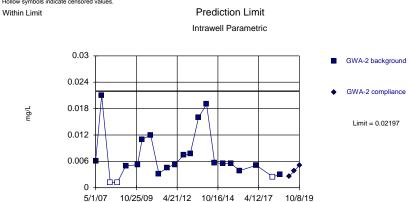




Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 95.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

> Constituent: Mercury Analysis Run 2/12/2020 7:21 PM View: Time Series

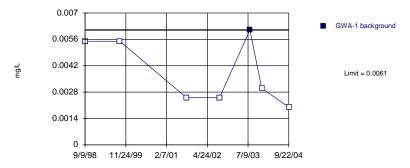
Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



Background Data Summary (based on square root transformation): Mean=0.07949, Std. Dev.=0.02944, n=22, 13.64% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9177, critical = 0.878. Kappa = 2.335 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

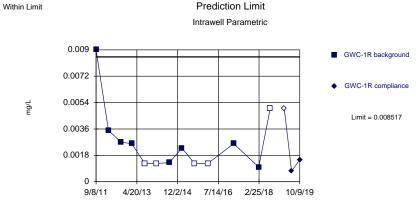
Prediction Limit Intrawell Non-parametric, GWA-1 (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2). Assumes 1 future value.

> Constituent: Nickel Analysis Run 2/12/2020 7:21 PM View: Time Series

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.04711, Std. Dev.=0.01691, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8236, critical = 0.814. Kappa = 2.671 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Within Limit

Intrawell Parametric

0.02

0.016

0.012

0.008

0.004

0.004

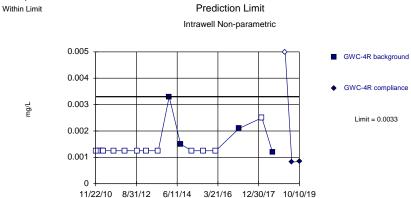
11/22/10 8/31/12 6/11/14 3/20/16 12/29/17 10/9/19

Prediction Limit

Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05234, Std. Dev.=0.0237, n=18, 44.4% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8584, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Nickel Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

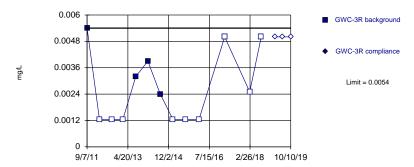


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

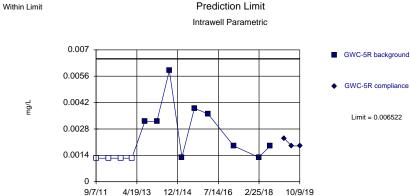
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Nickel Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

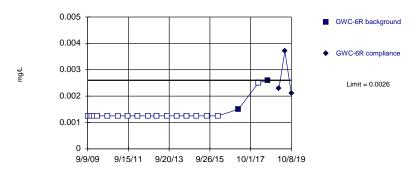
 $\mbox{Sanitas}^{\mbox{\tiny{1N}}} \ \mbox{v.9.6.25} \ \mbox{Sanitas} \ \mbox{software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values}.$



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.04594, Std. Dev.=0.01303, n=13, 30.77% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8265, critical = 0.814. Kappa = 2.671 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Within Limit

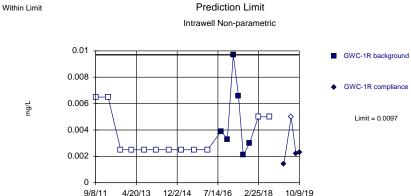
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.00482 (1 of 2).

Constituent: Nickel Analysis Run 2/12/2020 7:21 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

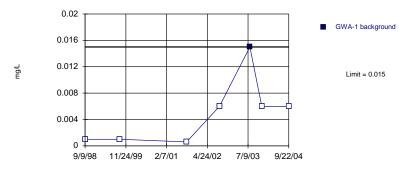
 $\mbox{Sanitas} \mbox{\ensuremath{^{\text{IV}}}} \mbox{\ensuremath{^{\text{IV}}}}$



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

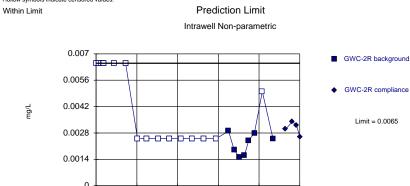
Prediction Limit Intrawell Non-parametric, GWA-1 (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.05455. Individual comparison alpha = 0.02765 (1 of 2). Assumes 1 future value.

Constituent: Selenium Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{1N}}} \ \mbox{v.9.6.25} \ \mbox{Sanitas} \ \mbox{software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values}.$



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 69.57% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

11/22/10 8/31/12 6/11/14 3/20/16 12/29/17 10/9/19

0 | 9/7/11

Within Limit

0.009
0.0072
0.0054
0.0036
0.0018
GWC-3R background

Limit = 0.0065

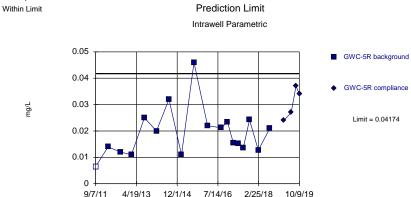
Prediction Limit

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 61.11% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2)

4/20/13 12/2/14 7/15/16 2/26/18 10/10/19

Constituent: Selenium Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

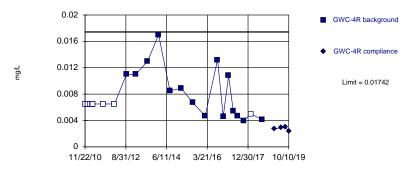


Background Data Summary: Mean=0.01923, Std. Dev.=0.009244, n=18, 5.556% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.0845, critical = 0.858. Kappa = 2.435 (c=16, w=6, 1 of 2, event alpha = 0.005486.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit



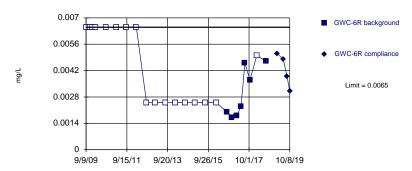


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.08534, Std. Dev.=0.02013, n=23, 34.78% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9032, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Selenium Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas $^{\mbox{\tiny NM}}$ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.





Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 70.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Within Limit

Intrawell Non-parametric

0.005

0.004

GWA-2 background

◆ GWA-2 compliance

Limit = 0.001

Prediction Limit

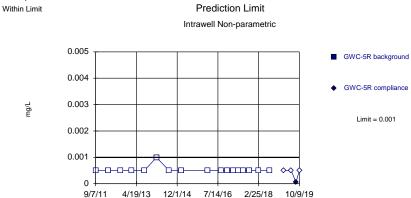
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 88.46% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

5/1/07 10/25/09 4/21/12 10/16/14 4/12/17 10/8/19

Constituent: Thallium Analysis Run 2/12/2020 7:21 PM View: Time Series

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

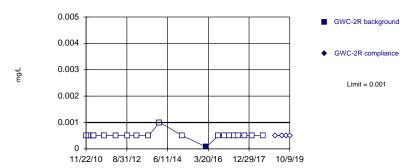


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 17) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

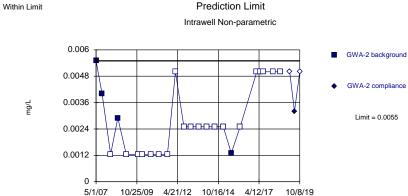


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 95.24% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Thallium Analysis Run 2/12/2020 7:21 PM View: Time Series

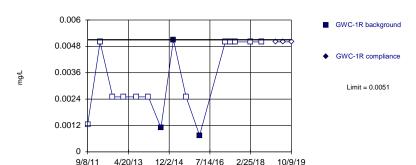
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{1N}}} \ \mbox{v.9.6.25} \ \mbox{Sanitas} \ \mbox{software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values}.$



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

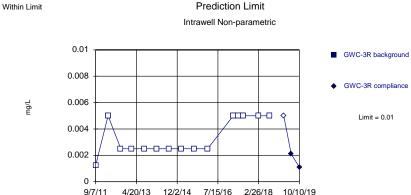
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

 $\mbox{Sanitas}^{\mbox{\tiny{$\rm M$}}} \mbox{v.9.6.25 Sanitas software licensed to ACC. UG} \\ \mbox{Hollow symbols indicate censored values.}$

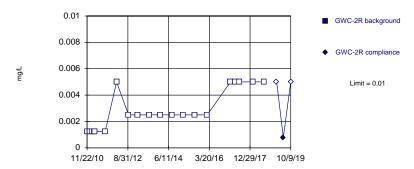


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



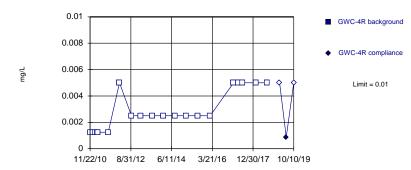
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Vanadium Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

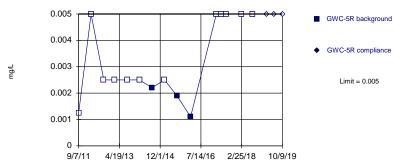
Within Limit





Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Within Limit Prediction Limit
Intrawell Non-parametric

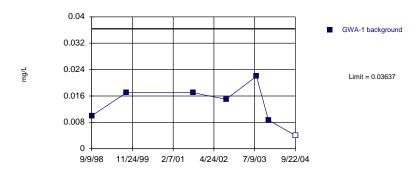


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 2/12/2020 7:21 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Prediction Limit
Intrawell Parametric, GWA-1 (bg)



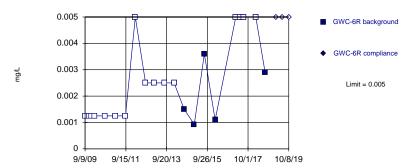
Background Data Summary: Mean=0.01339, Std. Dev.=0.006116, n=7, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9648, critical = 0.73. Kappa = 3.758 (c=16, w=6, 1 of 2, event alpha = 0.005132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Zinc Analysis Run 2/12/2020 7:22 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



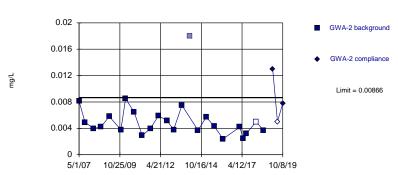
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 76.19% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Vanadium Analysis Run 2/12/2020 7:22 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

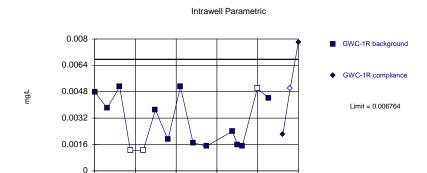
nit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.004774, Std. Dev.=0.001677, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9295, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.005486.

Constituent: Zinc Analysis Run 2/12/2020 7:22 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit



Prediction Limit

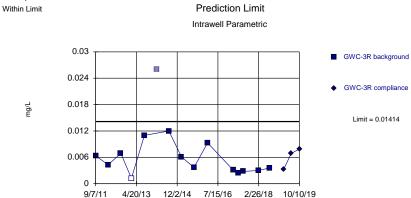
Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.051, Std. Dev.=0.01223, n=15, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8403, critical = 0.835. Kappa = 2.555 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

4/20/13 12/2/14 7/14/16 2/25/18 10/9/19

Constituent: Zinc Analysis Run 2/12/2020 7:22 PM View: Time Series

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

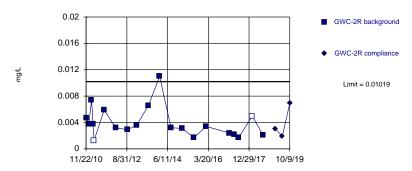
9/8/11



Background Data Summary: Mean=0.005425, Std. Dev.=0.003336, n=14, 7.143% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8941, critical = 0.825. Kappa = 2.613 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Within Limit

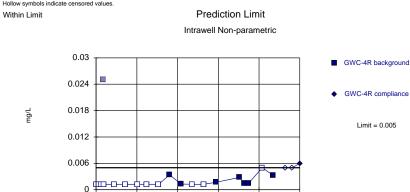




Background Data Summary (based on square root transformation): Mean=0.0606, Std. Dev.=0.01701, n=20, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9433, critical = 0.868. Kappa = 2.372 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

> Constituent: Zinc Analysis Run 2/12/2020 7:22 PM View: Time Series

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 63.16% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

11/22/10 8/31/12 6/11/14 3/21/16 12/30/17 10/10/19

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UC

Within Limit

0.03
0.024
0.018
0.012
0.018
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.012
0.006
0.007
0.007
0.007
0.008
0.008
0.008
0.009
0.008
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0.009
0

