2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GADSDEN
ASH POND

August 1, 2023

Prepared for

Alabama Power Company
Birmingham, Alabama

By

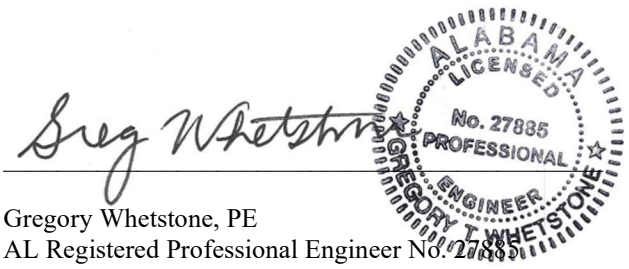
Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

This *2023 Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Gadsden Ash Pond* has been prepared in accordance with the United States Environmental Protection Agency's coal combustion residual rule (40 CFR Part 257, Subpart D), ADEM Admin. Code r. 335-13-15, and Part E of ADEM Administrative Order No. 18-095-GW, under the supervision of a licensed professional engineer in the State of Alabama. As such, I certify that the information contained herein is true and accurate to the best of my knowledge.

07/31/2023

Austin C. Patton, P.G.
AL Registered Professional Geologist No. 1585 Date



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EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart 257), the Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 19-104-GW, this 2023 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document groundwater monitoring activities and results from the October 2022 and June 2023 semi-annual monitoring events at the Alabama Power Company (APC) Gadsden Electric Generating Plant (Site) Ash Pond and satisfies the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), ADEM Admin. Code r. 335-13-15-.06(5)(g), and Part F of AO No. 19-104-GW. Semi-annual monitoring and associated reporting for the Ash Pond is performed in accordance with the monitoring requirements found in 40 CFR § 257.90 through § 257.98 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(9).

The CCR unit began the monitoring period in corrective action monitoring pursuant to 40 CFR § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9). Statistically significant increases (SSI) of Appendix III constituents over background were identified in the results of the first detection monitoring event (April 17, 2019) and assessment monitoring was initiated on July 16, 2019. Statistically significant levels (SSL) of Appendix IV parameters above groundwater protection standards (GWPS) were identified while in assessment monitoring. Consequently, an assessment of corrective measures (ACM) was initiated on April 11, 2020, and completed on July 10, 2020, according to the requirements of § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 19-104-GW. The ACM was subsequently submitted to ADEM and posted to the CCR compliance web site. A public meeting to discuss the ACM was held on October 19, 2020.

Since the submittal of the ACM, extensive Site investigations have been performed to select effective corrective measures to address SSL above GWPS. A Groundwater Remedy Selection Report was prepared to meet the requirements of § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No.19-104-GW and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022, for review.

The Corrective Action Groundwater Monitoring Program was prepared to meet § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9) to detect potential downgradient changes in groundwater quality and assess the efficacy of the selected groundwater corrective action remedies. The Monitoring Program has been developed to meet the requirements of CFR § 257.98(a)(1) and ADEM Admin. Code r. 335-13-15-

.06(9)(a)(1) and will supplement the ongoing CCR compliance groundwater monitoring currently being performed at the Site.

Statistical evaluation of assessment monitoring data identified SSL of the Appendix IV parameter arsenic at wells GSD-AP-MW-2 and GSD-AP-MW-4 during the first and second semi-annual monitoring events. The following summarizes the annual groundwater monitoring activities at Plant Gadsden Ash Pond:

- Completed the first semi-annual groundwater sampling event between October 25, 2022, and October 26, 2022.
- Submitted the first 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report on February 1, 2023.
- Began treatability studies to evaluate the effectiveness of various treatment solutions and doses in removing constituents of interest (COI) from impacted groundwater for a pilot study of geochemical manipulation injections, which was selected as one of the corrective measures as described in the Groundwater Remedy Selection Report on October 29, 2021.
- Initiated a geogenic evaluation of Site bedrock (Conasauga shale/mudstone) as a geogenic source of lithium and reviewed possible mechanisms to mobilize lithium into deeper Site wells recently installed for vertical delineation in the area of monitor well GSD-AP-MW-2.
    - In March 2023, eight borings were advanced to bedrock at select locations around the ash pond for soil sample collection. Mineralogy of the unconsolidated sediments was field screened using x-ray diffraction (XRD) techniques and subsequently analyzed in the laboratory for geogenic sources of lithium.
- Completed the second semi-annual groundwater sampling event between June 5, 2023 and June 13, 2023.

The CCR unit concluded the monitoring period in corrective action and APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program submitted to ADEM. The following future actions will be taken or are recommended for the site to further evaluate remedy selection:

- Complete the Laboratory Treatability Studies for the geochemical injection pilot studies. The laboratory treatability studies include:
    - Conduct batch testing to evaluate removal of COI and select the optimum reagents and doses for column tests.

  - Conduct column testing to evaluate removal of COI by mixing treatment reagents with site-specific impacted groundwater and applying to site-specific soils (aquifer solids) in columns. Appendix III and IV constituents will be measured in the column effluents to determine the reduction of COI in groundwater and to evaluate any unintended consequences of treatment (e.g., release of constituents from soils).
  - Conduct selective sequential extraction of post-column (treated) soils to help determine the sequestration mechanisms and stability of the COI and their host solids.
  - After treatment, the post-column (treated) soils will be leached with upgradient (background) groundwater in additional column studies to help assess long-term stability of the COI and their host solids.

- Draft and submit a Class V Underground Injection Control (UIC) permit application for geochemical manipulation by injection, which was selected as one of the corrective measures described in the Groundwater Remedy Selection Report.

- Continue the geogenic evaluation of Site bedrock (Conasauga shale/mudstone) as a geogenic source of lithium and review of possible mechanisms to mobilize lithium into deeper Site wells recently installed for vertical delineation. This includes:
  - Additional evaluation of potential confinement between geologic zones.
  - Laboratory analyses of unconsolidated zone and bedrock core samples for physical parameters, mineralogy, and geochemistry are planned and will be evaluated.
  - Research will be completed on natural lithologic deposits that contain lithium or have an association with lithium.
- Conduct the first semi-annual assessment monitoring event in Fall 2023 and submit the Semi-Annual Groundwater Monitoring and Corrective Action Report summarizing the findings to ADEM by February 1, 2024.

An **Executive Summary Table** highlighting program status and significant findings from the most recent annual monitoring period has been included on the next page.

Executive Summary Table.
Monitoring Period Summary
Plant Gadsden - Ash Pond

Assessment Monitoring Initiated: July 16, 2019
Monitoring Period: August 1, 2022 - August 1, 2023
Beginning Status: Corrective Action
Ending Status: Corrective Action

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
Boron	GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-11.
Calcium	GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12.
Chloride	GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-PZ-2.
Fluoride	None.
pH	GSD-AP-MW-6.
Sulfate	GSD-AP-MW-1, GWD-AP-MW-12.
TDS	GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-11, GSD-AP-MW-12.

Appendix IV SSLs

Parameter	Wells
Arsenic	GSD-AP-MW-2, GSD-AP-MW-4.
Lithium	None.

* See the attached report for further details regarding statistical exceedances and alternate source demonstrations.

Assessment of Corrective Measures & Groundwater Remedy

Assessment of Corrective Measures

Date Initated: April 11, 2020
Date Complete: July 10, 2020
Public Meeting Date: October 19, 2020

Groundwater Remedy

Remedy Selection Date: October 29, 2021
Initiated During Period: Yes
Ongoing During Period: Yes

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ABBREVIATIONS

ACM	Assessment of Corrective Measures
ADEM	Alabama Department of Environmental Management
AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
ASD	Alternate Source Demonstration
ASTM	Alabama Power Company Environmental Laboratory
BGS	below ground surface
CCR	Coal Combustion Residual
CEC	cation exchange capacity
CFR	Code of Federal Regulations
COC	chain of custody
COI	constituents of interest
CSM	conceptual site model
DO	dissolved oxygen
EPA	United States Environmental Protection Agency
ft	feet
GW	groundwater
GWPS	Groundwater Protection Standard(s)
LCL	Lower Confidence Limit(s)
m	meter
mg/L	milligram per liter
MNA	monitored natural attenuation
MSL	mean sea level
MW-	denotes “Monitoring Well”
NCDS	National Coal Data System
NELAP	National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
pCi/L	picocuries per liter
PE	Professional Engineer
PG	Professional Geologist
PL	prediction limits
PQL	practical quantitation limit
PVC	polymerizing vinyl chloride
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent difference
SEM	scanning electron microscopy

SM	Standard Method(s)
SSE	selective sequential extraction
SSI	statistically significant increase
SSL	statistically significant level
TAL	Test America, Inc.
TOC	top of casing
TDS	total dissolved solids
USGS	Unites States Geological Survey
UTLs	Upper Tolerance Limits
XRD	X-ray diffraction
XRF	X-ray fluorescence

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D) and the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2023 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document the first and second semi-annual groundwater monitoring activities at the Plant Gadsden Ash Pond and to satisfy the requirements of § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f). Semi-annual assessment monitoring and associated reporting for the Ash Pond is performed in accordance with the monitoring requirements 40 CFR § 257.90 through § 257.98 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(9).

Semi-Annual Groundwater Monitoring and Corrective Action Reports include an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (September 30, 2019) and corrective action activities completed since the submittal of the Corrective Action Groundwater Monitoring Program (January 27, 2022).

2.0 MONITORING PROGRAM STATUS

The site is currently in corrective action and APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program. In accordance with § 257.94(e) and ADEM Admin. Code r. 335-13-15-.06(5)(e), APC implemented assessment monitoring in July 2019. SSL of Appendix IV parameters were identified at the Gadsden Ash Pond during assessment sampling. Pursuant to § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), APC completed an ACM in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM AO No. 19-104-GW. The ACM was completed July 10, 2020, and a public meeting was held to discuss the ACM on October 19, 2020.

A Groundwater Remedy Selection Report was prepared to meet the requirements of § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No. 19-104-GW and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022, for review.

The Corrective Action Groundwater Monitoring Program was prepared to meet § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9) to detect potential downgradient changes in groundwater quality and assess the efficacy of the selected groundwater corrective action remedies. The Monitoring Program has been developed to meet the requirements of CFR § 257.98(a)(1) and ADEM Admin. Code r. 335-13-15-.06(9)(a)(1) and will supplement the ongoing CCR compliance groundwater monitoring currently being performed at the Site.

In accordance with § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9), APC will continue semi-annual monitoring, including all monitoring wells in the certified groundwater monitoring network and any well installed to characterize the horizontal and vertical extent of SSL. APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program submitted to ADEM.