Prediction Limit

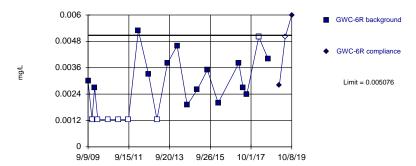
Background Data Summary: Mean=0.00738, Std. Dev.=0.004189, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8595, critical = 0.835. Kappa = 2.555 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 2/12/2020 7:22 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002813, Std. Dev.=0.0009613, n=21, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9172, critical = 0.873. Kappa = 2.354 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 2/12/2020 7:22 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Constituent: Antimony, Arsenic Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Plant Yates	Client: Southern	Company Data: Y	ates Gypsum Land	TIII
	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-6R	GWC-6R	GWA-1
9/9/1998							<0.003
9/20/1999							<0.003
9/12/2001							<0.0003058
9/3/2002							<0.009
7/29/2003							<0.009
12/5/2003							<0.009
9/22/2004							<0.009
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				
1/4/2011			<0.005				
2/17/2011			<0.005				
3/10/2011					<0.005		
3/11/2011			<0.005				
3/28/2011			<0.005				
9/7/2011			<0.005				
9/8/2011	<0.005				<0.005		
3/5/2012	<0.005				<0.005		
3/6/2012			<0.005				
9/5/2012	<0.005				<0.005		
9/11/2012			<0.005				
2/5/2013	<0.005				<0.005		
2/6/2013			<0.005				
8/13/2013	<0.005		<0.005		<0.005		
2/4/2014	<0.005		<0.005		<0.005		
8/5/2014	<0.005		<0.005		<0.005		
2/2/2015	<0.005		<0.005				
2/3/2015					<0.005		
8/4/2015	<0.005 (D)		<0.005		<0.005		
2/16/2016	<0.005				<0.005		
2/17/2016			<0.005				
8/31/2016	<0.003		<0.003				
9/1/2016					<0.003		
11/28/2016			<0.003				
11/29/2016	<0.003				<0.003		
2/22/2017			<0.003				
2/23/2017	<0.003				<0.003		
5/9/2017	<0.003						
5/10/2017			<0.003		<0.003		
7/18/2017	<0.003		<0.003		<0.003		
10/17/2017	<0.003		<0.003				
10/18/2017					<0.003		
2/19/2018					<0.003		
2/20/2018			<0.003				
2/21/2018	<0.003						
8/6/2018					<0.003		
8/7/2018	<0.003						
8/8/2018			<0.003				
2/25/2019						<0.003	

Constituent: Antimony, Arsenic Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-6R	GWC-6R	GWA-1
2/26/2019		<0.003		<0.003			
6/12/2019				<0.003			
6/13/2019		<0.003				<0.003	
8/20/2019		<0.003		<0.003		<0.003	
10/8/2019						<0.003	
10/9/2019		<0.003		<0.003			

Constituent: Arsenic Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			riant rates	Cilent. Southern	Company Data. I	ates Gypsuin Landii	II.	
	GWA-2	GWA-2	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R
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			
1/4/2011					<0.005			
2/17/2011					<0.005			
3/10/2011	<0.005							
3/11/2011					<0.005			
3/28/2011					<0.005			
9/7/2011					<0.005		<0.005	
9/8/2011	<0.005		<0.005					
3/5/2012	<0.005		<0.005				<0.005	
3/6/2012					<0.005			
9/5/2012			<0.005				<0.005	
9/10/2012	<0.005							
9/11/2012					<0.005			
2/5/2013			<0.005					
2/6/2013	<0.005				<0.005		<0.005	
8/12/2013	<0.005							
8/13/2013			<0.005		<0.005		<0.005	
2/4/2014			<0.005		<0.005			
2/5/2014	<0.005						<0.005	
8/4/2014							<0.005	
8/5/2014	<0.005		<0.005		<0.005			
2/2/2015			<0.005		<0.005			
2/3/2015							<0.005	
2/4/2015	<0.005							
8/3/2015	<0.005						<0.005 (D)	
8/4/2015			<0.005 (D)		<0.005			
2/16/2016	<0.005		<0.005				<0.005	
2/17/2016	.0.005				<0.005			
8/31/2016	<0.005		<0.005		<0.005		<0.005	
11/28/2016 11/29/2016	<0.005		<0.00E		<0.005			
11/30/2016			<0.005				<0.005	
2/22/2017	<0.005				<0.005		<0.005	
2/23/2017	<0.005		<0.005		\0.005		<0.005	
5/8/2017	<0.005		~0.003				~0.003	
5/9/2017	~0.003		0.0005 (J)				<0.005	
5/10/2017			0.0003 (0)		<0.005		10.000	
7/17/2017	<0.005				10.000			
7/18/2017	-0.000		<0.005		<0.005		<0.005	
10/16/2017	<0.005							
10/17/2017			0.0009 (J)		<0.005			
10/18/2017			ν-,				<0.005	
2/19/2018	<0.005							
2/20/2018					<0.005			

Constituent: Arsenic Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R
2/21/2018			<0.005				<0.005	
8/6/2018	<0.005							
8/7/2018			<0.005				<0.005	
8/8/2018					<0.005			
2/25/2019		<0.005						
2/26/2019				<0.005		<0.005		<0.005
6/12/2019		0.00038 (J)				<0.005		
6/13/2019				<0.005				0.0016 (J)
8/19/2019		0.00095 (J)						
8/20/2019				0.00044 (J)		0.00075 (J)		
8/21/2019								0.00061 (J)
10/8/2019		<0.005						
10/9/2019				<0.005		<0.005		
10/10/2019								<0.005

Constituent: Arsenic, Barium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Plant Yates	Client: Southern	Company Data:	Yates Gypsum Land	
	GWC-4R	GWC-4R	GWC-5R	GWC-5R	GWC-6R	GWC-6R	GWA-1
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
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						
1/4/2011	<0.005						
2/17/2011	<0.005						
3/10/2011					<0.005		
3/11/2011	<0.005						
3/28/2011	<0.005						
9/7/2011	<0.005		<0.005				
9/8/2011					<0.005		
3/4/2012	<0.005						
3/5/2012			<0.005		<0.005		
9/5/2012			<0.005		<0.005		
9/10/2012	<0.005						
2/5/2013			<0.005		<0.005		
2/6/2013	<0.005						
8/13/2013					<0.005		
8/14/2013	<0.005		<0.005				
2/4/2014	<0.005				<0.005		
2/5/2014			<0.005				
8/4/2014	<0.005		<0.005				
8/5/2014					<0.005		
2/2/2015	<0.005						
2/3/2015			<0.005		<0.005		
8/3/2015	<0.005 (D)		<0.005 (D)				
8/4/2015					<0.005		
2/16/2016	<0.005		<0.005		<0.005		
9/1/2016	<0.005		<0.005		<0.005		
11/29/2016					<0.005		
11/30/2016	<0.005						
12/1/2016			<0.005				
2/23/2017					<0.005		
2/24/2017	<0.005		<0.005				
5/10/2017	<0.005		0.0011 (J)		0.0007 (J)		
7/17/2017			0.0013 (J)				
7/18/2017	<0.005				0.001 (J)		
10/16/2017			0.0011 (J)				
10/17/2017	<0.005						
10/18/2017					0.0011 (J)		
2/19/2018					<0.005		
2/20/2018	<0.005						
2/21/2018			0.00091 (J)				

Constituent: Arsenic, Barium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R	GWC-5R	GWC-5R	GWC-6R	GWC-6R	GWA-1
8/6/2018					0.0023 (J)		
8/7/2018			0.0021 (J)				
8/8/2018	<0.005						
2/25/2019						0.00073 (J)	
2/26/2019		<0.005		0.00069 (J)			
6/12/2019		0.00037 (J)					
6/13/2019				0.0012 (J)		0.00068 (J)	
8/19/2019		0.00059 (J)					
8/20/2019						0.00072 (J)	
8/21/2019				0.00094 (J)			
10/8/2019						0.00056 (J)	
10/9/2019				0.0012 (J)			
10/10/2019		<0.005					

Constituent: Barium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			riant rates	Ciletit. Southern	Company Data. I	ates Gypsuin Landii	II.	
	GWA-2	GWA-2	GWC-1R	GWC-1R	GWC-2R	GWC-2R		GWC-3R
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			
1/4/2011					0.1			
2/17/2011					0.1			
3/10/2011	0.057							
3/11/2011					0.05			
3/28/2011					0.087			
9/7/2011					0.065		0.025	
9/8/2011	0.057		0.086					
3/5/2012	0.061		0.044				0.014	
3/6/2012					0.049			
9/5/2012			0.034				0.0095	
9/10/2012	0.055							
9/11/2012					0.045			
2/5/2013			0.03					
2/6/2013	0.061				0.05		0.0094	
8/12/2013	0.055							
8/13/2013			0.027		0.13		0.13	
2/4/2014			0.037		0.08			
2/5/2014	0.063						0.066	
8/4/2014							0.043	
8/5/2014	0.038		0.048		0.068			
2/2/2015			0.069		0.066			
2/3/2015							0.031	
2/4/2015	0.039							
8/3/2015	0.031						0.039 (D)	
8/4/2015			0.023 (D)		0.053			
2/16/2016	0.045		0.044				0.038	
2/17/2016					0.059			
8/31/2016	0.0542		0.0711		0.0601		0.0286	
11/28/2016	0.0529				0.0562			
11/29/2016			0.0754					
11/30/2016							0.0258	
2/22/2017	0.0607				0.0481			
2/23/2017			0.0646				0.0278	
5/8/2017	0.065							
5/9/2017			0.0463				0.0308	
5/10/2017					0.0563			
7/17/2017	0.06							
7/18/2017			0.039		0.049		0.0407	
10/16/2017	0.0542							
10/17/2017			0.0349		0.047			
10/18/2017							0.049	
2/19/2018	0.0533							
2/20/2018					0.0467			

Constituent: Barium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R
2/21/2018			0.0322				0.0285	
8/6/2018	0.044							
8/7/2018			0.025				0.029	
8/8/2018					0.049			
2/25/2019		0.045						
2/26/2019				0.028		0.056		0.026
6/12/2019		0.063				0.046		
6/13/2019				0.033				0.021
8/19/2019		0.065						
8/20/2019				0.07		0.05		
8/21/2019								0.02
10/8/2019		0.058						
10/9/2019				0.054		0.045		
10/10/2019								0.018

Constituent: Barium, Beryllium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

				Plant \	ates Client: Southe	rn Company	Data: Yates Gypsum La	ndfill
		GWC-4R	GWC-4R	GWC-5R	GWC-5R	GWC-6R	GWC-6R	GWA-1
9/9/1	1998							<0.001
9/20	/1999							<0.001
9/12	/2001							<0.001
9/3/2	2002							<0.001
7/29	/2003							<0.001
12/5	/2003							<0.001
9/22	/2004							<0.001
9/9/2	2009					0.025		
11/1	8/2009					0.025		
1/5/2	2010					0.018		
3/3/2	2010					0.022		
9/7/2	2010					0.019		
3/10	/2011					0.017		
3/28	/2011	0.04						
9/7/2	2011	0.041						
9/8/2	2011					0.019		
3/4/2	2012	0.046						
3/5/2	2012					0.027		
9/5/2	2012					0.04		
9/10	/2012	0.084						
2/5/2	2013					0.056		
2/6/2	2013	0.042						
8/13	/2013					0.07		
8/14	/2013	0.042		0.036				
2/4/2	2014	0.046				0.051		
2/5/2	2014			0.044				
8/4/2	2014	0.027		0.058				
8/5/2	2014					0.041		
2/2/2		0.02						
2/3/2	2015			0.033		0.04		
8/3/2		0.017 (D)		0.037 (D)				
8/4/2						0.042		
	/2016	0.032		0.04		0.068		
9/1/2		0.0377		0.0345		0.0536		
	9/2016					0.0459		
	0/2016	0.0148						
	/2016			0.0342				
	/2017					0.0581		
	/2017	0.029		0.0347				
	/2017	0.0182		0.0363		0.0873		
	/2017			0.0274				
	/2017	0.0187				0.0994		
	6/2017	0.0457		0.0151				
	7/2017	0.0157				0.0757		
	8/2017					0.0757		
	/2018	0.0151				0.0703		
	/2018	0.0151		0.0174				
	/2018			0.0174		0.076		
8/6/2				0.015		0.076		
8/7/2 8/8/2		0.019		0.015				
	/2019	0.010					0.045	
2/23/	12013						0.040	

Constituent: Barium, Beryllium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

ı	GWC-4R	GWC-4R	GWC-5R	GWC-5R	GWC-6R	GWC-6R	GWA-1
2/26/2019		0.017		0.014			
6/12/2019		0.017					
6/13/2019				0.014		0.062	
8/19/2019		0.02					
8/20/2019						0.06	
8/21/2019				0.014			
10/8/2019						0.054	
10/9/2019				0.015			
10/10/2019		0.018					

Constituent: Beryllium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-5R	GWC-5R
11/22/2010			<0.0013					
1/4/2011			<0.0013					
2/17/2011			<0.0013					
3/11/2011			<0.0013					
3/28/2011			<0.0013					
9/7/2011			<0.0013		<0.0013		<0.0013	
9/8/2011	<0.0013							
3/5/2012	<0.0013				<0.0013		<0.0013	
3/6/2012			<0.0013					
9/5/2012	<0.0013				<0.0013		<0.0013	
9/11/2012			<0.0013					
2/5/2013	<0.0013						<0.0013	
2/6/2013			<0.0013		<0.0013			
8/13/2013	<0.0013		<0.0013		<0.0013			
8/14/2013							<0.0013	
2/4/2014	<0.0013		<0.0013					
2/5/2014					<0.0013		<0.0013	
8/4/2014					0.0011 (J)		0.00026 (J)	
8/5/2014	7.5E-05 (J)		<0.0013					
2/2/2015	0.00023 (J)		<0.0013					
2/3/2015					0.00061 (J)		0.00023 (J)	
8/3/2015					0.00051 (JD)		0.00046 (JD)	
8/4/2015	<0.0013 (D)		<0.0013		. ,		, ,	
2/16/2016	<0.0013				0.00084 (J)		0.00048 (J)	
2/17/2016			<0.0013		.,		, ,	
8/31/2016	0.0001 (J)		<0.003		0.0003 (J)			
9/1/2016					, ,		0.0005 (J)	
11/28/2016			<0.003				. ,	
11/29/2016	<0.003							
11/30/2016					0.0004 (J)			
12/1/2016					, ,		0.0003 (J)	
2/22/2017			<0.003				. ,	
2/23/2017	<0.003				0.0003 (J)			
2/24/2017							0.0002 (J)	
5/9/2017	8E-05 (J)				0.0002 (J)			
5/10/2017			<0.003				0.0003 (J)	
7/17/2017							0.0004 (J)	
7/18/2017	<0.003		<0.003		0.0002 (J)			
10/16/2017							0.0006 (J)	
10/17/2017	0.0001 (J)		<0.003					
10/18/2017					0.0004 (J)			
2/20/2018			<0.003					
2/21/2018	<0.003				<0.003		<0.003	
8/7/2018	7.4E-05 (J)				0.00026 (J)		0.00096 (J)	
8/8/2018			7E-05 (J)					
2/26/2019		7.5E-05 (J)		5.3E-05 (J)		0.00038 (J)		0.0015 (J)
6/12/2019		, ,		<0.003		.,		•
6/13/2019		<0.003				0.00051 (J)		0.0015 (J)
8/20/2019		0.0001 (J)		0.00017 (J)				
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)		

Constituent: Cadmium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

T	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R
11/22/2010			<0.0013				<0.0013	
1/4/2011			<0.0013				<0.0013	
2/17/2011			<0.0013				<0.0013	
3/11/2011			<0.0013				<0.0013	
3/28/2011			<0.0013				<0.0013	
9/7/2011			<0.0013		<0.0013		<0.0013	
9/8/2011	<0.0013							
3/4/2012							<0.0013	
3/5/2012	<0.0013				<0.0013			
3/6/2012			<0.0013					
9/5/2012	<0.0013				<0.0013			
9/10/2012							<0.0013	
9/11/2012			<0.0013					
2/5/2013	<0.0013							
2/6/2013			<0.0013		<0.0013		<0.0013	
8/13/2013	<0.0013		<0.0013		<0.0013			
8/14/2013							<0.0013	
2/4/2014	<0.0013		<0.0013				<0.0013	
2/5/2014					<0.0013			
8/4/2014					0.00034 (J)		<0.0013	
8/5/2014	<0.0013		<0.0013					
2/2/2015	<0.0013		<0.0013				<0.0013	
2/3/2015					<0.0013			
8/3/2015					<0.0013 (D)		<0.0013 (D)	
8/4/2015	<0.0013 (D)		<0.0013					
2/16/2016	<0.0013				0.00025 (J)		<0.0013	
2/17/2016			<0.0013					
8/31/2016	<0.001		0.0001 (J)		<0.001			
9/1/2016							0.0001 (J)	
11/28/2016			0.0001 (J)					
11/29/2016	8E-05 (J)							
11/30/2016					<0.001		<0.001	
2/22/2017			<0.001					
2/23/2017	<0.001				<0.001			
2/24/2017							<0.001	
5/9/2017	<0.001				<0.001			
5/10/2017			<0.001				<0.001	
7/18/2017	<0.001		<0.001		<0.001		<0.001	
10/17/2017	<0.001		<0.001				<0.001	
10/18/2017					<0.001			
2/20/2018			<0.001				<0.001	
2/21/2018	<0.001				<0.001			
8/7/2018	<0.001				<0.001			
8/8/2018			<0.001				<0.001	
2/26/2019		<0.001		<0.001		0.00011 (J)		<0.001
6/12/2019				<0.001				<0.001
6/13/2019		<0.001				0.00021 (J)		
8/19/2019								<0.0025
8/20/2019		<0.0025		<0.0025				
8/21/2019		.0.005		.0.005		<0.0025		
10/9/2019		<0.0025		<0.0025		0.00040.75		0.0005
10/10/2019						0.00018 (J)		<0.0025

Constituent: Cadmium, Chromium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Plant Yates	Client: Southern	Company Data: 1	ates Gypsum Landt	111
	GWC-5R	GWC-5R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
9/9/1998			<0.004				
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				<0.0013			
9/8/2010				<0.0013			
3/10/2011				<0.0013			
9/7/2011	<0.0013						
9/8/2011	0.0010			<0.0013		<0.0013	
3/5/2012	<0.0013			<0.005		<0.005	
9/5/2012	<0.0013			0.000		<0.0013	
9/10/2012	0.00.0			<0.0013		0.0010	
2/5/2013	<0.0013			-0.0010		<0.0013	
2/6/2013	10.0013			<0.0013		10.0013	
8/12/2013				<0.0013			
8/13/2013				10.0013		<0.0013	
8/14/2013	<0.0013					10.0013	
2/4/2014	10.0013					<0.0013	
2/5/2014	<0.0013			0.0059		10.0013	
8/4/2014	0.00045 (J)			0.0000			
8/5/2014	0.00043 (3)			<0.0013		<0.0013	
2/2/2015				10.0013		0.0028	
2/3/2015	<0.0013					0.0020	
2/4/2015	-0.0013			<0.0013			
8/3/2015	0.00046 (JD)			0.0011 (J)			
8/4/2015	0.00040 (3D)			0.0011 (3)		<0.0013 (D)	
2/16/2016	0.00097 (J)			<0.0013		<0.0013 (D)	
8/31/2016	0.00097 (3)			<0.0013		0.0013 0.0012 (J)	
9/1/2016	0.0005 (J)			~0.01		0.0012 (3)	
11/28/2016	0.0003 (3)			<0.01			
11/29/2016				~0.01		0.0009 (J)	
12/1/2016	0.0004 (J)					0.0009 (3)	
2/22/2017	0.0004 (3)			<0.01			
2/23/2017				\(\text{0.01}\)		0.001 (J)	
2/24/2017	0.0003 (1)					0.001 (3)	
5/8/2017	0.0003 (J)			<0.01			
				<0.01		0.0011 (1)	
5/9/2017 5/10/2017	0.0003 (!)					0.0011 (J)	
	0.0003 (J)			-0.01			
7/17/2017	0.0004 (J)			<0.01		0.0008 / 15	
7/18/2017	0.0006 (!)			-0.01		0.0008 (J)	
10/16/2017	0.0006 (J)			<0.01		0.001 (1)	
10/17/2017				-0.01		0.001 (J)	
2/19/2018				<0.01			

Constituent: Cadmium, Chromium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Flant Tates	S Client. Southern	Company Data.	rates Gypsum Land	····
	GWC-5R	GWC-5R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
2/21/2018	<0.001					<0.01	
8/6/2018				<0.01			
8/7/2018	0.00083 (J)					<0.01	
2/25/2019					<0.01		
2/26/2019		0.00081 (J)					<0.01
6/12/2019					<0.01		
6/13/2019		0.00073 (J)					0.0009 (J)
8/19/2019					<0.01		
8/20/2019							0.0011 (J)
8/21/2019		0.0012 (J)					
10/8/2019					<0.01		
10/9/2019		0.0011 (J)					0.0012 (J)

Constituent: Chromium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			riant rates	Ciletti. Southern	Company Data. I	ates Gypsum Lanun	III	
	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R	GWC-5R	GWC-5R
11/22/2010	<0.0013				<0.0013			
1/4/2011	<0.0013				0.0062			
2/17/2011	<0.0013				<0.0013			
3/11/2011	<0.0013				<0.0013			
3/28/2011	<0.0013				<0.0013			
9/7/2011	<0.0013		<0.0013		<0.0013		<0.0013	
3/4/2012					<0.005			
3/5/2012			<0.005				<0.005	
3/6/2012	<0.005							
9/5/2012			<0.0013				<0.0013	
9/10/2012					<0.0013			
9/11/2012	<0.0013							
2/5/2013							<0.0013	
2/6/2013	<0.0013		<0.0013		<0.0013			
8/13/2013	0.0017		0.0019					
8/14/2013					<0.0013		0.0016	
2/4/2014	<0.0013				<0.0013			
2/5/2014			0.0023				0.0018	
8/4/2014			0.002		<0.0013		0.0029	
8/5/2014	<0.0013							
2/2/2015	<0.0013				<0.0013			
2/3/2015			0.0014				0.0017	
8/3/2015			0.0012 (JD)		<0.0013 (D)		0.0028 (D)	
8/4/2015	<0.0013		(*)		,		,	
2/16/2016			0.0017		<0.0013		0.0028	
2/17/2016	<0.0013							
8/31/2016	<0.01		0.0013 (J)					
9/1/2016			(0)		<0.01		0.0021 (J)	
11/28/2016	<0.01							
11/30/2016			0.001 (J)		0.0013 (J)			
12/1/2016			(-,		(-)		0.0017 (J)	
2/22/2017	<0.01						()	
2/23/2017			0.0012 (J)					
2/24/2017			()		<0.01		0.0018 (J)	
5/9/2017			0.0016 (J)				(-,	
5/10/2017	0.0008 (J)		(0)		0.0007 (J)		0.0024 (J)	
7/17/2017	(,,				(0)		0.0017 (J)	
7/18/2017	<0.01		0.0009 (J)		0.0011 (J)		(-)	
10/16/2017			(-)		(-,		0.0023 (J)	
10/17/2017	<0.01				<0.01		(-,	
10/18/2017			0.001 (J)					
2/20/2018	<0.01				<0.01			
2/21/2018			<0.01				<0.01	
8/7/2018			<0.01				0.0024 (J)	
8/8/2018	<0.01				<0.01		(-)	
2/26/2019	-	<0.01		<0.01	-	<0.01		0.0019 (J)
6/12/2019		<0.01		-		<0.01		· · /
6/13/2019		-		0.00073 (J)		-		0.0018 (J)
8/19/2019				\-'\		0.00051 (J)		• /
8/20/2019		<0.01				(-)		
8/21/2019				0.001 (J)				0.0024 (J)
10/9/2019		0.00059 (J)		` '				0.0024 (J)
		- \-/						• /

Constituent: Chromium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

GWC-2R GWC-3R GWC-3R GWC-4R GWC-5R GWC-5R 10/10/2019 0.0014 (J) 0.00057 (J)

Constituent: Chromium, Cobalt Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Plant Yates			ates Gypsum Landf	III
	GWC-6R	GWC-6R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
9/9/1998			0.013				
9/20/1999			<0.006				
9/12/2001			0.0024				
9/3/2002			<0.001				
7/29/2003			0.002				
12/5/2003			<0.001				
9/22/2004			<0.002				
5/1/2007				0.0067			
9/11/2007				<0.0025			
3/20/2008				<0.0025			
8/27/2008				<0.0025			
3/3/2009				<0.0025			
9/9/2009	<0.0013						
11/18/2009	<0.0013			<0.0025			
1/5/2010	<0.0013						
3/3/2010	<0.0013			0.0027			
9/7/2010	<0.0013						
9/8/2010				0.007			
3/10/2011	<0.0013			<0.0025			
9/8/2011	0.0018			<0.0025			
3/5/2012	<0.005			0.0032		<0.0025	
9/5/2012	0.0013					0.0018	
9/10/2012				<0.0013			
2/5/2013	<0.0013					0.0013	
2/6/2013				<0.0013			
8/12/2013				0.0045			
8/13/2013	0.0025					<0.0013	
2/4/2014	0.0013					<0.0013	
2/5/2014				<0.0013			
8/5/2014	0.0018			0.0027		<0.0013	
2/2/2015						0.0015	
2/3/2015	0.0015						
2/4/2015				0.0016			
8/3/2015				0.002			
8/4/2015	0.0028					<0.0013 (D)	
2/16/2016	0.001 (J)			0.0027		<0.0013	
8/31/2016	0.001 (0)			0.0053 (J)		0.0006 (J)	
9/1/2016	0.0015 (J)			(,,		(,,	
11/28/2016	(5)			0.0036 (J)			
11/29/2016	0.0014 (J)					<0.01	
2/22/2017	0.0011(0)			0.0049 (J)		0.01	
2/23/2017	0.0017 (J)			(0)		0.0009 (J)	
5/8/2017	0.0017 (0)			0.0059 (J)		0.0000 (0)	
5/9/2017				0.0000 (0)		0.0008 (J)	
5/10/2017	0.0015 (J)					(,,	
7/17/2017	0.0010(0)			0.0046 (J)			
7/18/2017	0.0012 (J)			(0)		0.0032 (J)	
10/16/2017	(0)			0.0034 (J)		(3)	
10/17/2017				(-)		0.0007 (J)	
10/18/2017	0.0012 (J)						
2/19/2018	<0.01			<0.01			
2/21/2018						<0.01	
						5.0.	