3.0 SITE LOCATION AND DESCRIPTION

Plant Gadsden is located in the northeastern area of the city of Gadsden, in central Etowah County, Alabama. The physical address of the plant is 1000 Goodyear Avenue, Gadsden, AL 35903. Plant Gadsden occupies Sections 2, 3, and 11, Township 12 South, Range 6 East (USGS, 1986). The Ash Pond is located northeast of the plant and separated from the main plant by the Coosa River. **Figure 1, Site Location Map,** depicts the location of the Plant and Ash Pond with respect to the surrounding area.

3.1 PHYSICAL SETTING

Plant Gadsden is located within the Coosa Valley district of the Valley and Ridge physiographic section (Sapp and Emplaincourt, 1975). The neighboring Coosa River forms a broad, gently sloping valley with elevations ranging from 510 to 530 feet above mean sea level (MSL). To the west of the Coosa River is a series of ridges including Shinbone Ridge, Lookout Mountain, and Big Ridge, some of which reach elevations above 1,450 feet MSL (USGS, 1986). Local Site elevations near the Ash Pond are approximately 520 feet MSL. The embankment elevations that form the perimeter of the Ash Pond range from 520 to 525 feet MSL. **Figure 2**, **Site Topographic Map**, provides the topography of the Site.

3.2 SITE GEOLOGY AND HYDROGEOLOGY

Plant Gadsden is in the Appalachian thrust belt, which consists of a series of northeast trending thrust sheets and folds of Cambrian to Pennsylvanian strata. In general, the valleys represent eroded or breached anticlines underlain by Cambrian and Ordovician carbonates. The ridge crests are typically composed of relatively resistant sandstone and chert units and represent erosional remnants (Mann and Baker, 1995). The Appalachian thrust belt is bordered to the west by the Black Warrior basin, to the northwest by the East Warrior Platform, and to the north-northwest by the Nashville dome. It is bordered to the southeast by the Appalachian Piedmont (Osborne and Raymond, 1992).

A thrust fault lies near Plant Gadsden. The exact geometry and configuration of the fault is unknown because the fault is concealed under alluvium. To the north of the fault, folds and faults have a more moderate expression and generally trend to the northeast. To the south of the thrust fault, geologic structures become more complex, folding is more intense, and the structures trend in a more easterly orientation (Bossong, 1989). In general, faults in this region (including the Gadsden Fault) were active during the late Paleozoic Alleghanian orogeny but are not considered to be presently active. **Figure 3, Site Geologic Map**, illustrates the surface geology at the Site and neighboring areas.

Boring logs from monitoring well and piezometer installations provide details on subsurface geologic conditions between ground surface and 75 feet below ground surface (ft BGS). Site geology consists of two distinct formations underlying the Ash Pond, described from shallowest to deepest as follows:

1. Surficial soils are described as Quaternary-age alluvial low terrace deposits and high terrace deposits consisting of varying amounts of sand, silt, clay, and gravel associated with river deposition (Raymond et al., 1988). These deposits range from 20 to 30 feet in thickness at the Site. Site groundwater monitoring wells are installed within higher-permeability zones near the base of the alluvial deposits and near the interface with underlying rock.

2. The Conasauga Formation (Middle and Upper Cambrian), which consists of varying amounts of limestone, dolomite, and shale. Chert and siltstone horizons can be present locally. Limited core logs from the Site indicate the Conasauga to be a medium to dark gray mudstone or shale with noticeable calcite veining. In general, the Conasauga Formation is characterized as a shoaling-upward succession in which deep-water shale grades vertically into a diverse assemblage of carbonate ramp facies. In Etowah County, the Conasauga Formation has been targeted as a potential source for shale gas and is preserved within the Gadsden antiform (Pashin, 2008). The Conasauga Formation is not considered to be a water-bearing aquifer at the Site.

Figure 4A Geologic Cross-Section A-A', and Figure 4B, **Geologic Cross-Section B-B',** illustrate the geologic layering and stratigraphy underlying the Site.

3.2.1 Uppermost Aquifer

The uppermost aquifer beneath the Site corresponds to a coarse and more permeable fraction of alluvial overburden soils and weathered or fractured rock near the soil-rock interface. The uppermost aquifer is typically located at depths between 15 and 50 feet below ground surface (BGS). Soils are generally poorly graded sands with layers of clay and well-graded gravels that overlay a mudstone or shale bedrock. Groundwater recharge to the uppermost aquifer is largely accomplished by infiltration of precipitation and subsequent percolation down to the water table. Monitoring wells are typically screened across reddish-brown (iron-coated) coarse sediments and/or weathered Conasauga mudstone/shale.

3.2.2 Flow Interpretation

Within overburden soils beneath the Site, groundwater flow occurs by porous (Darcy) flow mechanics with potential for preferential movement along more conductive sand and gravel lenses or channels. Slug and

Shelby Tube permeameter testing reveals that sandy fractions generally have a hydraulic conductivity between 0.5 and 7 feet per day.

Based on historic groundwater elevation data, it appears a localized groundwater divide is present in the drier late summer-to-fall season along the north side of the Ash Pond. During drier season monitoring events (August 2019, August 2020, and October 2021 and 2022), groundwater elevations ranged from 2.4 to 7.8 feet lower in monitoring wells GSD-AP-PZ-1, GSD-AP-PZ-5, GSD-AP-PZ-6, GSD-AP-MW-18H, and GSD-AP-MW-19H when compared to the April 2020, March 2021, and May 2022 monitoring events.

The result of the localized groundwater divide is a temporary reversal of flow from south to north in the direction of an intermittent stream that flows seasonally in response to the seasonal rise in the water table. It is possible that seasonal changes in evapotranspiration could cause a rise and fall in the water table, which produces bidirectionality in both stream-groundwater head gradients. Hydraulic gradients across the site and the Ash Pond decrease during the drier season months leading to slower groundwater flow velocities.

Historically, during wetter months or seasons, this localized groundwater divide is not apparent on potentiometric surface contour maps. Instead, groundwater flow is more uniform with a predominantly southern flow direction. Groundwater flows from northeast to southwest before shifting to a more southern flow direction beneath the ash pond. Groundwater northwest and west of the ash pond provides some variability with a more local western flow component.

Based on groundwater elevations measured during June 2023, the aforementioned seasonal groundwater divide was also observed during this wet season sampling event. Potentiometric surface maps generated from the October 2022 event seem to parallel the groundwater flow patterns presented in the June 2023 map. The localized flow divide at the Site will continue to be monitored for potential fluctuations in flow interpretation.

Groundwater elevations fluctuate in response to rainfall. Fluctuations are typically greater further away from the Coosa River, which is consistent with groundwater recharge areas.

Upgradient wells, located on the opposite side of the Coosa River, demonstrate groundwater flow to the north or northeast. The Coosa River forms a groundwater divide separating the upgradient and downgradient flow regimes.

3.3 GROUNDWATER MONITORING SYSTEM

Pursuant to § 257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Gadsden has installed a groundwater monitoring well network to evaluate groundwater quality within the uppermost aquifer. The certified groundwater monitoring system for the Plant Gadsden Ash Pond is designed to monitor groundwater flow passing the waste boundary of the CCR unit. Wells were sited to serve as upgradient and downgradient monitoring locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps. All groundwater monitoring wells were designed and constructed using "Design and Installation of Groundwater Monitoring Wells in Aquifers," ASTM Subcommittee D18.21, as a guideline.

3.3.1 Monitoring Wells

Well locations at the site are designated as upgradient, downgradient, piezometer (water-level only), vertical delineation, and horizontal delineation. The following subsections provide a summary of well designations and, if applicable, changes or modifications to the well network or designations. As described in the site Groundwater Monitoring Plan, modifications to the well network or designation must first be approved by ADEM.

The location and designation of site wells are presented on **Figure 5, Monitoring Well Location Map**. **Table 1a. - Compliance Monitoring Well Network Details, Table 1b. - Delineation Well Network Details, and Table 1c. - Piezometer Well Network Details** summarize the monitoring well construction details and design purpose for the Plant Gadsden Ash Pond.

3.3.1.1 Upgradient Wells

To evaluate upgradient well locations at the Site, groundwater elevations and CCR indicator parameters were reviewed. Radial flow has historically been observed at the Ash Pond and identifying a truly upgradient location in the vicinity was infeasible. To meet the requirements of the rules and establish background groundwater quality not affected by a release from the unit, on-site groundwater monitoring wells were installed within the same geologic formation as site monitoring wells and across the river from the Ash Pond. Monitoring well locations MW-14, MW-16, and MW-17 serve as upgradient locations for the Ash Pond. These well locations are located on the opposite side of the Coosa River and are hydraulically disconnected from downgradient flow away from the Gadsden Ash Pond. Groundwater flow in the area of upgradient locations is from south to north or southwest to northeast towards the Coosa River. **Table 1a** summarizes the monitoring well construction details and design purpose.

3.3.1.2 Downgradient Wells

Monitoring well locations MW-1 through MW-12, PZ-1, PZ-2, PZ-5, and PZ-6 are used as downgradient locations. These well locations are in the proximity of the waste boundary to the north, east, south, and west of the Ash Pond. Because groundwater flow conditions can change seasonally in response to rainfall at the Site (as described in **Section 3.2.2**), wells previously identified as being downgradient to the north (GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-PZ-1, GSD-AP-PZ-5, GSD-AP-PZ-6) now appear hydraulically upgradient of the Site or hydraulically separated from the Site by a localized groundwater divide. APC will continue to monitor all wells surrounding the Ash Pond as downgradient compliance wells until a revision to the network is proposed to and approved by ADEM. Changes to well designations are not recommended at this time. **Table 1a** summarizes the monitoring well construction details and design purpose.

3.3.1.3 Delineation Wells

Pursuant to AO 19-104-GW, additional wells were installed in October 2019, January 2020, and March 2021. These delineation wells were installed to define the horizontal and vertical extent of arsenic and lithium MCL exceedances. Horizontal delineation wells GSD-AP-MW-18H, GSD-AP-MW-19H, and GSD-AP-MW-20H were installed in October 2019 north of compliance wells GSD-AP-MW-2/GSD-AP-MW-4 and in areas historically interpreted as downgradient of the Ash Pond.