Constituent: Chromium, Cobalt Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
8/6/2018	<0.01			0.003 (J)			
8/7/2018						<0.01	
2/25/2019		<0.01			0.001 (J)		
2/26/2019							<0.01
6/12/2019					0.003 (J)		
6/13/2019		0.00089 (J)					0.00033 (J)
8/19/2019					0.0035 (J)		
8/20/2019		0.0017 (J)					0.00079 (J)
10/8/2019		0.0014 (J)			0.0039 (J)		
10/9/2019							0.00064 (J)

Constituent: Cobalt Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			riant rates	Ciletti. Southern	Company Data. I	ates Gypsum Lanui	III	
	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R	GWC-5R	GWC-5R
11/22/2010	0.038				<0.0025			
1/4/2011	0.049				0.0036			
2/17/2011	0.044				0.0035			
3/11/2011	0.038				0.0053			
3/28/2011	0.029				<0.0025			
9/7/2011	0.031		<0.0025		0.0033		<0.0025	
3/4/2012					0.0032			
3/5/2012			<0.0025				<0.0025	
3/6/2012	0.021							
9/5/2012			<0.0013				<0.0013	
9/10/2012					0.0067			
9/11/2012	0.017							
2/5/2013							<0.0013	
2/6/2013	0.025		<0.0013		0.0024			
8/13/2013	0.023		<0.0013					
8/14/2013					0.0014		<0.0013	
2/4/2014	0.019				<0.0013			
2/5/2014			<0.0013				<0.0013	
8/4/2014			<0.0013		<0.0013		<0.0013	
8/5/2014	0.023							
2/2/2015	0.022				<0.0013			
2/3/2015			<0.0013				<0.0013	
8/3/2015			<0.0013 (D)		<0.0013 (D)		<0.0013 (D)	
8/4/2015	0.021		. ,		,		. ,	
2/16/2016			<0.0013		0.0082		<0.0013	
2/17/2016	0.024							
8/31/2016	0.0239		<0.01					
9/1/2016					0.0023 (J)		<0.01	
11/28/2016	0.0189				()			
11/30/2016			<0.01		0.0008 (J)			
12/1/2016							<0.01	
2/22/2017	0.0184							
2/23/2017			<0.01					
2/24/2017					0.0025 (J)		<0.01	
5/9/2017			<0.01					
5/10/2017	0.0213				<0.01		<0.01	
7/17/2017							<0.01	
7/18/2017	0.0261		<0.01		0.0005 (J)			
10/16/2017							<0.01	
10/17/2017	0.0182				0.0006 (J)			
10/18/2017			<0.01					
2/20/2018	<0.01				<0.01			
2/21/2018			<0.01				<0.01	
8/7/2018			<0.01				<0.01	
8/8/2018	0.014				0.001 (J)			
2/26/2019		0.029		<0.01		<0.01		<0.01
6/12/2019		0.013				0.00078 (J)		
6/13/2019				0.01				<0.01
8/19/2019						0.001 (J)		
8/20/2019		0.014						
8/21/2019				0.0016 (J)				0.00034 (J)
10/9/2019		0.024						0.00031 (J)

Constituent: Cobalt Analysis Run 2/12/2020 7:24 PM View: Time Series

Constituent: Cobalt, Copper Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

ı	GWC-6R	GWC-6R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
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				<0.0025			
3/20/2008				<0.0025			
8/27/2008				0.0074			
3/3/2009				<0.0025			
9/9/2009	<0.0025						
11/18/2009	<0.0025			0.0029			
1/5/2010	<0.0025						
3/3/2010	<0.0025			0.005			
9/7/2010	<0.0025						
9/8/2010				<0.0025			
3/10/2011	<0.0025			0.0029			
9/8/2011	<0.0025			<0.013		<0.013	
3/5/2012	<0.0025			<0.013		<0.013	
9/5/2012	<0.0013					<0.005	
9/10/2012				<0.005			
2/5/2013	<0.0013					<0.005	
2/6/2013				<0.005			
8/12/2013				<0.005			
8/13/2013	<0.0013					<0.005	
2/4/2014	<0.0013					<0.005	
2/5/2014				<0.005			
8/5/2014	<0.0013			0.005		<0.005	
2/2/2015						0.0031 (J)	
2/3/2015	<0.0013			0.0005 (1)			
2/4/2015				0.0025 (J)			
8/3/2015	0.0014			0.0014 (J)		10 005 (D)	
8/4/2015	0.0014			0.0011 (1)		<0.005 (D)	
2/16/2016 9/1/2016	<0.0013 <0.01			0.0011 (J)		<0.005	
11/29/2016	<0.01						
2/22/2017	<0.01			0.0011 (J)			
2/23/2017	<0.01			0.0011 (3)		<0.025	
5/10/2017	<0.01					<0.025	
7/18/2017	<0.01						
10/18/2017	<0.01						
2/19/2018	<0.01			<0.005			
2/21/2018	~0.01			~0.003		<0.005	
8/6/2018	<0.01			<0.025		-0.000	
8/7/2018	-0.01			-0.020		<0.025	
2/25/2019		<0.01			<0.025	-0.023	
2/26/2019		3.01			3.020		<0.025
6/12/2019					0.00034 (J)		
6/13/2019		<0.01			2.3000. (0)		<0.025
8/20/2019		<0.005					

Constituent: Cobalt, Copper Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
10/8/2019		<0.005			0.00041 (J)		
10/9/2019							0.00079 (J)

Constituent: Copper Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

					,			
	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R	GWC-5R	GWC-5R
11/22/2010	<0.0025				<0.0025			
1/4/2011	<0.0025				0.0049			
2/17/2011	<0.0025				<0.0025			
3/11/2011	<0.0025				<0.0025			
3/28/2011	<0.0025				<0.0025			
9/7/2011	<0.013		<0.013		<0.013		<0.013	
3/4/2012					<0.013			
3/5/2012			<0.013				<0.013	
3/6/2012	<0.013							
9/5/2012			0.016				<0.005	
9/10/2012					<0.005			
9/11/2012	<0.005							
2/5/2013							<0.005	
2/6/2013	<0.005		<0.005		<0.005			
8/13/2013	<0.005		<0.005					
8/14/2013					<0.005		<0.005	
2/4/2014	<0.005				<0.005			
2/5/2014			<0.005				<0.005	
8/4/2014			0.0012 (J)		<0.005		0.0015 (J)	
8/5/2014	<0.005							
2/2/2015	<0.005				<0.005			
2/3/2015			<0.005				<0.005	
8/3/2015			<0.005 (D)		<0.005 (D)		<0.005 (D)	
8/4/2015	<0.005							
2/16/2016			0.00082 (J)		0.00088 (J)		<0.005	
2/17/2016	<0.005							
2/22/2017	<0.025							
2/23/2017			<0.025		.0.005		.0.005	
2/24/2017	-0.005				<0.025		<0.025	
2/20/2018 2/21/2018	<0.005		<0.005		<0.005		<0.005	
8/7/2018			<0.005				<0.005	
8/8/2018	<0.025		<0.025		<0.025		<0.025	
2/26/2019	-0.020	<0.025		<0.025	-0.020	<0.025		<0.025
6/12/2019		<0.025		-0.023		0.00025 (J)		-0.020
6/13/2019		-0.020		<0.025		0.00020 (0)		0.00049 (J)
10/9/2019		0.00024 (J)		5.020				0.00049 (J)
10/10/2019		3.33024 (0)		0.00033 (J)		<0.025		
. 5/ 10/2010				3.33000 (0)		0.020		

Constituent: Copper, Lead Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

ı	GWC-6R	GWC-6R	GWA-1	GWC-1R	GWC-1R	GWC-2R	GWC-2R
9/9/1998			0.006				
9/20/1999			<0.002				
9/12/2001			0.0042				
9/3/2002			<0.008				
7/29/2003			0.015				
12/5/2003			<0.011				
9/22/2004			<0.01				
9/9/2009	0.0028						
11/18/2009	0.0027						
1/5/2010	0.0035						
3/3/2010	<0.0025						
9/7/2010	<0.0025						
11/22/2010						<0.013	
1/4/2011						<0.013	
2/17/2011						<0.013	
3/10/2011	<0.0025						
3/11/2011						<0.013	
3/28/2011						<0.013	
9/7/2011						<0.013	
9/8/2011	<0.013			<0.013			
3/5/2012	<0.013			<0.013			
3/6/2012						<0.013	
9/5/2012	<0.005			<0.013			
9/11/2012						<0.013	
2/5/2013	<0.005			<0.013			
2/6/2013						<0.013	
8/13/2013	<0.005			<0.013		<0.013	
2/4/2014	<0.005			<0.013		<0.013	
8/5/2014	0.0012 (J)			<0.013		<0.013	
2/2/2015				<0.013		<0.013	
2/3/2015	0.0013 (J)						
8/4/2015	0.0043 (J)			<0.013 (D)		<0.013	
2/16/2016	<0.005			<0.013			
2/17/2016						<0.013	
8/31/2016				<0.005		<0.005	
11/28/2016						<0.005	
11/29/2016				<0.005			
2/22/2017						<0.005	
2/23/2017	0.0018 (J)			<0.005			
5/9/2017				<0.005			
5/10/2017						0.0001 (J)	
7/18/2017				<0.005		7E-05 (J)	
10/17/2017				<0.005		<0.005	
2/19/2018	<0.005						
2/20/2018						<0.005	
2/21/2018				<0.005			
8/6/2018	0.0016 (J)						
8/7/2018				<0.005			
8/8/2018						<0.005	
2/25/2019		0.0016 (J)					
2/26/2019					<0.005		<0.005
6/12/2019							<0.005

Constituent: Copper, Lead Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R	GWA-1	GWC-1R	GWC-1R	GWC-2R	GWC-2R
6/13/2019		0.0011 (J)			<0.005		
8/20/2019					<0.005		6.1E-05 (J)
10/8/2019		0.0011 (J)					
10/9/2019					5.2E-05 (J)		5.7E-05 (J)

Constituent: Lead, Mercury Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

					, ,			
	GWC-3R	GWC-3R	GWC-5R	GWC-5R	GWA-2	GWA-2	GWC-1R	GWC-1R
5/1/2007					<0.000254			
9/11/2007					<0.000254			
3/20/2008					<0.000145			
8/27/2008					<0.000145			
3/3/2009					<0.00025			
11/18/2009					<0.00025			
3/3/2010					<0.000591			
9/8/2010					<0.000591			
3/10/2011					<0.000299			
9/7/2011	<0.013		<0.013					
9/8/2011					<0.000168		<0.000168	
3/5/2012	<0.013		<0.013		<0.000123		<0.000123	
9/5/2012	<0.013		<0.013				<0.0002	
9/10/2012					<0.0002			
2/5/2013			<0.013				<0.0001	
2/6/2013	<0.013				<0.0001			
8/12/2013					<0.0002			
8/13/2013	<0.013						<0.0002	
8/14/2013			<0.013					
2/4/2014							<0.0002	
2/5/2014	<0.013		<0.013		<0.0002			
8/4/2014	<0.013		<0.013		*****			
8/5/2014	0.010		0.010		<0.000213		<0.000213	
2/2/2015					0.0002.0		<0.0001	
2/3/2015	<0.013		<0.013				-0.0001	
2/4/2015	-0.010		10.010		<0.0001			
8/3/2015	<0.013 (D)		<0.013 (D)		<0.0002			
8/4/2015	-0.010 (B)		10.010 (D)		10.0002		<0.0002 (D)	
2/16/2016	<0.013		<0.013		1.36E-05 (J)		<0.0002 (D)	
8/31/2016	0.0001 (J)		10.013		<0.0005		<0.0002	
9/1/2016	0.0001 (0)		<0.005		-0.0000		-0.0000	
11/28/2016			10.000		<0.0005			
11/29/2016					-0.0000		<0.0005	
11/30/2016	<0.005						0.0000	
12/1/2016	-0.000		<0.005					
2/22/2017			10.000		<0.0005			
2/23/2017	<0.005				-0.0000		<0.0005	
2/24/2017	-0.000		<0.005				-0.0000	
5/8/2017			10.000		<0.0005			
5/9/2017	<0.005				-0.0000		<0.0005	
5/10/2017	10.003		<0.005				10.0000	
7/17/2017			<0.005		<0.0005			
7/18/2017	<0.005		10.000		10.0003		<0.0005	
10/16/2017	~0.003		<0.005		<0.0005		<0.0003	
10/10/2017			~0.003		~0.0003		<0.0005	
10/17/2017	8E_05 (I)						~0.0000	
2/19/2018	8E-05 (J)				<0.0002			
2/19/2018	<0.00E		<0.005		~U.UUU∠		<0.0003	
	<0.005		~0.000		<0.0005		<0.0002	
8/6/2018	<0.00E		<0.005		<0.0005		<0.0005	
8/7/2018 2/25/2019	<0.005		<0.005			7.4E-05 (J)	<0.0005	
2/25/2019		<0.005		<0.005		7.4L-00 (J)		5.9E-05 (J)
2/20/2019		<u.uc< td=""><td></td><td>~0.005</td><td></td><td></td><td></td><td>J.JL-03 (J)</td></u.uc<>		~ 0.005				J.JL-03 (J)

Constituent: Lead, Mercury Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

ı	GWC-3R	GWC-3R	GWC-5R	GWC-5R	GWA-2	GWA-2	GWC-1R	GWC-1R
6/12/2019						<0.0005		
6/13/2019		<0.005		<0.005				<0.0005
8/19/2019						<0.0005		
8/20/2019								<0.0005
8/21/2019		8.2E-05 (J)		7E-05 (J)				
10/8/2019						<0.0002		
10/9/2019				5.9E-05 (J)				<0.0002
10/10/2019		<0.005						

Constituent: Mercury Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

					, , ,			
'	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R	GWC-5R	GWC-5R
11/22/2010	<0.000299				<0.000299			
1/4/2011	<0.000299				<0.000299			
2/17/2011	<0.000299				<0.000299			
3/11/2011	<0.000299				<0.000299			
3/28/2011	<0.000299				<0.000299			
9/7/2011	<0.000168		<0.000168		<0.000168		<0.000168	
3/4/2012					<0.000123			
3/5/2012			<0.000123				<0.000123	
3/6/2012	<0.000123							
9/5/2012			<0.0002				<0.0002	
9/10/2012					<0.0002			
9/11/2012	<0.0002							
2/5/2013							<0.0001	
2/6/2013	<0.0001		<0.0001		0.00014			
8/13/2013	<0.0002		<0.0002					
8/14/2013					<0.0002		<0.0002	
2/4/2014	<0.0002				<0.0002			
2/5/2014			<0.0002				<0.0002	
8/4/2014			<0.000213		<0.000213		<0.000213	
8/5/2014	<0.000213							
2/2/2015	<0.0001				<0.0001			
2/3/2015			<0.0001				<0.0001	
8/3/2015			<0.0002 (D)		<0.0002 (D)		<0.0002 (D)	
8/4/2015	<0.0002							
2/16/2016			1.34E-05 (J)		<0.0002		<0.0002	
2/17/2016	<0.0002							
8/31/2016	<0.0005		<0.0005					
9/1/2016					<0.0005		<0.0005	
11/28/2016	<0.0005							
11/30/2016			<0.0005		<0.0005			
12/1/2016							<0.0005	
2/22/2017	<0.0005							
2/23/2017			<0.0005					
2/24/2017					<0.0005		<0.0005	
5/9/2017			<0.0005					
5/10/2017	<0.0005				<0.0005		<0.0005	
7/17/2017							<0.0005	
7/18/2017	<0.0005		<0.0005		<0.0005			
10/16/2017							<0.0005	
10/17/2017	<0.0005				<0.0005			
10/18/2017			<0.0005					
2/20/2018	<0.0002				<0.0002			
2/21/2018			<0.0002				<0.0002	
8/7/2018			<0.0005				<0.0005	
8/8/2018	<0.0005				<0.0005			
2/26/2019		7.1E-05 (J)		6.4E-05 (J)		5.8E-05 (J)		6E-05 (J)
6/12/2019		<0.0005				<0.0005		
6/13/2019				<0.0005				<0.0005
8/19/2019						<0.0005		
8/20/2019		<0.0005						
8/21/2019				<0.0005				<0.0005
10/9/2019		<0.0002						<0.0002

Constituent: Mercury Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

GWC-2R GWC-2R GWC-3R GWC-4R GWC-5R GWC-5R

10/10/2019 0.00043 (J) <0.0002

Constituent: Mercury, Nickel Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Plant Yates			ates Gypsum Landf	111
	GWC-6R	GWC-6R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
9/9/1998			<0.011				
9/20/1999			<0.011				
9/12/2001			<0.005				
9/3/2002			<0.005				
7/29/2003			0.0061				
12/5/2003			<0.006				
9/22/2004			<0.004				
5/1/2007				0.0061			
9/11/2007				0.021			
3/20/2008				<0.0025			
8/27/2008				<0.0025			
3/3/2009				0.005			
9/9/2009	<0.00025						
11/18/2009	<0.00025			0.0052			
1/5/2010	<0.00025						
3/3/2010	<0.000591			0.011			
9/7/2010	<0.000591						
9/8/2010				0.012			
3/10/2011	<0.000299			0.0032			
9/8/2011	<0.000168			0.0046		0.009	
3/5/2012	<0.000123			0.0053		0.0035	
9/5/2012	<0.0002					0.0027	
9/10/2012	0.0002			0.0074		0.0027	
2/5/2013	<0.0001					0.0026	
2/6/2013				0.0077			
8/12/2013				0.016			
8/13/2013	<0.0002					<0.0025	
2/4/2014	<0.0002					<0.0025	
2/5/2014	0.0002			0.019		0.0020	
8/5/2014	<0.000213			0.0057		0.0013 (J)	
2/2/2015						0.0023 (J)	
2/3/2015	<0.0001					(,,	
2/4/2015				0.0055			
8/3/2015				0.0055			
8/4/2015	<0.0002					<0.0025 (D)	
2/16/2016	1.13E-05 (J)			0.0039		<0.0025	
9/1/2016	<0.0005						
11/29/2016	<0.0005						
2/22/2017				0.0051 (J)			
2/23/2017	<0.0005			(-,		0.0026 (J)	
5/10/2017	<0.0005						
7/18/2017	<0.0005						
10/18/2017	<0.0005						
2/19/2018	<0.0002			<0.005			
2/21/2018	-					0.001 (J)	
8/6/2018	<0.0005			0.003 (J)		\-/	
8/7/2018				\-/		<0.01	
2/25/2019		6.7E-05 (J)			0.0026 (J)	9- - -	
2/26/2019		(-/			\.		<0.01
6/12/2019					0.0038 (J)		
6/13/2019		<0.0005			× \ - /		0.00072 (J)
8/20/2019		<0.0005					``

Constituent: Mercury, Nickel Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R	GWA-1	GWA-2	GWA-2	GWC-1R	GWC-1R
10/8/2019		<0.0002			0.0051 (J)		
10/9/2019							0.0015 (J)

Constituent: Nickel Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

					,			
	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R	GWC-5R	GWC-5R
11/22/2010	0.0096				<0.0025			
1/4/2011	0.0084				<0.0025			
2/17/2011	0.0088				<0.0025			
3/11/2011	0.0058				<0.0025			
3/28/2011	0.0058				<0.0025			
9/7/2011	0.005		0.0054		<0.0025		<0.0025	
3/4/2012					<0.0025			
3/5/2012			<0.0025				<0.0025	
3/6/2012	<0.0025							
9/5/2012			<0.0025				<0.0025	
9/10/2012					<0.0025			
9/11/2012	<0.0025							
2/5/2013							<0.0025	
2/6/2013	<0.0025		<0.0025		<0.0025			
8/13/2013	0.003		0.0032					
8/14/2013					<0.0025		0.0032	
2/4/2014	0.0026				0.0033			
2/5/2014			0.0039				0.0032	
8/4/2014			0.0024 (J)		0.0015 (J)		0.0059	
8/5/2014	0.0015 (J)							
2/2/2015	<0.0025				<0.0025			
2/3/2015			<0.0025				0.0013 (J)	
8/3/2015			<0.0025 (D)		<0.0025 (D)		0.0039 (D)	
8/4/2015	<0.0025							
2/16/2016			<0.0025		<0.0025		0.0036	
2/17/2016	<0.0025							
2/22/2017	0.0009 (J)							
2/23/2017			<0.01					
2/24/2017					0.0021 (J)		0.0019 (J)	
2/20/2018	<0.005				<0.005			
2/21/2018			<0.005				0.0013 (J)	
8/7/2018			<0.01				0.0019 (J)	
8/8/2018	<0.01				0.0012 (J)			
2/26/2019		0.0068 (J)		<0.01		<0.01		0.0023 (J)
6/12/2019		0.00043 (J)				0.00082 (J)		
6/13/2019				<0.01				0.0019 (J)
10/9/2019		0.00058 (J)						0.0019 (J)
10/10/2019				<0.01		0.00084 (J)		

Constituent: Nickel, Selenium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Plant Yate		n Company Da	ata: Yates Gypsum Lan	atili
	GWC-6R	GWC-6R	GWA-1	GWC-1R	GWC-1R	GWC-2R	GWC-2R
9/9/1998			<0.002				
9/20/1999			<0.002				
9/12/2001			<0.0012				
9/3/2002			<0.012				
7/29/2003			0.015				
12/5/2003			<0.012				
9/22/2004			<0.012				
9/9/2009	<0.0025						
11/18/2009	<0.0025						
1/5/2010	<0.0025						
3/3/2010	<0.0025						
9/7/2010	<0.0025						
11/22/2010						<0.013	
1/4/2011						<0.013	
2/17/2011						<0.013	
3/10/2011	<0.0025						
3/11/2011						<0.013	
3/28/2011						<0.013	
9/7/2011						<0.013	
9/8/2011	<0.0025			<0.013			
3/5/2012	<0.0025			<0.013			
3/6/2012						<0.013	
9/5/2012	<0.0025			<0.005			
9/11/2012						<0.005	
2/5/2013	<0.0025			<0.005			
2/6/2013						<0.005	
8/13/2013	<0.0025			<0.005		<0.005	
2/4/2014	<0.0025			<0.005		<0.005	
8/5/2014 2/2/2015	<0.0025			<0.005 <0.005		<0.005 <0.005	
2/3/2015	<0.0025			10.003		10.003	
8/4/2015	<0.0025			<0.005 (D)		<0.005	
2/16/2016	<0.0025			<0.005		0.000	
2/17/2016						<0.005	
8/31/2016				0.0039 (J)		0.0029 (J)	
11/28/2016						0.0019 (J)	
11/29/2016				0.0033 (J)			
2/22/2017						0.0015 (J)	
2/23/2017	0.0015 (J)			0.0097 (J)			
5/9/2017				0.0066 (J)			
5/10/2017						0.0016 (J)	
7/18/2017				0.0021 (J)		0.0024 (J)	
10/17/2017				0.003 (J)		0.0028 (J)	
2/19/2018	<0.005						
2/20/2018						<0.01	
2/21/2018				<0.01			
8/6/2018	0.0026 (J)			0.04			
8/7/2018				<0.01		0.0005 (1)	
8/8/2018 2/25/2019		0.0033 (1)				0.0025 (J)	
2/25/2019		0.0023 (J)			0.0014 (J)		0.003 (J)
6/12/2019					0.0017 (0)		0.003 (J)
5. 12.2010							

Constituent: Nickel, Selenium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

						• • • • • • • • • • • • • • • • • • • •	
	GWC-6R	GWC-6R	GWA-1	GWC-1R	GWC-1R	GWC-2R	GWC-2R
6/13/2019		0.0037 (J)			<0.01		
8/20/2019					0.0022 (J)		0.0032 (J)
10/8/2019		0.0021 (J)					
10/9/2019					0.0023 (J)		0.0026 (J)

Constituent: Selenium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R	GWC-4R	GWC-4R	GWC-5R	GWC-5R	GWC-6R	GWC-6R
9/9/2009							<0.013	
11/18/2009							<0.013	
1/5/2010							<0.013	
3/3/2010							<0.013	
9/7/2010							<0.013	
11/22/2010			<0.013					
1/4/2011			<0.013					
2/17/2011			<0.013					
3/10/2011							<0.013	
3/11/2011			<0.013					
3/28/2011			<0.013					
9/7/2011	<0.013		<0.013		<0.013			
9/8/2011							<0.013	
3/4/2012			<0.013					
3/5/2012	<0.013				0.014		<0.013	
9/5/2012	<0.005				0.012		<0.005	
9/10/2012			0.011					
2/5/2013					0.011		<0.005	
2/6/2013	<0.005		0.011					
8/13/2013	0.0057						<0.005	
8/14/2013			0.013		0.025			
2/4/2014			0.017				<0.005	
2/5/2014	<0.005				0.02			
8/4/2014	<0.005		0.0085		0.032			
8/5/2014							<0.005	
2/2/2015			0.0089					
2/3/2015	<0.005				0.011		<0.005	
8/3/2015	<0.005 (D)		0.0067 (D)		0.046 (D)			
8/4/2015							<0.005	
2/16/2016	<0.005		0.0047 (J)		0.022		<0.005	
8/31/2016	0.0038 (J)							
9/1/2016			0.0132		0.0212		0.002 (J)	
11/29/2016							0.0017 (J)	
11/30/2016	0.0054 (J)		0.0046 (J)					
12/1/2016					0.0234			
2/23/2017	0.002 (J)						0.0018 (J)	
2/24/2017			0.0108		0.0154			
5/9/2017	<0.01							
5/10/2017			0.0054 (J)		0.0152		0.0023 (J)	
7/17/2017					0.0136			
7/18/2017	0.0027 (J)		0.0047 (J)				0.0046 (J)	
10/16/2017					0.0242			
10/17/2017			0.004 (J)					
10/18/2017	0.0047 (J)						0.0037 (J)	
2/19/2018							<0.01	
2/20/2018			<0.01					
2/21/2018	<0.01				0.0127			
8/6/2018							0.0047 (J)	
8/7/2018	0.0016 (J)				0.021			
8/8/2018			0.0041 (J)					
2/25/2019								0.0051 (J)
2/26/2019		0.002 (J)		0.0027 (J)		0.024		

Constituent: Selenium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R	GWC-4R	GWC-4R	GWC-5R	GWC-5R	GWC-6R	GWC-6R
6/12/2019				0.0029 (J)				
6/13/2019		0.0089 (J)				0.027		0.0048 (J)
8/19/2019				0.003 (J)				
8/20/2019								0.0039 (J)
8/21/2019		0.004 (J)				0.037		
10/8/2019								0.0031 (J)
10/9/2019						0.034		
10/10/2019		0.0021 (J)		0.0024 (J)				