Two vertical delineation wells, GSD-AP-MW-2V and GSD-AP-MW-4V, were installed in October 2019, and one vertical delineation well, GSD-AP-MW-2VA, was installed in January 2020, to delineate the vertical extent of MCL exceedances. Vertical delineation well GSD-AP-MW-2V did not yield sufficient groundwater for well development and has been converted to a temporary piezometer. As a result, GSD-AP-MW-2VA was installed to replace GSD-AP-MW-2V. Because GSD-AP-MW-2VA exhibited elevated lithium concentrations above the GWPS, a second, deeper vertical delineation well was proposed and GSD-AP-MW-2VB was installed in March 2021. These vertical delineation wells were installed adjacent to monitoring wells GSD-AP-MW-2 and GSD-AP-MW4 where elevated concentrations of constituents had been observed.

Following a review of the March 2021 analytical data, it was determined that additional (Phase III) vertical delineation was necessary to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA and GSD-AP-MW-2VB and further north and northwest in the direction of groundwater flow associated with the seasonal groundwater divide. Five vertical delineation wells (GSD-AP-MW-2VC, GSD-AP-MW21VB, GSD-P-MW-21VC, GSD-AP-MW-22VB, and GSD-AP-MW-23VB)

were installed between August 17, 2021, and September 3, 2021. Two of the vertical delineation wells (GSD-AP-MW-21VC and GSD-AP-MW-22VB) were successfully developed and sampled during the 2022 semi-annual sampling event in October. Vertical delineation wells GSD-AP-MW-2VC, GSD-AP-MW21VB, and GSD-AP-MW-23VB did not produce sufficient water to be sampled and are designated as water level only piezometers.

Delineation wells are identified on **Figure 5** and detailed on **Table 1b**. All delineation wells are sampled semi-annually as part of the semi-annual groundwater monitoring program.

3.3.1.4 Piezometers

Vertical delineation wells GSD-AP-MW-2V and GSD-AP-MW-2VC, GSD-AP-MW21VB, and GSD-AP-MW-23VB did not produce sufficient water for sampling. As a result, these wells have been designated as piezometers and will be used better define groundwater flow direction at the Site. **Table 1c** summarizes the water level only piezometer construction details and design purpose.

3.3.1.5 Monitoring Well Replacement and Abandonment

Monitoring well replacements or abandonments were not conducted during the annual reporting period.

3.4 GROUNDWATER MONITORING HISTORY

In accordance with § 257.94(b) and ADEM Admin. Code r. 335-13-15-.06(5)(b), eight independent samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV prior to April 17, 2019. Background sampling was performed over the period of December 2017 to February 2019. Groundwater sampling for the first detection monitoring event after the background period was performed in February 2019.

Based on results of the 2018 and 2019 monitoring, APC initiated an assessment monitoring program on July 16, 2019. Pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a), monitoring wells were sampled for all Appendix IV parameters in August, within 90 days of initiating the assessment monitoring program.

The Site entered assessment monitoring pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a) in July 2019. Statistical evaluations of the 2019 assessment monitoring data identified SSL of Appendix IV constituents above the GWPS, and the Site entered Assessment of Corrective Measures. Pursuant to 40 CFR §257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 19-104-GW,

additional monitoring wells were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring in three phases of groundwater investigations between October 2019 and September 2021. These wells, along with the compliance monitoring well network, are sampled semi-annually. Delineation wells installed at the Site have been sampled concurrently with the compliance monitoring well network beginning with the first semi-annual sampling event after the well installation.

3.4.1 Available Monitoring Data

Laboratory analytical data is available for the groundwater monitoring history outlined in **Section 3.4.** Tables summarizing analytical data from all previous groundwater monitoring events are included in **Appendix A, Analytical Data Summary**.

3.4.2 Historical Groundwater Flow

Groundwater level monitoring was initiated with background sampling in December 2017, before Ash Pond closure and dewatering was complete. Groundwater elevation contours between December 2017 and December 2018 displayed a radial pattern of groundwater flow away from the Site. Groundwater flow interpretations suggest flow to the north, south, east, and west from this mound. Thus, wells around the periphery of the pond are all classified as downgradient.

Between December 2018 and February 2019, as the pond was dewatered, the radial groundwater flow pattern appeared to diminish, exhibiting a more north-to-south groundwater flow pattern. The observed change in flow pattern likely represents groundwater flow returning to pre-pond conditions as the hydraulic influence of the pond was eliminated by closure and dewatering.

A less prominent groundwater mound was observed just to the north of the Site during the August 2019, August 2020, October 2021, October 2022, and June 2023 sampling events and appears to form a localized groundwater divide where groundwater flow bifurcates to the north (north of the divide) or to the south (south of the divide). The groundwater divide appears to be centered approximately 120 feet north of the Ash Pond, indicating north to south flow across the Ash Pond. This groundwater flow divide appears to be seasonal or temporary with occurrences during drier periods. Tables summarizing groundwater elevations from all groundwater monitoring events are included in **Appendix B, Historical Groundwater Elevations Summary**.

3.4.3 Monitoring Variance

The groundwater monitoring program at the site is operating under a Variance granted by ADEM on April 15, 2019, to conform State monitoring requirements under the CCR rule to Federal requirements. The variance:

1. Retains boron as an Appendix III detection monitoring parameter and excludes it as an Appendix IV monitoring parameter.
2. Authorizes the use of Federally-published GWPS of 0.006 milligrams per liter (mg/L) for cobalt, 0.015 mg/L for lead, 0.040 mg/L for lithium, and 0.100 mg/L for molybdenum in lieu of background where those levels are greater than background levels.

3.5 GROUNDWATER SAMPLING AND ANALYSIS

Site compliance wells are sampled semi-annually in: (1) early to late fall and (2) late winter to mid-spring. The temporal spacing between sampling events is sufficient to ensure that sampling events yield independent groundwater samples and generally represent different climatic or meteorological seasons that provide a degree of natural variability in groundwater quality.

During routine semi-annual monitoring events, all compliance and delineation network wells are sampled and analyzed for Appendix III and Appendix IV constituents. Additional general chemistry constituents (major ions and anions) are now being collected routinely as well. These non-compliance parameters will be periodically analyzed to explore seasonal or closure-related changes to geochemical facies in site groundwater.

The following subsections summarize the sequential steps and process for the sampling, handling and transport, and analysis of compliance-related groundwater samples at the site.

3.5.1 Groundwater Sample Collection

Prior to recording water levels and collecting samples, each well was opened and allowed to equilibrate to atmospheric pressure. Within a 24-hour period, depths to groundwater were measured to the nearest 0.01 foot with an electronic water level indicator with depth referenced from the top of the inner PVC well casing. Groundwater elevations were calculated by subtracting the depth to groundwater from surveyed top-of-casing (TOC) elevations.

Groundwater samples were collected from monitoring wells using low-flow sampling procedures in accordance with § 257.93(a) and ADEM Admin. Code r. 335-13-15-.06(4)(a). All monitoring wells at Plant Gadsden are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures. In this procedure, field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) are measured to determine stabilization and groundwater samples are collected when the following stabilization criteria are met:

- 0.2 standard units for pH.
- 5% for specific conductance.
- 0.2 mg/L or 10% for DO > 0.5 mg/l (whichever is greater).
- Turbidity measurements less than 10 NTU.
- Temperature and ORP – record only, no stabilization criteria.

During purging and sampling, an In-Situ Aqua Troll instrument was used to monitor and record field parameters. Once stabilization was achieved, samples were collected and submitted to the laboratory following standard chain-of-custody (COC) protocol. Field data recorded in support of groundwater sampling activities are included in **Appendix C, Laboratory and Field Records**.

3.5.2 Sample Preservation and Handling

Groundwater samples were collected in the designated size and type of laboratory-supplied containers required for specific parameters. Sample bottles were pre-preserved by the laboratory. Where temperature control was required, samples were placed in an ice-packed cooler and cooled to less than 6 °C immediately after collection. Blue ice or other cooling packs were not used for cooling samples. An ice-packed cooler was on hand when samples were collected.

3.5.3 Chain of Custody

A chain-of-custody (COC) record was used to track sample possession from the time of collection to the time of receipt at the laboratory. All samples were handled under strict COC procedures beginning in the field. COC records are included with the analytical laboratory reports included in **Appendix C**.

3.5.4 Laboratory Analysis

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama and Pace Analytical Services, LLC (Pace) in Greensburg, Pennsylvania. Each of these labs is accredited

by the National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for all parameters analyzed**. Table 2, Parameters and Reporting Limits**, lists monitoring constituents analyzed from site groundwater samples. Laboratory reports for the monitoring period are presented in **Appendix C**.

3.5.5 Monitoring Period Sampling Events Summary

As required by § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f), the following describes monitoring-related activities performed during the first and second semi-annual monitoring events that occurred in October 2022 and June 2023.

Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during the monitoring event. During the most recent sampling event, additional general chemistry and monitored natural attenuation monitoring parameters were sampled and analyzed. These analytes have been incorporated for continued evaluations of geochemical facies and their evolution over time. These analytes will also support geochemical modeling and evaluations associated with monitored natural attenuation. These parameters include:

- Calcium (filtered).
- Iron (total and dissolved).
- Silicon (total and dissolved).
- Silica (total and dissolved).
- Sodium (total and dissolved).
- Sulfide.
- Potassium.
- Aluminum (total and dissolved).
- Manganese.
- Magnesium (total and filtered).
- Nitrate-Nitrite.
- Total Alkalinity, Carbonate Alkalinity, Bicarbonate Alkalinity.
- Total Organic Carbon.

All groundwater sampling activities were conducted by APC Field and Water Services. Pace Analytical Services performed the laboratory analyses of Radium-226 and Radium-228 (reported combined). APCEL performed the remaining Appendix III and Appendix IV analyses. Analytical data from the groundwater

monitoring events is included as **Appendix C**, in accordance with the requirements of § 257.90(e)(3), and ADEM Admin. Code r. 335-13-15-.06(1)(f)3.

4.0 GROUNDWATER DATA EVALUATION

During the October 2022 sampling event, depths to water ranged from 5.86 to 26.42 feet below top of casing (ft BTOC) and groundwater elevations ranged from 530.02 to 506.64 feet above mean seal level (ft NAVD). **Figure 6A, Potentiometric Surface Contour Map (October 24, 2022)**, depicts groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

During the June 2023 sampling event, depths to water ranged from 1.87 to 24.98 ft BTOC and groundwater elevations ranged from 531.65 to 507.61 ft NAVD. **Figure 6B, Potentiometric Surface Contour Map (June 5, 2023)**, depicts groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

As shown on **Figures 6A (October 2022)** and **6B (June 2023)** and discussed in **Section 3.2.2**, a seasonal groundwater divide is depicted north of the Ash Pond. Recent monitoring events have shown this seasonal groundwater divide occurs during fall dry season monitoring events, however, a groundwater divide appears to be present during the two most recent events. The groundwater divide during the October 2022 and June 2023 sampling events appears to occur or be centered along or near a straight line between wells GSD-AP-MW-1 and GSD-AP-MW-4.

Small magnitude vertical gradients were historically noted between compliance well GSD-AP-MW-2 and corresponding vertical delineation wells GSD-AP-MW-2VA, GSD-AP-MW-2VB, and GSD-AP-MW-21VC which implies that stratigraphic intervals monitored are not confined to a high degree and appear hydraulically connected.

Figures 6A and 6B also show a northeastern groundwater flow direction on the opposite side of the Coosa River where upgradient wells are located. The Coosa River forms a groundwater divide separating the upgradient and downgradient flow regimes. Recent groundwater elevation data have been tabulated and are included in **Table 3, Groundwater Elevations Summary.** All available groundwater elevation data recorded since 2017 have been tabulated and included in **Appendix B.**

4.1 GROUNDWATER FLOW VELOCITY CALCULATIONS

Groundwater flow velocity at the Site was calculated based on hydraulic gradients, hydraulic conductivity values derived from slug tests, and an estimated effective porosity of the screened horizon. To date, four slug tests have been analyzed. Based on these analyses, the horizontal hydraulic conductivities for the uppermost aquifer ranges from 2.28 ft/day and 67.75 ft/day, with 67.75 ft/day observed in a more permeable gravel zone. The geometric mean hydraulic conductivity for the Site is 12.33 ft/day. The hydraulic gradient

was calculated between well pairs shown in **Appendix D, Horizontal Groundwater Flow Velocity Calculations**. The hydraulic conductivity value used in the calculations is 4.35 x 10^{-3} cm/sec or 12.33 ft/day and representative of the geometric mean. An estimated effective porosity of 20% is used in the flow rate calculations.

Horizontal flow velocity was calculated using the commonly used derivative of Darcy's Law:

$$V = \frac{K * i}{n_e}$$

Where:

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

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

i = Horizontal hydraulic gradient

n_e = Effective porosity

Using this equation, horizontal groundwater flow velocity is calculated for the site flow regime. **Appendix D** presents the estimated horizontal flow velocity calculated using groundwater elevation data from measurements collected during the October 2022 and June 2023 sampling events.

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at an interval of one sample per group of 10 well locations. These QA/QC samples include well duplicates, equipment blanks, and field blanks. Routine analyses of field QA/QC samples are a method for evaluating whether artificial bias could have been introduced into lab results by ways of sampling activities or equipment.

5.1 DATA VALIDATION QUALITY ASSURANCE/QUALITY CONTROL

Analytical precision is measured through the calculation of the relative percent difference (RPD) of two data sets generated from a similar source. Here, a comparison of results between samples and field duplicate samples are used as measure of laboratory precision. Where field duplicates are collected, the RPD between the sample and duplicate sample is calculated as:

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the relative percent difference is below 20%, the difference is considered acceptable, and no further action is needed. Where an RPD is greater than 20%, further evaluation is required in attempt to determine the cause of the difference and potentially result in qualified data. **Table 4a, Relative Percent Difference Calculations,** provides the relative percent differences for sample and sample duplicates during the October 2022 and June 2023 semi-annual sampling events. RPD calculations are only conducted on sets of valid detections; estimated concentrations and non-detects do not provide a reliable base for comparison. All RPDs were below 20% for the October 2022 sampling events with the exception of cadmium, in parent-duplicate pair GC-AP-MW-14/GC-AP-MW-14 DUP. A resulting qualifier of (+) J was needed because both duplicate concentrations exceeded five times the reporting limit (RL). All RPDs were below 20% for June 2023 sampling event.

Analytical data reviewed provided low-level or trace detections in one field blank for arsenic during the October 2022 monitoring period sampling event. Low-level or trace detections were reported in five total equipment or field blanks for chromium or fluoride during the June 2023 monitoring period sampling event. **Table 4b, Field QC: Blank Detections** provides a summary of the low-level detections observed during the annual monitoring period. The detection was an estimated concentration, above the MDL but below the RL, and qualified in the laboratory analytical reports with "J flags." However, if concentrations are detected above the MDL in field QC samples, original results on the (1) date of a blank detection and (2) with a value less than 5 times the field QC detection are flagged with a (+) U* and MDL/RL values modified based upon the blank concentration.

Validated flags do not have an impact on possible statistical analyses due to: (1) low-level concentrations flagged during validation or (2) constituents flagged are not Site COI. The extent of trace arsenic detections in blanks can be explained by a low MDL value of 0.000081 mg/L.

5.2 STATISTICAL METHODOLOGY AND TESTS

The Sanitas groundwater statistical software is 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 EPA regulations. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) as well as with the USEPA Unified Guidance (2009).

5.2.1 Appendix III Evaluation

Intrawell prediction limits, combined with a 1-of-2 verification strategy, were constructed for fluoride and pH. Interwell prediction limits, combined with a 1-of-2 verification strategy, are used to evaluate boron, calcium, chloride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to identify SSI.

Groundwater Stats Consulting demonstrated that these test methods were appropriate in the April 2019 Statistical Analysis Plan. Time series plots were used to screen proposed background data for suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective. Suspected outliers at all wells for Appendix III parameters are formally tested using Tukey's box plot method and, when identified, flagged in the computer database.

The following adjustments were made:

- No statistical analyses are required on wells and analytes containing 100% non-detects (EPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in the background, simple substitution of one-half the reporting limit is used in the statistical analysis. The reporting limit used for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data.
- Non-parametric prediction limits are used on data containing greater than 50% non-detects.

5.2.2 Appendix IV Evaluation

When in corrective action, Appendix IV constituents are sampled semi-annually, and concentrations are statistically compared to GWPS. Following the Unified Guidance, spatial variation for Appendix III parameters is tested using the ANOVA; this test is not prescribed for Appendix IV constituents. Unlike the statistical evaluation of Appendix III constituents (where single-sample results are compared to the statistical limit), Appendix IV analysis uses the pooled results from each downgradient well to develop a well-specific Confidence Interval that is compared to the statistical limit. The statistical limit is either the Interwell Tolerance limit (i.e., background) calculated using the pool of all available upgradient well data (see Chapter 7 of the Unified Guidance), or an applicable groundwater protection standard such as the MCL. Appendix IV background data are screened for outliers and extreme trending patterns that would lead to artificially elevated statistical limits.

Parametric tolerance limits (UTL) were calculated using pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent on the number of background samples. The UTLs were then used as the GWPS.

As described in 40 CFR §§ 257.95(h)(1)-(3) and the ADEM Variance (see **Section 3.4.3)**, the GWPS is:

(1) The maximum contaminant level (MCL) established under 40 CFR §§ 141.62 and 141.66.
(2) Where an MCL has not been established:
    (i) Cobalt 0.006 mg/l.
    (ii) Lead 0.015 mg/l.

(iii) Lithium 0.040 mg/l.

(iv) Molybdenum 0.100 mg/l.

(3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

In corrective action monitoring, when the Lower Confidence Limit (LCL), or the entire interval, exceeds the GWPS as discussed in the USEPA Unified Guidance (2009), the result is recorded as an SSL. GWPS for Appendix IV constituents are updated on a biennial schedule. This schedule was initiated in 2019 with updates generally occurring after the second semi-annual sampling event of each biennial year. Data from upgradient wells collected between updates may still be used to support ASDs if merited.

5.3 STATISTICAL EXCEEDANCES

Analytical data from the October 2022 and June 2023 semi-annual monitoring events were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (April 2019 and revised in August 2020) by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents have returned to background levels. Appendix IV monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

5.3.1 Appendix III Constituents

Based on review of the Appendix III statistical analysis presented in **Appendix E, Statistical Analyses**, Appendix III constituents have not returned to background levels.

5.3.2 Appendix IV Constituents

Table 5, Summary of Background Levels and Groundwater Protection Standards, summarizes the background limit established at each monitoring well and the GWPS. A summary table of the statistical limits accompanies the prediction limits in **Appendix E.**

Statistical analysis of Appendix IV data identified the following SSL over GWPS at the listed wells during the October 2022 semi-annual monitoring event:

- GSD-AP-MW-2: Arsenic.
- GSD-AP-MW-4: Arsenic.

Table 6, First Semi-Annual Monitoring Event Analytical Results Summary, provides a summary of all detected constituents for the October 2022 semi-annual sampling event.

Limited groundwater analytical data are available for delineation wells installed at the Site; therefore, groundwater quality is simply compared to the GWPS. A review of analytical data derived from delineation wells revealed the following GWPS exceedances for the October 2022 semi-annual sampling event:

- GSD-AP-MW-2VA: Lithium.
- GSD-AP-MW-2VB: Fluoride, Lithium.
- GSD-AP-MW-21VC: Fluoride, Lithium.
- GSD-AP-MW-22VB: Lithium.

Statistical analysis of Appendix IV data identified the following SSL over GWPS at the listed wells during the June 2023 semi-annual monitoring event:

- GSD-AP-MW-2: Arsenic.
- GSD-AP-MW-4: Arsenic.

Table 7, Second Semi-Annual Monitoring Event Analytical Results Summary, provides a summary of all detected constituents from the June 2023 semi-annual sampling event.

Limited groundwater analytical data are available for delineation wells installed at the Site; therefore, groundwater quality is simply compared to the GWPS. A review of analytical data derived from delineation wells revealed the following GWPS exceedances for the June 2023 semi-annual sampling event:

- GSD-AP-MW-2VA: Lithium.
- GSD-AP-MW-2VB: Fluoride, Lithium.
- GSD-AP-MW-21VC: Fluoride, Lithium.
- GSD-AP-MW-22VB: Lithium.

Fluoride was detected at a concentration exceeding the GWPS during both events in newly installed vertical delineation wells GSD-AP-MW-2VB and GSD-AP-MW-21VC. However, it is not being considered as a potential impact from the Ash Pond. Additional discussion is presented in **Section 6.2** outlining rationale for why fluoride is not being considered an impact from the Ash Pond.

To address SSL at the site, an ACM was prepared to evaluate potential groundwater corrective measures for the occurrence of arsenic and lithium in groundwater at the Site in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order No. 19-104-GW. The ACM was completed on July 10, 2020, and submitted to ADEM and placed on the CCR compliance web site on August 9, 2020. A Groundwater Remedy Selection Report was prepared and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022, for review.