Constituent: Thallium, Vanadium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Flailt Tates	Ciletit. Southern	Company Data. I	ates Gypsuin Lanui	"	
ı	GWA-2	GWA-2	GWC-2R	GWC-2R		GWC-5R	GWA-2	GWA-2
5/1/2007	<0.002						0.0055	
9/11/2007	<0.002						0.004	
3/20/2008	<0.002						<0.0025	
8/27/2008	<0.002						0.0029	
3/3/2009	<0.002						<0.0025	
11/18/2009	<0.002						<0.0025	
3/3/2010	<0.002						<0.0025	
9/8/2010	<0.002						<0.0025	
11/22/2010			<0.001					
1/4/2011			<0.001					
2/17/2011			<0.001					
3/10/2011	<0.001						<0.0025	
3/11/2011			<0.001					
3/28/2011			<0.001					
9/7/2011			<0.001		<0.001			
9/8/2011	<0.001						<0.0025	
3/5/2012	<0.001				<0.001		<0.01	
3/6/2012	0.001		<0.001		0.001		0.01	
9/5/2012			0.00		<0.001			
9/10/2012	<0.001				0.001		<0.005	
9/11/2012	0.001		<0.001				0.000	
2/5/2013			10.001		<0.001			
2/6/2013	<0.001		<0.001		-0.001		<0.005	
8/12/2013	<0.001		10.001				<0.005	
8/13/2013	-0.001		<0.001				-0.000	
8/14/2013			40.001		<0.001			
2/4/2014			<0.002		-0.001			
2/5/2014	<0.002		-0.002		<0.002		<0.005	
8/4/2014	10.002				<0.002		10.000	
8/5/2014	<0.001				-0.001		<0.005	
2/2/2015	-0.001		<0.001				-0.000	
2/3/2015			10.001		<0.001			
2/4/2015	<0.001				-0.001		<0.005	
8/3/2015	0.001						0.0013 (J)	
2/16/2016	<0.001				<0.001		<0.005	
2/17/2016	-0.001		7E-05 (J)		-0.001		-0.000	
8/31/2016	<0.001		<0.001					
9/1/2016	0.001		0.001		<0.001			
11/28/2016	<0.001		<0.001		0.001			
12/1/2016	0.001		0.001		<0.001			
2/22/2017	<0.001		<0.001		0.001		<0.01	
2/24/2017	0.001		0.00		<0.001		0.01	
	6E-05 (J)				0.001		<0.01	
5/10/2017	02 00 (0)		<0.001		<0.001		-0.01	
	6E-05 (J)		10.001		<0.001		<0.01	
7/18/2017	02 00 (0)		<0.001		-0.001		-0.01	
	7E-05 (J)		0.00		<0.001			
10/10/2017	00 (0)		<0.001		5.55.			
2/19/2018	<0.001						<0.01	
2/20/2018	5.00.		<0.001					
2/21/2018			00 .		<0.001			
8/6/2018	<0.001						<0.01	

Constituent: Thallium, Vanadium Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	Talk tale Calling Company Call tale Cype III									
	GWA-2	GWA-2	GWC-2R	GWC-2R	GWC-5R	GWC-5R	GWA-2	GWA-2		
8/7/2018					<0.001					
8/8/2018			<0.001							
2/25/2019		<0.001						<0.01		
2/26/2019				<0.001		<0.001				
6/12/2019		<0.001		<0.001				0.0032 (J)		
6/13/2019						<0.001				
8/19/2019		5.5E-05 (J)								
8/20/2019				<0.001						
8/21/2019						5.3E-05 (J)				
10/8/2019		<0.001						<0.01		
10/9/2019				<0.001		<0.001				

Constituent: Vanadium Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R	GWC-2R	GWC-2R	I GWC-3R	GWC-3R	GWC-4R	GWC-4R
11/22/2010			<0.0025				<0.0025	
1/4/2011			<0.0025				<0.0025	
2/17/2011			<0.0025				<0.0025	
3/11/2011			<0.0025				<0.0025	
3/28/2011			<0.0025				<0.0025	
9/7/2011			<0.0025		<0.0025		<0.0025	
9/8/2011	<0.0025							
3/4/2012							<0.01	
3/5/2012	<0.01				<0.01			
3/6/2012			<0.01					
9/5/2012	<0.005				<0.005			
9/10/2012							<0.005	
9/11/2012			<0.005					
2/5/2013	<0.005							
2/6/2013			<0.005		<0.005		<0.005	
8/13/2013	<0.005		<0.005		<0.005			
8/14/2013							<0.005	
2/4/2014	<0.005		<0.005				<0.005	
2/5/2014					<0.005			
8/4/2014					<0.005		<0.005	
8/5/2014	0.0011 (J)		<0.005					
2/2/2015	0.0051		<0.005				<0.005	
2/3/2015					<0.005			
8/3/2015					<0.005 (D)		<0.005 (D)	
8/4/2015	<0.005 (D)		<0.005					
2/16/2016	0.00075 (J)				<0.005		<0.005	
2/17/2016			<0.005					
2/22/2017			<0.01					
2/23/2017	<0.01				<0.01			
2/24/2017							<0.01	
5/9/2017	<0.01				<0.01			
5/10/2017			<0.01				<0.01	
7/18/2017	<0.01		<0.01		<0.01		<0.01	
2/20/2018			<0.01				<0.01	
2/21/2018	<0.01				<0.01			
8/7/2018	<0.01				<0.01			
8/8/2018			<0.01				<0.01	
2/26/2019		<0.01		<0.01		<0.01		<0.01
6/12/2019				0.00079 (J)				0.00088 (J)
6/13/2019		<0.01				0.0021 (J)		
10/9/2019		<0.01		<0.01				
10/10/2019						0.0011 (J)		<0.01

Constituent: Vanadium, Zinc Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

SWY-1009								
1000000000000000000000000000000000000			GWC-5R	GWC-6R				GWA-2
99/2002	9/9/1998					0.01		
90/2007	9/20/1999					0.017		
1982	9/12/2001					0.017		
1922/2016	9/3/2002					0.015		
1920004	7/29/2003					0.022		
ST10007	12/5/2003					0.0087		
ST10007						<0.008		
1000000000000000000000000000000000000							0.0081	
\$1000000000000000000000000000000000000							0.0049	
2022/2019								
\$\times \$\ti								
11/18/2009								
1182009				<0.0025				
1,022010							0.0038	
97/2010								
97/2010							0.0085	
9822101								
917/2011							0.0065	
97/2011 4,0025				<0.0025				
98/2011		<0.0025		0.0020			0.0020	
		0.0020		<0.0025			0.004	
915/2012 0.005 0.005 0.005 0.005		<0.01						
9/10/2012							0.0000	
2/52013 <0.005		0.000		0.000			0.0052	
262013		<0.005		<0.005			0.0002	
8/13/2013		10.003		10.000			0.0038	
8/13/2013								
8/14/2013 <0.005				<0.005			0.0070	
2/4/2014 < 0.005		<0.005		10.000				
2/5/2014 <0.0005		10.003		<0.005				
8/4/2014 0.0022 (J) 8/5/2014 0.005 0.0015 (J) 0.0037 2/3/2015 0.005 0.0093 (J) 2/4/2015 0.0019 (JD) 0.0030 (J) 8/4/2015 0.0011 (J) 0.0036 (J) 2/16/2016 0.0011 (J) 0.0011 (J) 0.0011 (J) 0.0042 (J) 2/22/2017 0.01 0.01 2/22/2017 0.01 0.01 5/6/2017 0.01 0.01 5/10/2017 0.01 0.01 5/10/2017 0.01 0.01 5/10/2017 0.01 0.01 5/10/2017 0.01 0.01 8/4/2018 0.001 8/4/2018 0.001 8/6/2018 0.001 8/6/2018 0.001 8/6/2018 0.001 8/6/2018 0.001 8/6/2018 0.001		<0.005		-0.000				
8/5/2014 0.0015 (J) 0.0037 2/3/2015 <0.005								
2/3/2015 <0.005		0.0022 (3)		0.0015 (1)			0.0037	
2/4/2015 0.0019 (JD) 0.0036 (J) 8/4/2015 0.0011 (J) 0.0014 (J) 2/16/2016 0.0011 (J) 0.0024 (J) 2/2/2017 0.001 0.0042 (J) 2/2/2017 <0.01		<0.005					0.0037	
8/3/2015 0.0019 (JD) 0.0036 (J) 2/16/2016 0.0011 (J) 0.0011 (J) 0.0024 (J) 2/22/2017 0.01 0.0042 (J) 2/23/2017 <0.01		10.003		0.00033 (3)			0.0057	
8/4/2015 0.0011 (J) 0.0014 (J) 0.0024 (J) 2/16/2016 0.0011 (J) 0.0042 (J) 0.0042 (J) 2/23/2017 < 0.01		0.0019 (ID)						
2/16/2016 0.0011 (J) 0.0011 (J) 0.0011 (J) 0.0024 (J) 2/22/2017		0.0019 (3D)		0.0036 (1)			0.0043	
2/22/2017 < 0.01		0.0011 (1)					0.0024 (1)	
2/23/2017 <0.01		0.0011(0)		0.0011(0)				
2/24/2017 < 0.01				<0.01			0.0042 (3)	
5/8/2017 < 0.01		<0.01		<0.01				
5/10/2017 <0.01		~0.01					0.0025 (1)	
7/17/2017 < 0.01 7/18/2017 < 0.01 2/19/2018 < 0.01 2/21/2018 < 0.01 8/6/2018 < 0.01 8/7/2018 < 0.01 2/25/2019 < 0.01 <p>< 0.01</p> < 0.01 < 0.0032 (J) < 0.01 < 0.01 < 0.01 < 0.0037 (J) < 0.013 < 0.013		<0.01		<0.01			0.0025 (3)	
7/18/2017 < 0.01 2/19/2018 < 0.01 < 0.01 2/21/2018 < 0.01 8/6/2018				<0.01			0.0033 (1)	
2/19/2018 <0.01		<0.01		<0.01			0.0032 (3)	
2/21/2018 < 0.01 8/6/2018							-0.01	
8/6/2018 0.0029 (J) 0.0037 (J) 8/7/2018 <0.01 2/25/2019 <0.01 0.013 2/26/2019 <0.01		-0.01		<0.01			<0.01	
8/7/2018 <0.01 2/25/2019 <0.01 0.013 2/26/2019 <0.01		\U.U1		0.0020 (1)			0.0027 (!)	
2/25/2019 <0.01 0.013 2/26/2019 <0.01		<0.01		0.0029 (J)			0.0037 (J)	
2/26/2019 <0.01		~U.U I			~0.01			0.012
			<0.01		~ U.U1			0.013
U112/2013 <uut< td=""><td></td><td></td><td>~U.U1</td><td></td><td></td><td></td><td></td><td><0.01</td></uut<>			~U.U1					<0.01
	0/12/2019							V.U1

Constituent: Vanadium, Zinc Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	T						
	GWC-5R	GWC-5R	GWC-6R	GWC-6R	GWA-1	GWA-2	GWA-2
6/13/2019		<0.01		<0.01			
10/8/2019				<0.01			0.0078 (J)
10/9/2019		<0.01					

Constituent: Zinc Analysis Run 2/12/2020 7:24 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

					,			
	GWC-1R	GWC-1R	GWC-2R	GWC-2R	GWC-3R	GWC-3R	GWC-4R	GWC-4R
11/22/2010			0.0047				<0.0025	
1/4/2011			0.0038				<0.0025	
2/17/2011			0.0074				<0.0025	
3/11/2011			0.0038					
3/28/2011			<0.0025				<0.0025	
9/7/2011			0.0059		0.0064		<0.0025	
9/8/2011	0.0048							
3/4/2012							<0.0025	
3/5/2012	0.0038				0.0043			
3/6/2012			0.0032					
9/5/2012	0.0051				0.0069			
9/10/2012							<0.0025	
9/11/2012			0.0029					
2/5/2013	<0.0025							
2/6/2013			0.0036		<0.0025		<0.0025	
8/13/2013	<0.0025		0.0066		0.011			
8/14/2013							<0.0025	
2/4/2014	0.0037		0.011				0.0034	
8/4/2014					0.012		0.0013 (J)	
8/5/2014	0.0019 (J)		0.0032					
2/2/2015	0.0051		0.0031				<0.0025	
2/3/2015					0.0061			
8/3/2015					0.0037 (D)		<0.0025 (D)	
8/4/2015	0.0017 (JD)		0.0017 (J)					
2/16/2016	0.0015 (J)				0.0093		0.0017 (J)	
2/17/2016			0.0034					
2/22/2017			0.0024 (J)					
2/23/2017	0.0024 (J)				0.0031 (J)			
2/24/2017							0.0028 (J)	
5/9/2017	0.0016 (J)				0.0025 (J)			
5/10/2017			0.0022 (J)				0.0014 (J)	
7/18/2017	0.0015 (J)		0.0017 (J)		0.0028 (J)		0.0015 (J)	
2/20/2018			<0.01				<0.01	
2/21/2018	<0.01				0.003 (J)			
8/7/2018	0.0044 (J)				0.0036 (J)			
8/8/2018			0.0021 (J)				0.0033 (J)	
2/26/2019		0.0022 (J)		0.003 (J)		0.0033 (J)		<0.01
6/12/2019				0.0019 (J)				<0.01
6/13/2019		<0.01				0.0069 (J)		
10/9/2019		0.0078 (J)		0.0069 (J)				
10/10/2019						0.0079 (J)		0.006 (J)

Constituent: Zinc Analysis Run 2/12/2020 7:24 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

			Plant Yates	Client: Southern Company	Data: Yates Gypsum Land	111	
	GWC-5R	GWC-5R		GWC-6R			
9/9/2009			0.003				
11/18/2009			<0.0025				
1/5/2010			0.0027				
3/3/2010			<0.0025				
9/7/2010			<0.0025				
3/10/2011			<0.0025				
9/7/2011	0.0064						
9/8/2011			<0.0025				
3/5/2012	0.0034		0.0053				
9/5/2012	0.0035		0.0033				
2/5/2013	0.0027		<0.0025				
8/13/2013			0.0038				
8/14/2013	0.0041						
2/4/2014			0.0046				
2/5/2014	0.011						
8/4/2014	0.011						
8/5/2014			0.0019 (J)				
2/3/2015	0.0044		0.0026				
8/3/2015	0.011 (D)						
8/4/2015			0.0035				
2/16/2016	0.014		0.002 (J)				
2/23/2017			0.0038 (J)				
2/24/2017	0.0043 (J)						
5/10/2017	0.0042 (J)		0.0027 (J)				
7/17/2017	0.0055 (J)						
7/18/2017			0.0024 (J)				
2/19/2018			<0.01				
2/21/2018	0.0102						
8/6/2018			0.004 (J)				
8/7/2018	0.015						
2/25/2019				0.0028 (J)			
2/26/2019		0.015					
6/13/2019		0.015		<0.01			
10/8/2019				0.006 (J)			
10/9/2019		0.025					
1/21/2020		0.015					

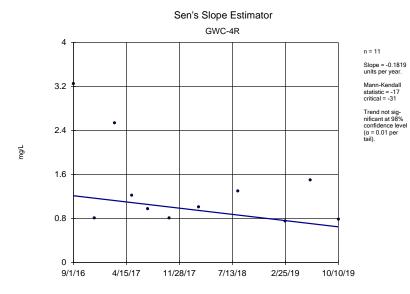
Trend Test

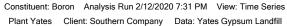
	Plant Yates	Client: South	ern Company	Data: Yates Gy	psum Lar	ndfill l	Printed 2/12/20	20, 7:33 PM			
Constituent	Well	<u>Slope</u>	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Chloride (mg/L)	GWC-3R	-0.722	-35	-31	Yes	11	0	n/a	n/a	0.02	NP
TDS (mg/L)	GWC-1R	-134.8	-33	-31	Yes	11	0	n/a	n/a	0.02	NP

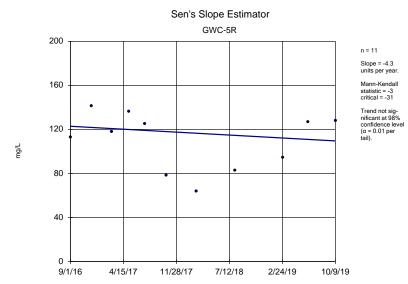
Trend Test

Constituent Boron (mg/L) Calcium (mg/L) Calcium (mg/L) Calcium (mg/L) Chloride (mg/L) Chloride (mg/L) Chloride (mg/L) Chloride (mg/L) Sulfate (mg/L) Sulfate (mg/L) Sulfate (mg/L) TDS (mg/L) TDS (mg/L) TDS (mg/L) TDS (mg/L)

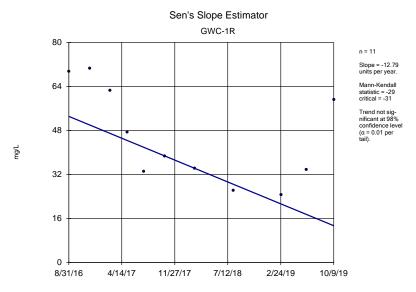
Plant Yates	Client: Sou	thern Company	Data: Yates	Gypsum La	andfill	Printed 2/12/2	020, 7:33 PM			
Well	<u>Slope</u>	Calc.	<u>Critical</u>	Sig.	<u>N</u>	%NDs	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
GWC-4R	-0.1819	-17	-31	No	11	0	n/a	n/a	0.02	NP
GWC-1R	-12.79	-29	-31	No	11	0	n/a	n/a	0.02	NP
GWC-5R	-4.3	-3	-31	No	11	0	n/a	n/a	0.02	NP
GWC-6R	24.33	29	31	No	11	0	n/a	n/a	0.02	NP
GWC-1R	4.432	17	31	No	11	0	n/a	n/a	0.02	NP
GWC-2R	0.1006	2	31	No	11	0	n/a	n/a	0.02	NP
GWC-3R	-0.722	-35	-31	Yes	11	0	n/a	n/a	0.02	NP
GWC-4R	-6.297	-19	-31	No	11	0	n/a	n/a	0.02	NP
GWC-1R	-97.72	-31	-31	No	11	0	n/a	n/a	0.02	NP
GWC-5R	-48.98	-9	-31	No	11	0	n/a	n/a	0.02	NP
GWC-6R	142	29	31	No	11	0	n/a	n/a	0.02	NP
GWC-1R	-134.8	-33	-31	Yes	11	0	n/a	n/a	0.02	NP
GWC-2R	41.81	13	31	No	11	0	n/a	n/a	0.02	NP
GWC-5R	-68.65	-7	-31	No	11	0	n/a	n/a	0.02	NP
GWC-6R	208.2	29	31	No	11	0	n/a	n/a	0.02	NP



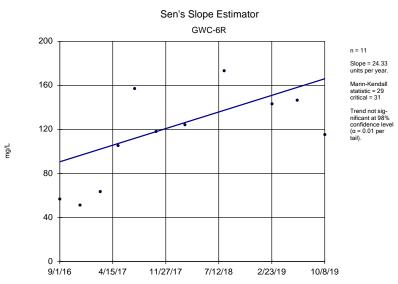




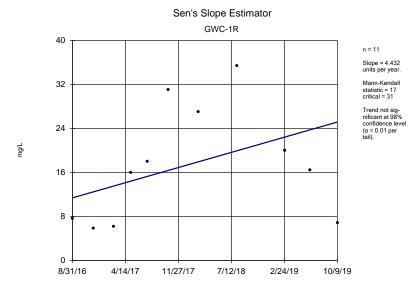
Constituent: Calcium Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



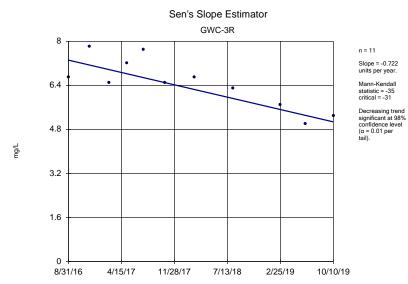
Constituent: Calcium Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



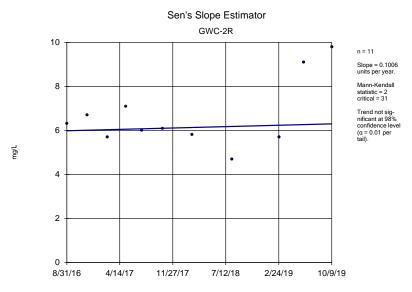
Constituent: Calcium Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



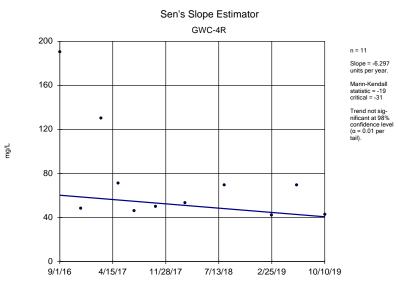
Constituent: Chloride Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



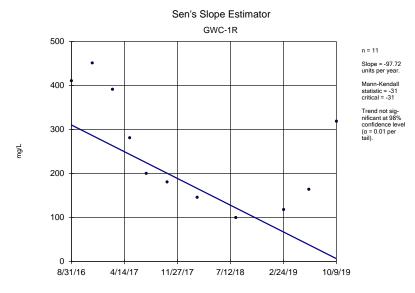
Constituent: Chloride Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



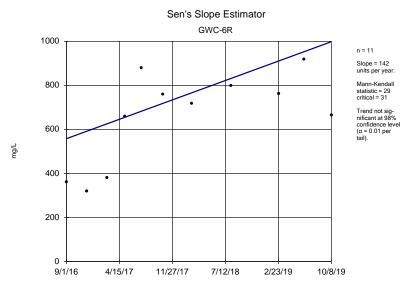
Constituent: Chloride Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



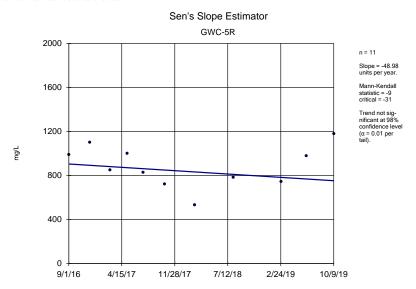
Constituent: Chloride Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



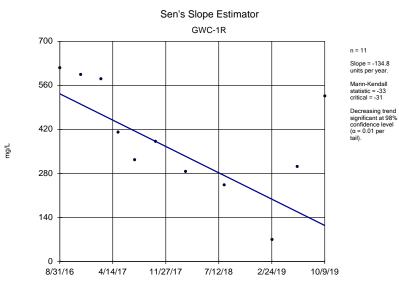
Constituent: Sulfate Analysis Run 2/12/2020 7:31 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



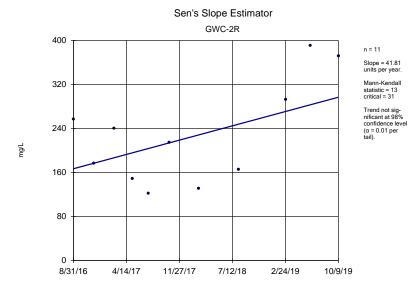
Constituent: Sulfate Analysis Run 2/12/2020 7:31 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



Constituent: Sulfate Analysis Run 2/12/2020 7:31 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

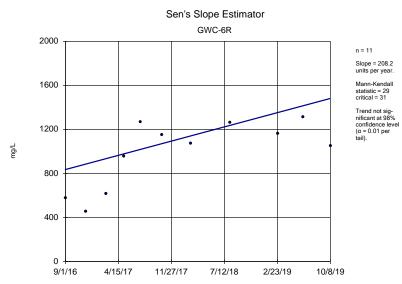


Constituent: TDS Analysis Run 2/12/2020 7:31 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

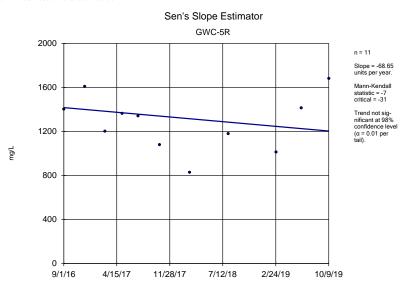


Constituent: TDS Analysis Run 2/12/2020 7:31 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.25 Sanitas software licensed to ACC. UG



Constituent: TDS Analysis Run 2/12/2020 7:31 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



Constituent: TDS Analysis Run 2/12/2020 7:31 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Constituent: Boron, Calcium Analysis Run 2/12/2020 7:33 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

				, ,
	GWC-4R	GWC-1R	GWC-5R	GWC-6R
8/31/2016		69.4		
9/1/2016	3.25		113	56.8
11/29/2016		70.6 (B)		50.7 (B)
11/30/2016	0.813			
12/1/2016			141 (B)	
2/23/2017		62.4		63.5
2/24/2017	2.53		118	
5/9/2017		47.4		
5/10/2017	1.22		136	105
7/17/2017			125	
7/18/2017	0.97	33.2		157
10/16/2017			78.2	
10/17/2017	0.804	38.7		
10/18/2017				118
2/19/2018				124
2/20/2018	1.01			
2/21/2018		34.3	64	
8/6/2018				173
8/7/2018		26.2	83	
8/8/2018	1.3			
2/25/2019				143
2/26/2019	0.75	24.7 (J)	94.4	
6/12/2019	1.5			
6/13/2019		33.8	127	146
10/8/2019				115
10/9/2019		59.1	128	
10/10/2019	0.78			

Constituent: Chloride Analysis Run 2/12/2020 7:33 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

T	GWC-1R	GWC-2R	GWC-3R	GWC-4R
8/31/2016	7.6	6.3	6.7	
9/1/2016				190
11/28/2016		6.7		
11/29/2016	5.8			
11/30/2016			7.8	48
2/22/2017		5.7		
2/23/2017	6.2		6.5	
2/24/2017				130
5/9/2017	16		7.2	
5/10/2017		7.1		71
7/18/2017	18	6	7.7	46
10/17/2017	31	6.1		50
10/18/2017			6.5	
2/20/2018		5.8		53.1
2/21/2018	27		6.7	
8/7/2018	35.4		6.3	
8/8/2018		4.7		69.3
2/26/2019	20	5.7	5.7	42.2
6/12/2019		9.1		69.5
6/13/2019	16.4		5	
10/9/2019	6.9	9.8		
10/10/2019			5.3	42.8