6.0 GROUNDWATER ASSESSMENT AND CORRECTIVE ACTION

As required by Part F of the Order (AO 19-104-GW) and correspondence from ADEM (March 2021), this report provides an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (September 30, 2019). The primary purpose of this plan and subsequent phases of work were to identify the horizontal and vertical extent of groundwater impacts defined by the EPA Appendix IV groundwater protection standards.

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in November 2020. The conclusion and results presented indicate that groundwater delineation have been completed to a sufficient degree to define the spatial extent of groundwater impacts and to inform a groundwater remedy selection plan. However, following a review of the March 2021 analytical data, it was determined that additional (Phase III) vertical delineation was necessary to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA and GSD-AP-MW-2VB and further north and northwest in the direction of groundwater flow associated with the observed seasonal groundwater divide.

6.1 CHRONOLOGY OF DELINEATION ACTIVITIES

Initially, Semi-Annual Progress Reports were routinely provided to ADEM in May and November, annually. Alabama Power Company (APC) requested approval to combine information typically provided in the Semi-Annual Progress Reports with Semi-Annual Groundwater Monitoring and Corrective Action Reports on March 15, 2021. ADEM approved this approach and revised timeline for submittals on March 16, 2021. APC now provides ADEM with a discussion of delineation results and corrective action activities in each semi-annual groundwater monitoring and corrective action report until released in writing.

6.1.1 Delineation Wells

Part C of the Order required the installation of additional wells as necessary to define the extent of groundwater impacts. The following sections describe monitoring wells installed to delineate impacts to Site groundwater.

Phase I – Groundwater Investigation (June 2019 – April 2020)

Phase I was conducted from of June 5, 2019 to April 16, 2020. **Table 1b** and **Figure 5** present details and locations of the onsite delineation wells.

The following summarizes all activities completed during Phase I of groundwater delineation at the site:

- Installation of three horizontal delineation wells (GSD-AP-MW-18H through GSD-AP-MW-20H) north of compliance wells GSD-AP-MW-2 and GSD-AP-MW-4, and in areas historically interpreted as downgradient of the Ash Pond, between June 5, 2019 and October 24, 2019. Horizontal delineation wells were installed in coarse fractions of water-bearing alluvial deposits or in shallow, weathered intervals of the Conasauga formation.
- Installation of three vertical delineation wells (GSD-AP-MW-2V, GSD-AP-MW-2VA, and GSD-AP-MW-4V) adjacent to monitoring wells GSD-AP-MW-2 and GSD-AP-MW-4. GSD-AP-MW-2 and GSD-AP-MW-4 had historically exhibited elevated concentrations of Appendix IV constituents. Vertical delineation wells targeted more permeable/fractured water-bearing zones within the Conasauga formation in the upper 50 feet of bedrock.
- Vertical delineation well GSD-AP-MW-2VA was installed because the initial attempt (GSD-AP-MW-2V) at vertical delineation proximal to GSD-AP-MW-2 did not yield sufficient groundwater for well development or sampling. As a result, GSD-AP-MW-2V has been converted to a temporary piezometer.
- Successfully developed the three horizontal and two vertical delineation wells between June 25, 2019 and April 14, 2020.
- Sampled the delineation wells between April 13, 2020 and April 16, 2020.
- Submitted a Groundwater Investigation Report to ADEM on May 22, 2020. This report recommended a second phase of groundwater investigation to complete delineation of groundwater impacts as required by Part C of the Order.
- Submitted an Assessment of Corrective Measures to ADEM on July 10, 2020 as required by Part D of the Order.
- Submitted the 2020 Annual Groundwater Monitoring and Corrective Action Report to document groundwater monitoring activities and results from the August 2019 and April 2020 semi-annual monitoring events on August 1, 2020.

Phase II – Groundwater Investigation – March 2021 to July 2021

Field work for Phase II was conducted during March 2021 and included the installation of an additional, deeper vertical delineation well. GSD-AP-MW-2VB was installed in the vicinity of compliance well GSD-AP-MW-2 and vertical delineation well GSD-AP-MW-2VA to further evaluate the depth of potential impacts. The well was installed, developed, and sampled during the second semi-annual event in March 2021.

Phase III – Groundwater Investigation – August 2021 to Present

Field work for Phase III was conducted between August 2021 and October 2021 and included the installation of additional vertical delineation wells to further evaluate the depth of potential impacts. The following summarizes all activities completed during Phase III of groundwater delineation at the site:

- Installation of one additional vertical delineation well (GSD-AP-MW-2VC) to vertically delineate groundwater impacts at the Site proximal to the GSD-AP-MW-2, GSD-AP-MW-2VA, and GSD-AP-MW-2VB well locations.

- Installation of two additional vertical delineation well (GSD-AP-MW-21VB and GSD-AP-MW-21VC) to vertically delineate groundwater impacts at the Site to the north of GSD-AP-MW-2, GSD-AP-MW-2VA, and GSD-AP-MW-2VB well locations and in the direction of historical groundwater flow.

- Installation of two additional vertical delineation well (GSD-AP-WW-22VB and GSD-AP-MW-23VB) to vertically delineate groundwater impacts at the Site to the north in the direction of historical groundwater flow.

- Successfully developed and sampled vertical delineation wells GSD-AP-MW-21VC and GSD-AP-WW-22VB. Wells GSD-AP-MW-21VB, GSD-AP-MW-2VC, and GSD-AP-MW-23VB did not yield sufficient groundwater for well development or sampling and have been designated as water level only piezometers.

Phase III delineation field work concluded with the first semi-annual groundwater sampling event in October 2021, and a discussion of the results are included in the following sections.

6.2 DISCUSSION OF DELINEATION RESULTS

Groundwater Monitoring and Corrective Action reports for the Plant Gadsden Ash Pond have historically identified SSL in groundwater for arsenic and lithium in compliance well GSD-AP-MW-2 and arsenic in compliance well GSD-AP-MW-4. Lithium is no longer an SSL in GSD-AP-MW-2 and recent analytical results have identified only lithium concentrations above GWPS in deeper vertical delineation wells GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-21VC, and GSD-AP-MW-22VB.

However, these new vertical delineation wells are screened in a deeper section of the Conasauga Formation, which has different geochemical characteristics and can introduce new types of variability not observed in shallow site wells. These data are not congruent with the previous conceptual site model (CSM) that

attributes the source of lithium to the ash pond; rather, the data suggest that natural, geogenic sources for lithium may exist. The Conasauga shale/mudstone formation at the Site may be a geogenic source of lithium to deeper groundwater. Among the common rock or sediment types, the highest lithium concentrations occur in shales (average 66 parts per million lithium; USGS 2017), which is more than enough lithium to produce the observed concentrations in deeper groundwater at the Site. Existing monitoring data supporting a natural source include:

- Geochemical facies consistent with ancient or old water (Sodium Chloride Type).
- Linear increase in lithium concentration as a function of well depth.
- Increase in lithium concentration also associated with rock formation.
- Higher pH indicating longer residence time and water-rock interactions.
- Elevated sodium and fluoride.

A geogenic investigation work plan to investigate the potential natural geogenic sources of lithium is currently being conducted. The geogenic investigation is composed of two major components: (1) determine if lithium is present in bedrock and could be released to groundwater and (2) determine by various geochemical methods if ash pond water may have impacted deeper groundwater. This approach provides multiple lines of evidence to assess a geogenic source for lithium.

Additionally, with the most recent phase of groundwater investigation and monitoring, fluoride exceedances were observed in vertical delineation wells GSD-AP-MW-2VB and GSD-AP-MW-21VC during recent semi-annual sampling events in October 2021, May 2022, October 2022, and June 2023. However, it is not being considered as a potential impact from the Ash Pond. The reasons for this determination are date driven: (1) fluoride impacts have not been observed historically in the uppermost aquifer or other site delineation wells (including paired locations GSD-AP-MW-2, GSD-AP-MW-2VA) and (2) GSD-AP-MW-2VB and GSD-AP-MW-21VC are new wells, screened in a deeper section of the Conasauga Formation, which has different geochemical characteristics and can introduce new types of variability not observed in shallow site wells. Groundwater quality obtained from recently installed wells also have the potential to provide (temporary) unrepresentative results as the physical processes used during the boring and well installation process can disrupt equilibrium conditions for months to years.

Isoconcentration maps for arsenic and lithium from the first semi-annual event are presented in **Figure 7A Arsenic Isoconcentration Map (October 2022)** and **Figure 8A Lithium Isoconcentration Map (October 2022)**, respectively. Geologic profiles depicting arsenic and lithium concentrations in cross-section are presented in **Figure 9A Arsenic Concentrations Along Geologic Cross-Section A-A'**

(October 2022) and **Figure 10A Lithium Concentrations Along Geologic Cross-Section A-A' (October 2022),** respectively. **Table 6** identifies Appendix IV constituents in delineation wells with concentrations above GWPS.

Isoconcentration maps for arsenic and lithium from the second semi-annual event are presented in **Figure 7B Arsenic Isoconcentration Map (June 2023)** and **Figure 8B Lithium Isoconcentration Map (June 2023)**, respectively. Geologic profiles depicting arsenic and lithium concentrations in cross-section are presented in **Figure 9B Arsenic Concentrations Along Geologic Cross-Section A-A' (June 2023)** and **Figure 10B Lithium Concentrations Along Geologic Cross-Section A-A' (June 2023),** respectively. **Table 7** identifies Appendix IV constituents in delineation wells with concentrations above GWPS.

Isoconcentration lines shown on **Figures 7A and 7B** and **Figures 8A and 8B** are data-driven contours derived from the spatial distribution of constituent concentrations in the well network. When spatially distributed objects are spatially correlated (objects close to together have similar characteristics) interpolation analysis can be used to predict "unknowns" between objects. ArcGIS and geostatistical analyst are used to interpolate chemical concentrations between well locations. This process involves the transformation of chemical concentration data to log-normal distribution prior to interpolation. In cases where concentrations decrease below the GWPS in between well pairs, the extent of groundwater impacts are interpreted from the interpolated (predicted) data set. This method takes into account the spatial pattern of decreasing concentrations observed in nearby wells.

The location and spacing of delineation wells are largely based upon the following goals and site factors:

1. Determine if impacts to groundwater could extend off-site in the direction of groundwater flow away from the facility.
2. Evaluate potential for vertical migration adjacent to compliance wells with SSL and within the context of site hydrogeology.
3. Address key data gaps between phases – working in from property line or off-site depending on gaps.
4. Ability to safely access locations with drill rig and supporting equipment.
5. Occurrence of groundwater and sufficient groundwater yield/recharge at locations.
6. Delineate extent of impacts and capture additional hydrogeologic data necessary to evaluate the feasibility of groundwater remediation technologies.

As shown on **Table 1b**, nine delineation wells have been installed at the site to assess potential impacts. Additionally, as shown on **Table 1c,** four delineation wells were installed but did not produce sufficient water to sample and were designated as water-level only piezometers.

6.2.1 Arsenic Delineation

As shown on **Figures 7A and 7B** and **Figures 9A and 9B** arsenic impacts to groundwater include two compliance wells GSD-AP-MW-2 and GSD-AP-MW-4. Phase I groundwater delineation activities were executed to continue the investigation of impacts to groundwater at Plant Gadsden and delineation wells were installed to define the horizontal and vertical extent of Appendix IV exceedances. In addition, existing downgradient piezometers GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6 were also sampled and used in delineation of Appendix IV exceedances.

Arsenic concentrations in well GSD-AP-MW-2 have declined since October 2018 and the completion of ash pond closure. Arsenic concentrations in compliance well GSD-AP-MW-2 fluctuate but exhibit an overall decrease from 1.01 mg/L in October 2018 to 0.424 mg/L in October 2021 to 0.555 mg/L in October 2022. Analytical results from the most recent sampling event in June 2023 exhibit a slight increase in arsenic concentrations from 0.555 mg/L to 0.652 mg/L. However, the data still suggests a downward trend with time.

Compliance well GSD-AP-MW-4 has displayed a consistent or overall flat trend since sampling began in 2017. However, arsenic concentrations in well GSD-AP-MW-4 demonstrate a distinctive seasonal overprint pattern of higher concentrations in Fall/Winter sampling events and lower concentrations in spring sampling events. The magnitude of these seasonal trends is small with variations typically around 0.001 to 0.002 mg/L or presented differently, concentration variations of 9-11% between events. It should be noted that the average concentration (0.013 mg/L) is just 0.003 mg/L above the GWPS (0.01 mg/L). While arsenic does not show a decreasing trend, boron in well GSD-AP-MW-4, has shown an overall decreasing trend from 0.510 to 0.415 mg/L between December 2018 and the most recent June 2023 sampling event. This indicates that throughout this period pond closure activities have had a positive impact on limiting CCR sources of COI and reducing concentrations overall. Arsenic concentrations and fluctuations in GSD-AP-MW-4 likely represent a geochemical dynamic of sorption and desorption from aquifer minerals.

Arsenic concentrations have not been detected above GWPS in horizontal delineation wells GSD-AP-MW-18H, GSD-AP-MW-19H, and GSD-AP-MW-20H or vertical delineation wells GSD-AP-MW-2VA and GSD-AP-MW-4V installed north of compliance wells GSD-AP-MW-2 and GSD-AP-MW-4 which are areas historically interpreted as downgradient of the Ash Pond. Vertical delineation wells targeted more

permeable/fractured water-bearing zones within Conasauga Formation bedrock in the upper 50 feet of bedrock. Vertical delineation well GSD-AP-MW-2VA was installed because the initial attempt (GSD-AP-MW-2V) near well GSD-AP-MW-2 did not yield sufficient groundwater for well development. As a result, GSD-AP-MW-2V has been converted to a temporary piezometer. Phase II and Phase III vertical delineation wells were installed to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2 and GSD-AP-MW-2VA and further north and northwest in the direction of groundwater flow associated with the seasonal groundwater divide. Arsenic concentrations have not been detected above GWPS in Phase II or III vertical delineation wells GSD-AP-MW-2VB, GSD-AP-MW-21VC, or GSD-AP-MW-22VB. As shown on **Figures 7A and 7B** and **Figures 9A and 9B**, analytical results for arsenic in horizontal and vertical delineation wells have been below GWPS and are sufficiently delineated laterally and vertically at the Site.

6.2.2 Lithium Delineation

Phase I and II of groundwater delineation also explored the extent of potential lithium impacts to groundwater in the vicinity of GSD-AP-MW-2. Analytical results from horizontal delineation wells have been below the GWPS for lithium as shown on **Figures 8A and 8B** and **Figures 10A and 10B**.

As described previously, the results from existing compliance wells installed near the northern waste boundary (GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6) supplement delineation efforts to the north. These wells continued to be non-detect for lithium and thus show no indications of off-site migration.

Vertical delineation results obtained from GSD-AP-MW-2VA showed lithium concentrations above GWPS during the August 2020 sampling event with concentrations increasing with depth from MW-2 to MW-2VA. Additionally, an upward hydraulic gradient was noted at the well pair GSD-AP-MW-2 and GSD-AP-MW-2VA where groundwater appeared to be flowing from deeper intervals towards the shallow water table. To continue vertical delineation, a second deeper vertical delineation well, GSD-AP-MW-2VB, was installed to further assess groundwater conditions in the vicinity of compliance well GSD-AP-MW-2. Results from the recent May 2022 and October 2022 sampling events continue to indicate increased lithium concentrations with depth. The lithium concentration exhibited in vertical delineation well GSD-AP-MW-2VB was approximately twice the concentration exhibited in vertical delineation well GSD-AP-MW-2VA, and over four times the concentration exhibited in the shallow compliance well GSD-AP-MW-2. Additional vertical delineation wells were installed to further evaluate lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA, and GSD-AP-MW-2VB further north and northwest in the direction of groundwater flow. Two vertical delineation wells, GSD-AP-MW-21VC and GSD-AP-MW-22VB, exhibited lithium

concentrations above GWPS during the October 2021, May 2022, October 2022, and June 2023 semi-annual sampling events, continuing to indicate increased lithium concentrations with depth.

Lithium concentrations in compliance well GSD-AP-MW-2 remained below the GWPS for the fifth consecutive time during the June 2023 sampling event, and it is no longer identified as an SSL. The decreasing lithium concentration trend in GSD-AP-MW-2 began between October 2018 and February 2019, which correlates exactly with the timing and disappearance of the radial flow pattern described in **Section 3.2.2**

6.3 STATUS OF DELINEATION

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in November 2020. The conclusion and results presented indicate that groundwater delineation has been completed to a sufficient degree to define the spatial extent of groundwater impacts and to inform a groundwater remedy selection plan. However, following a review of the March 2021 analytical data, it was determined that additional (Phase III) vertical delineation was necessary to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA and GSD-AP-MW-2VB and further north and northwest in the direction of groundwater flow associated with the seasonal groundwater divide.

As presented in **Section 6.2**, the horizontal and vertical extent of arsenic impacts have been successfully delineated, and no future actions are planned. Lithium impacts appear to be delineated laterally but are not yet fully delineated vertically. Additional sampling and geochemical analyses will be performed to evaluate groundwater quality in deep rock intervals where constituents and concentrations can vary from the more-shallow monitoring network naturally.

6.4 GEOGENIC EVALUATION

A geogenic investigation to evaluate the potential natural geogenic sources of lithium is currently being conducted. Because (1) lithium concentrations tend to increase with depth in vertical delineation wells, (2) a clay zone separates rock from the overlying alluvial aquifer, and (3) an initial review of water chemistry data suggests differences in water chemistry between groundwater in the alluvial aquifer and rock aquifer, a natural source of lithium (possibly Conasauga shale) is suspected. A geogenic study of lithium was initiated. The following activities have been accomplished:

- Existing reports, geologic logs, and water quality data have been reviewed.
- Groundwater quality data have been plotted on Piper diagrams to determine if there are distinct differences in water types between the unconsolidated sediments (alluvial aquifer) and bedrock.

Based on information gathered, there appear to be distinct water quality differences between the unconsolidated sediments and bedrock zones.

- Groundwater data have been evaluated and correlation plots have been conducted to determine whether there were strong relationships between groundwater parameters and lithium. For example, lithium is correlated with fluoride, which suggests fluorine-bearing minerals could be a source of lithium.
- An initial evaluation has been conducted of the geological units and their potential for permeability and groundwater flow isolation or retardation.
- In March 2023, a total of eight borings were advanced to bedrock at select locations around the ash pond for soil sample collection and subsequent analysis. Surficial aquifer soils were collected for additional permeability testing.
- Mineralogy of the bedrock samples was analyzed for lithium presence, mineral associations, and environmental availability, including bulk chemical analysis, X-ray fluorescence, X-ray diffraction, selective sequential extraction (SSE), and cation exchange capacity (CEC).

Work, either ongoing or scheduled to be performed, includes:

- Further evaluation of analytical results and of the vertical distribution of arsenic and lithium in the unconsolidated material overlying the bedrock and in the upper portion of the mudstone. This information would help further evaluate the distribution of these constituents in the subsurface and determine which of the intervals could be the source in several monitoring wells.
- Initial results of the study suggest a natural geogenic source for site COIs. Once all data have been received and reviewed, a report summarizing the findings will be submitted to ADEM.

6.5 GROUNDWATER QUALITY CHANGES AND TRENDS

Important groundwater quality changes or trends have been noted in **Section 6.2**. The key findings include:

- Arsenic concentrations exceeding GWPS are limited to two compliance wells: GSD-AP-MW-2 and GSD-AP-MW-4. Arsenic has been delineated laterally and vertically.
- Arsenic concentrations in compliance well GSD-AP-MW-2 fluctuate seasonally but exhibit an overall decrease from 1.01 mg/L in October 2018 to 0.424 mg/L in October 2021 to 0.555 mg/L in October 2022. Concentrations from the recent June 2023 sampling event showed a slight increase (0.652 mg/L), but a downward trend with time is still demonstrated.

- Arsenic concentrations in compliance well GSD-AP-MW-4 historically have exhibited a trend of fluctuating concentrations just slightly above GWPS with an average concentration of 0.013 mg/L.
- Lithium concentrations in compliance well GSD-AP-MW-2 have decreased to below GWPS during the last five consecutive sampling events, and it is no longer identified as an SSL.
- Recent analytical results have identified only lithium constituent concentrations above GWPS in deeper vertical delineation wells GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-21VC, and GSD-AP-MW-22VB. A geogenic investigation is currently being performed to evaluate groundwater quality and bedrock geochemistry in deep rock intervals where constituents and concentrations may vary from the more-shallow monitoring network naturally.

Annualized averages from waste boundary compliance wells suggest overall improvements in groundwater quality. Increasing ORP and decreasing pH, conductivity, and boron at the waste boundary show a reduction of CCR influence and an increase in meteoric source signatures. Changes such as increasing ORP can play a significant role in arsenic reduction. Annual averages are summarized below.