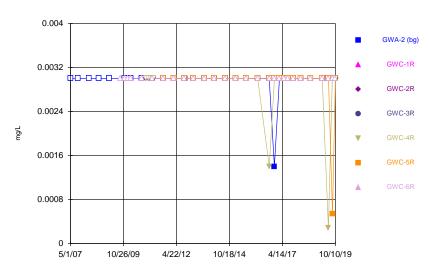
Constituent: Sulfate, TDS Analysis Run 2/12/2020 7:33 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-5R	GWC-6R	GWC-1R
8/31/2016	410			616
9/1/2016		990	360	
11/29/2016	450		320	594
12/1/2016		1100		
2/23/2017	390		380	581
2/24/2017		850		
5/9/2017	280			410
5/10/2017		1000	660	
7/17/2017		830		
7/18/2017	200		880	322
10/16/2017		720		
10/17/2017	180			381
10/18/2017			760	
2/19/2018			718	
2/21/2018	146	533		285
8/6/2018			797	
8/7/2018	100	784		242
2/25/2019			763	
2/26/2019	118	742		69
6/13/2019	163	976	918	301
10/8/2019			664	
10/9/2019	318	1180		526

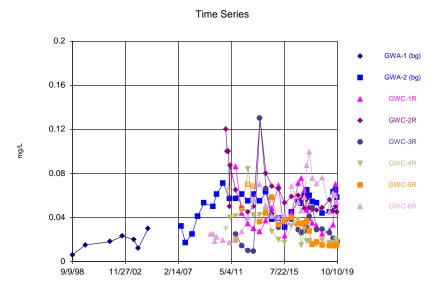
Constituent: TDS Analysis Run 2/12/2020 7:33 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R
8/31/2016	257		
9/1/2016		1400	578
11/28/2016	177		
11/29/2016			455
12/1/2016		1610 (B)	
2/22/2017	240		
2/23/2017			614
2/24/2017		1200	
5/10/2017	149	1360	955
7/17/2017		1340	
7/18/2017	122		1270
10/16/2017		1080	
10/17/2017	214		
10/18/2017			1150
2/19/2018			1070
2/20/2018	131		
2/21/2018		830	
8/6/2018			1260
8/7/2018		1180	
8/8/2018	166		
2/25/2019			1160
2/26/2019	293	1010	
6/12/2019	391		
6/13/2019		1410	1310
10/8/2019			1050
10/9/2019	372	1680	



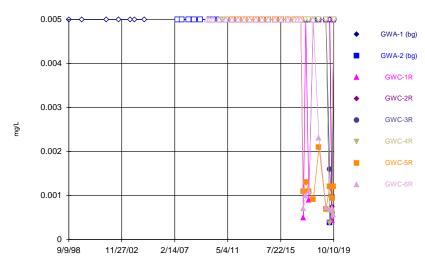


Constituent: Antimony Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



Constituent: Barium Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series



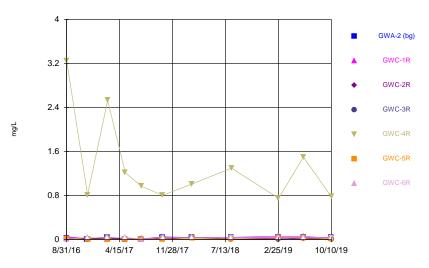
Constituent: Arsenic Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Time Series 0.02 GWA-1 (bg) GWA-2 (bg) 0.016 GWC-1R GWC-2R 0.012 GWC-3R mg/L 0.008 0.004 9/9/98 11/27/02 2/14/07 5/4/11 7/22/15 10/10/19

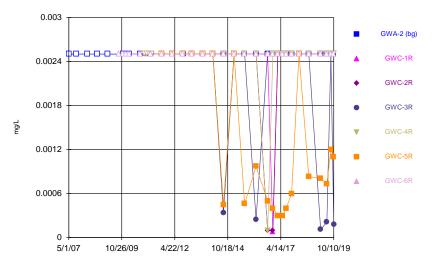
Constituent: Beryllium Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series



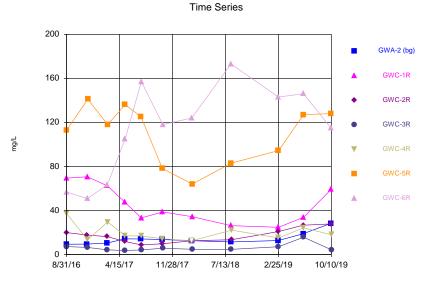
Constituent: Boron Analysis Run 12/18/2019 2:55 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series

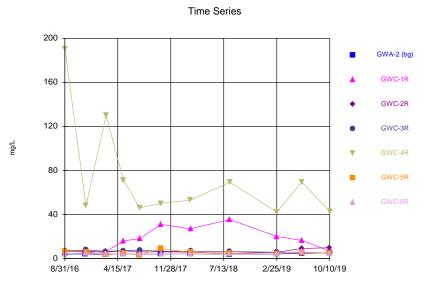


Constituent: Cadmium Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

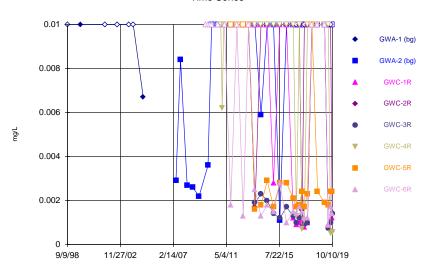


Constituent: Calcium Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



Constituent: Chloride Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill





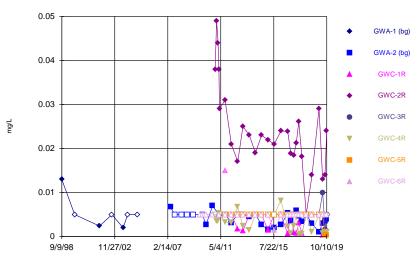
Constituent: Chromium Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series GWA-2 (bg) GWC-1R 2.4 GWC-2R 1.8 GWC-3R pCi/L GWC-4R 1.2 GWC-5R GWC-6R 0.6 8/31/16 4/15/17 11/28/17 7/13/18 2/25/19 10/10/19

Constituent: Combined Radium 226 + 228 Analysis Run 12/18/2019 2:55 PM View: Time Series

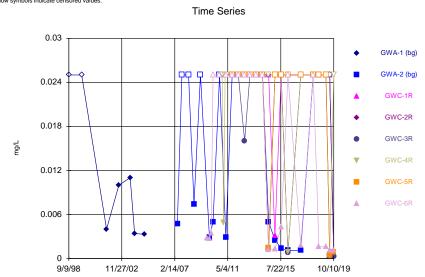
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill





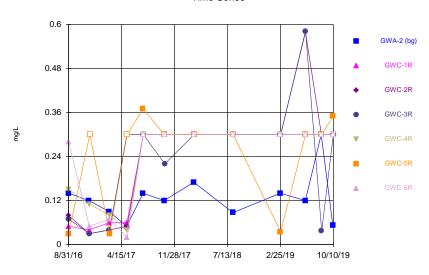
Constituent: Cobalt Analysis Run 12/18/2019 2:55 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



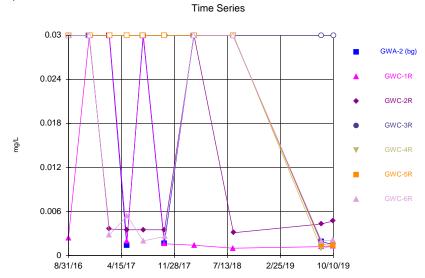
Constituent: Copper Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill





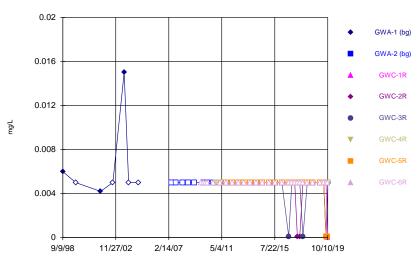
Constituent: Fluoride Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



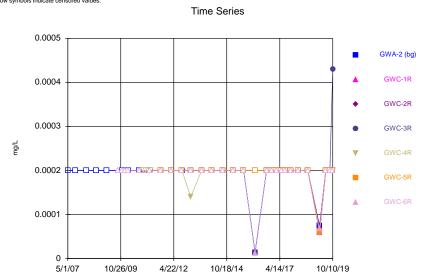
Constituent: Lithium Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series



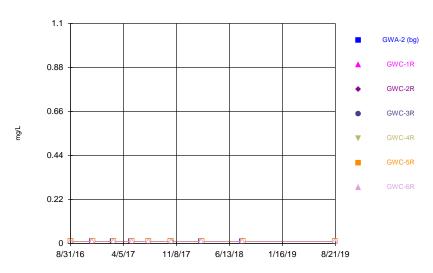
Constituent: Lead Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



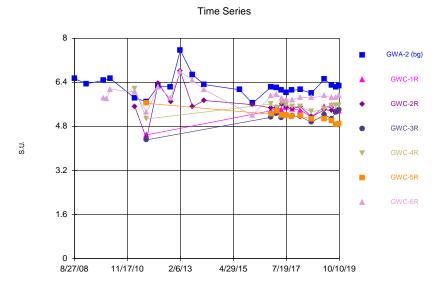
Constituent: Mercury Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill





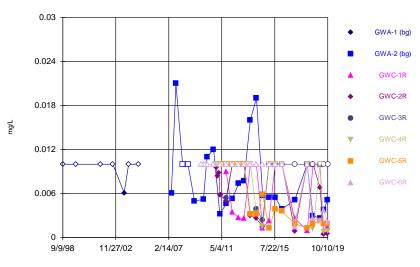
Constituent: Molybdenum Analysis Run 12/18/2019 2:55 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas $^{\text{\tiny{TM}}}$ v.9.6.24 Sanitas software licensed to ACC. UG



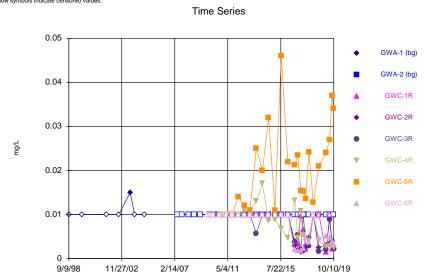
Constituent: pH Analysis Run 12/18/2019 2:56 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series



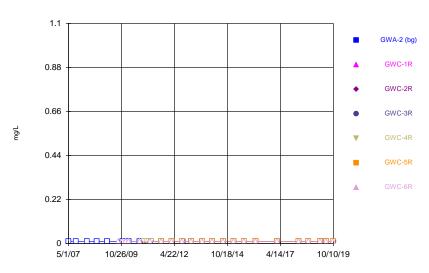
Constituent: Nickel Analysis Run 12/18/2019 2:56 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.



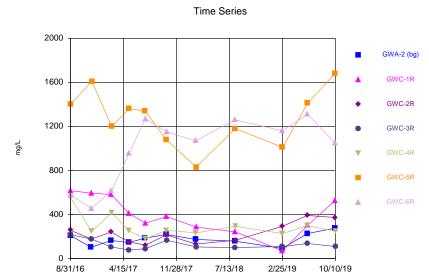
Constituent: Selenium Analysis Run 12/18/2019 2:56 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill





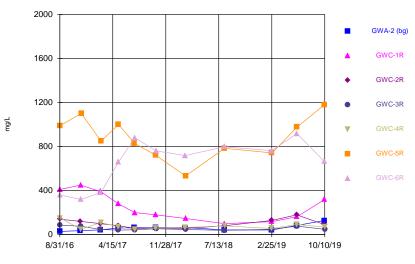
Constituent: Silver Analysis Run 12/18/2019 2:56 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas $^{\text{\tiny{TM}}}$ v.9.6.24 Sanitas software licensed to ACC. UG



Constituent: TDS Analysis Run 12/18/2019 2:56 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

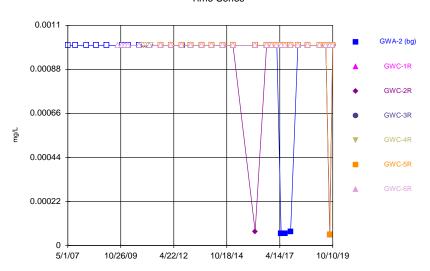
Time Series



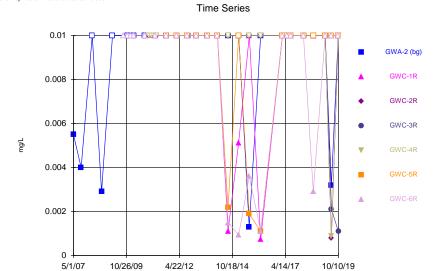
Constituent: Sulfate Analysis Run 12/18/2019 2:56 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Time Series



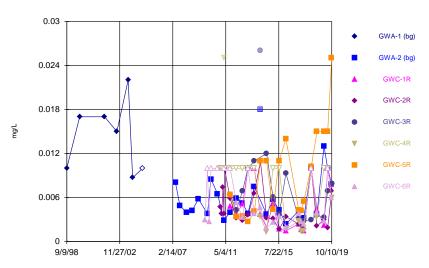
Constituent: Thallium Analysis Run 12/18/2019 2:56 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



Constituent: Vanadium Analysis Run 12/18/2019 2:56 PM View: Time Series
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.24 Sanitas software licensed to ACC. UG Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 12/18/2019 2:56 PM View: Time Series Plant Yates Client: Southern Company Data: Yates Gypsum Landfill



Roswell, GA 1150 Northmeadow Pkwy. Suite 100 Roswell, GA 30076 Phone: 770.594.5998 Savannah, GA 7 East Congress Street Suite 801 Savannah, GA 31401 Phone: 912.236.3471 Knoxville, TN 212 S. Peters Road Suite 203 Knoxville, TN 37923 Phone: 865.531.9143