Annualized Averages – Boundary Compliance Wells				
Year	**Boron (mg/L)**	**Conductivity (Us/cm)**	**ORP (mv)**	**Field_pH (SU)**
2017	0.39	576	-25.9	6.56
2018	0.37	525	-13.4	6.41
2019	0.35	498	17.9	6.21
2020	0.34	438	21.3	6.27
2021	0.31	457	41.4	6.25
2022	0.29	443	38.7	6.16
2023	0.27	403	51.6	6.19

Statistically decreasing trends for Appendix III parameters are noticeably clustered in northern boundary wells. This clustering could be related to the dissipation of radial groundwater flow since closure.

Statistically Decreasing:

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-4, and GSD-AP-MW-5.
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, and GSD-AP-MW-3.
- Chloride: GSD-AP-MW-17 (upgradient) and GSD-AP-MW-3.
- pH: GSD-AP-MW-16 (upgradient).
- TDS: GSD-AP-MW-1 and GSD-AP-MW-3.

7.0 GROUNDWATER REMEDY AND CORRECTIVE ACTION

An Assessment of Corrective Measures (ACM) for groundwater impacts was conducted and formally submitted to ADEM in July 2020. Additional data analyses and investigations conducted since the ACM culminated with a more detailed Groundwater Remedy Selection Report, submitted in October 2021, and a Corrective Action Groundwater Monitoring Program document submitted in January 2022.

Submittal	Submittal Date	Purpose
Assessment of Corrective Measures	07/2020	Initial evaluation of the feasibility, performance, and implementation of known and emerging groundwater remediation technologies against site conditions and factors.
Groundwater Remedy Selection Report	10/2021	Formal selection and detailed description of groundwater remedies selected for implementation at the site.
Corrective Action Groundwater Monitoring Program	01/2022	Plan document to describe process and program for implementation and monitoring of groundwater remedies selected at the site.

7.1 GROUNDWATER REMEDY SELECTION

The Groundwater Remedy Selection Report described the selected remedies for groundwater corrective actions at the site:

- Source control (complete) that included dewatering, consolidation, capping of the Site.
- Geochemical manipulation by injection in areas of relatively high concentrations of constituents of interest (COI) to remove them from groundwater and immobilize them in situ.
- Monitored natural attenuation (MNA) over the entire Site.

Closure of the Site, which included dewatering, consolidation, and capping, has reduced source contributions to groundwater. Geochemical manipulation by injection was selected because of its effectiveness, ease of implementation, versatility (ability to treat more than one COI with the same treatment solution), ability to implement in areas with limited working space, and lack of byproducts that would require further treatment or disposal. MNA was selected because substantial evidence indicates that it is currently occurring at the Site.

7.2 CORRECTIVE ACTION – GROUNDWATER MONITORING PROGRAM

The Corrective Action Groundwater Monitoring Program describes early plans for implementation and monitoring of the groundwater remedies described above. As discussed in the Groundwater Remedy Selection Report (Anchor QEA 2021), construction activities associated with closure reached substantial completion in August 2018. Site closure included removal of free water, dewatering the CCR material, grading the Site to promote drainage, and installing a final low-permeability cover system consisting of synthetic turf and geomembrane. The final cover was constructed over the consolidated footprint of the CCR unit, an area of approximately 55 acres.

In addition to continued rule-required monitoring, the objectives of this Monitoring Program are to demonstrate that horizontal and vertical delineation remain complete, demonstrate that natural attenuation is occurring, evaluate groundwater remedy performance against groundwater protection standards, evaluate groundwater constituent of interest concentrations with respect to standards protective of potential human and ecological receptors, and evaluate system performance against adaptive triggers to determine if adaptation or change to the remedy system is necessary.

For the first 2 years (2022 through 2024), background (in time) monitoring will be conducted to establish post-closure baseline Site conditions with respect to MNA parameters. After the 2-year period, the baseline data will be evaluated, and subsequent adjustments to the Monitoring Program may be implemented. Specific adaptive triggers for MNA monitoring will also be developed after the initial 2-year background monitoring.

MNA and source control (Site closure) will operate in conjunction with each other as remedies. Site closure appears to be reducing source contributions of COIs to groundwater. Geochemical manipulation by injection will be implemented after completion of successful laboratory treatability studies, issuance of an underground injection control permit, and installation of injection and additional monitoring wells associated with the injection areas. The following tasks outline the first phase of the implementation and monitoring of selected groundwater remedies.

Selected Remedy	Implementation Tasks
Monitored Natural Attenuation	1. Implementation of expanded MNA sampling parameters. 2. Further assessment of MNA monitoring network.
Geochemical Injection	1. Complete laboratory treatability studies to evaluate reagent composition, dosing, effectiveness, and sequencing for in situ groundwater treatment of constituents of interest (COI) via injection. Results from the treatability studies would be incorporated into an Underground Injection Control (UIC) permit application for the Site. 2. Implementation of geochemical injection pilot tests using data collected from the laboratory treatability studies and issuance of an UIC permit.

Implementation of Monitored Natural Attenuation

MNA sampling parameters were added to the sampling plans and analyzed in the laboratory beginning with the May 2022 sampling event (**Tables 6 and 7**). These parameters, in addition to field parameters, Appendix III, and Appendix IV parameters are used to study the processes that govern or facilitate MNA as well as changes in geochemical conditions. Parameters will be included in the site geochemical model.

Geochemical Injection Pilot Testing Program

Laboratory treatability studies using Site aquifer media and impacted groundwater to evaluate reagent composition, dosing, effectiveness, and sequencing (if applicable) for in situ groundwater treatment of COIs via injection is currently being conducted. Treatability tests include the following tasks and procedures prior to field implementation of an injection treatment pilot study.

- Selection and formulation of reagent solutions based on previous similar studies.

- Batch testing using multiple treatment solutions to determine the most effective formulations for column testing.
- Column testing to better simulate field conditions, determine effectiveness, and evaluate potential release of COIs due to treatment (unintended consequences).
- Post-column testing, using selective sequential extraction, on treated soils to determine the long-term stability of the accumulated COIs.
- Results from the treatability studies would be incorporated into an Underground Injection Control permit application to be submitted to ADEM for approval prior to field implementation of an injection treatment pilot study.

The tentative schedule for this initial foundation phase is:

- Aquifer solids (soils) and groundwater sample collection from the selected pilot test areas – first and second quarters of 2022 (completed).
- Laboratory batch and column testing, and selective sequential extraction of treated soil (in progress).
- In situ groundwater treatment and hydraulic containment evaluation (in progress).
- Underground Injection Permit application – third and fourth quarters of 2023.
- Geochemical Injection Pilot Program – TBD, pending requisite documents and approvals supporting the injection program.

8.0 SUMMARY AND CONCLUSIONS

The first and second semi-annual monitoring events were conducted in October 2022 and June 2023. Statistical evaluations of the monitoring data identified SSL of the Appendix IV constituent arsenic at wells GSD-AP-MW-2 and GSD-AP-MW-4 during the first and second monitoring events. To address previously identified SSL, a Groundwater Remedy Selection Report was prepared and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022, for review.

The Corrective Action Groundwater Monitoring Program was prepared to detect potential downgradient changes in groundwater quality and assess the efficacy of the selected groundwater corrective action remedies. The Monitoring Program will supplement the ongoing CCR compliance groundwater monitoring currently being performed at the Site. The following future actions will be taken or are recommended for the site:

- Complete the Laboratory Treatability Studies then for the geochemical injection pilot studies. The laboratory treatability studies include the following tasks:
    - Conduct batch testing to evaluate removal of COI, and select the optimum reagents and doses for column tests.
    - Conduct column testing to evaluate removal of COI by mixing treatment reagents with site-specific impacted groundwater and applying to site-specific soils (aquifer solids) in columns. Appendix III and IV constituents will be measured in the column effluents to determine the reduction of COI in groundwater, and to evaluate any unintended consequences of treatment (e.g., release of constituents from soils).
    - Conduct selective sequential extraction of post-column (treated) soils to help determine the sequestration mechanisms and stability of the COI and their host solids.
    - After treatment, the post-column (treated) soils will be leached with upgradient (background) groundwater in additional column studies to help assess long-term stability of the COIs and their host solids.
- Draft and submit a Class V Underground Injection Control (UIC) permit application for geochemical manipulation by injection, which was selected as one of the corrective measures described in the Groundwater Remedy Selection Report.

Continue the geogenic evaluation of Site bedrock (Conasauga shale/mudstone) as a geogenic source of lithium and review of possible mechanisms to mobilize lithium into deeper Site wells recently installed for vertical delineation. This includes:

  - Additional evaluation of potential confinement between geologic zones.
  - Laboratory analyses of unconsolidated zone and bedrock core samples for physical parameters, mineralogy, and geochemistry are planned and will be evaluated.
  - Research will be completed on natural lithologic deposits that contain lithium or have an association with lithium.

- Conduct the first semi-annual assessment monitoring event in Fall 2023 and submit the Semi-Annual Groundwater Monitoring and Corrective Action Report summarizing the findings to ADEM by February 1, 2024.

9.0 REFERENCES

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Tables

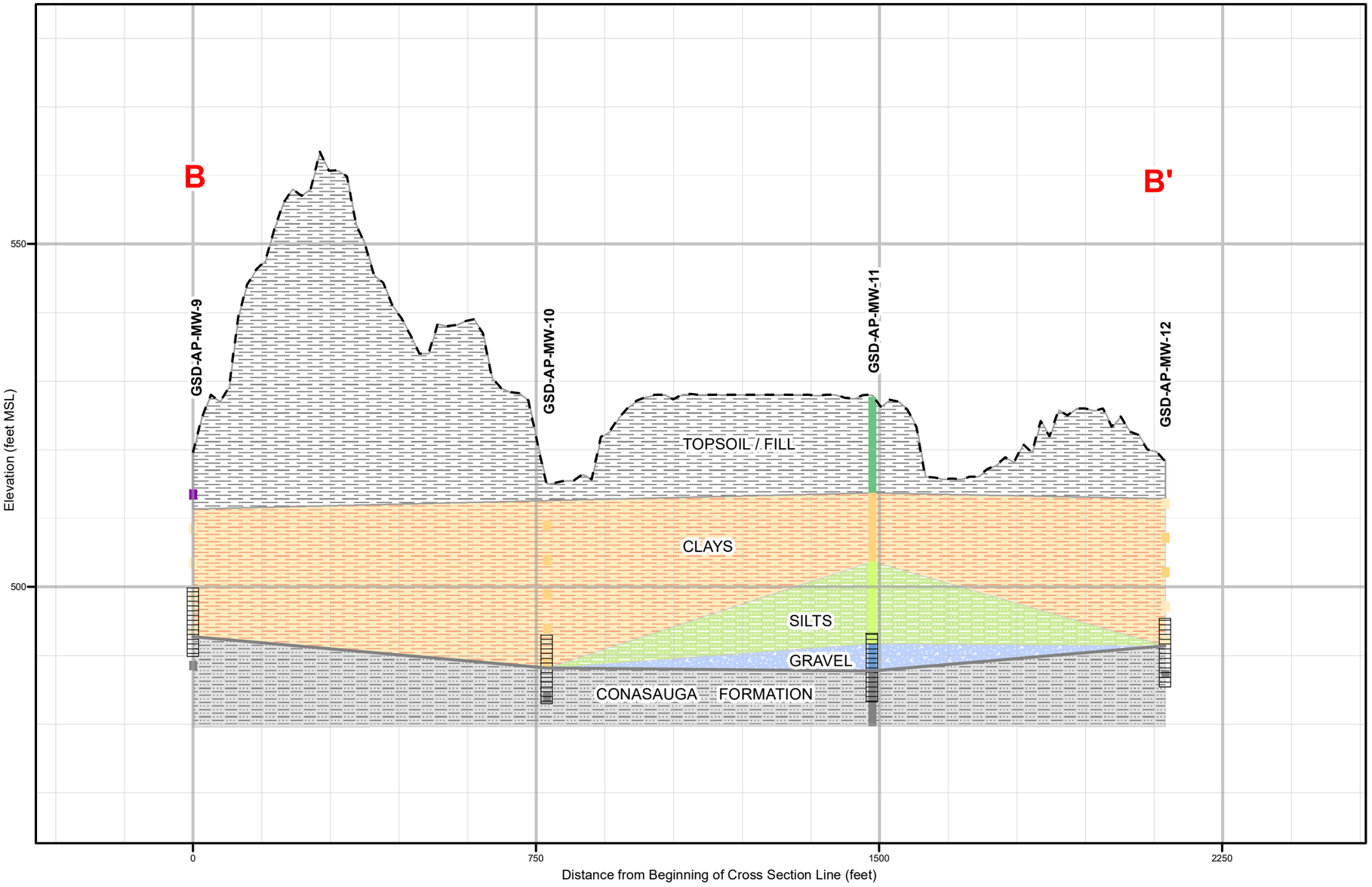
Table 4b. - Field QC: Blank Detections

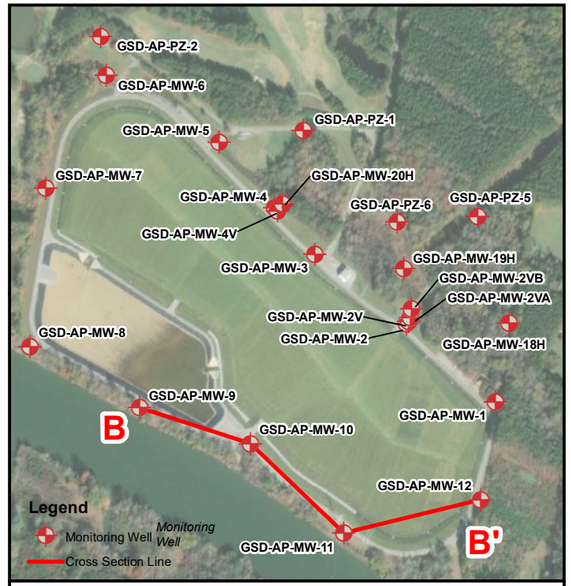
Plant Gadsden Ash Pond
10/25/2022 - 10/26/2022

Parameters Detected Above MDL					
Sample Date	**QC Location**	**Parameter**	**Blank Concentration**	**Units**	**MDL**
10/25/2022	FB-1	Antimony	0.00057 J	mg/L	0.00051
10/26/2022	FB-2	Arsenic	9E-05 J	mg/L	8E-05
10/25/2022	FB-1	Arsenic	0.00014 J	mg/L	8E-05
10/25/2022	FB-1	Chromium	0.00038 J	mg/L	0.0002

Notes:
1. Lab qualifiers have been appended to result when applicable
2. MDL = Method Detection Limit
3. Only Appendix 4 Constituents were compared and validated. Radium data was not validated.
4. mg/L = milligrams per liter

Figures





Notes: 1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.

Legend

- Screen Interval
- Ground Surface Elevation
- Unit Boundary

Borehole Descriptions

- Clay, Silt, and Gravel Fill
- Lean Clays
- Fat and Silty Clays
- Silt
- Poorly-graded Gravelly Sand
- Well-graded Gravel
- Shale/Siltstone

Geologic Units

- Topsoil/Fill
- Clays
- Silts
- Gravel
- Siltstone/Shale

HORIZONTAL SCALE	1:3000
DATE	7/22/2021
DRAWN BY	KAR
CHECKED BY	CTL

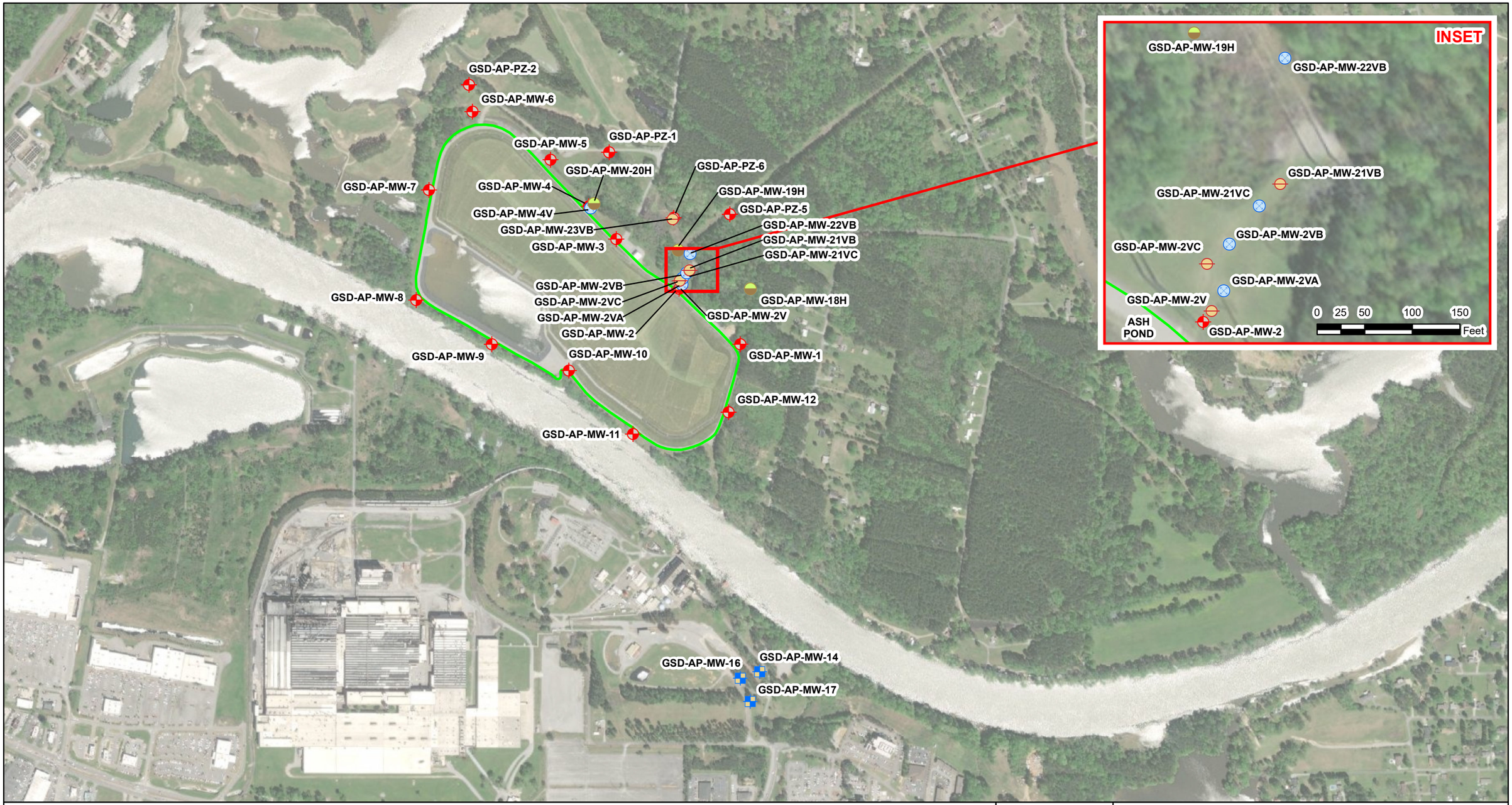
DRAWING TITLE

GEOLOGIC CROSS-SECTION B - B'
PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 4B

Southern Company



Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Ash Pond Boundary

N

0 500 1,000 2,000 Feet

SCALE	1:9000
DATE	1/25/2022
DRAWN BY	KAR
TECH REVIEW	KWR
CHECKED BY	GFB

DRAWING TITLE

MONITORING WELL LOCATION MAP
PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 5

Southern Company

PZ-2
507.17

MW-6
507.51

MW-5
508.00

PZ-1
508.63

MW-7
506.64

MW-4
510.86

MW-20H
510.82

MW-4V
510.75

PZ-6
508.98

PZ-5
509.05

MW-23VB
509.52

MW-3
510.82

MW-19H
509.60

MW-22VB
509.52

MW-21VB
510.62

MW-2VC
510.91

MW-18H
509.19

MW-21VC
510.87

MW-2
510.75

MW-2VB
510.72

MW-2V
510.77

MW-2VA
510.75

MW-1
510.76

MW-8
507.68

MW-9
507.69

MW-10
508.35

MW-12
508.36

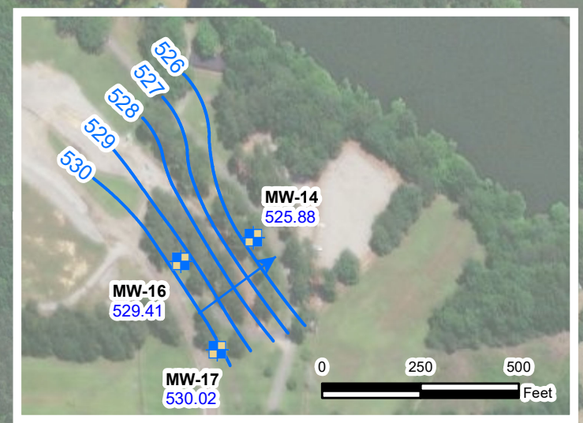
MW-11
507.50

507

509

510

508



NOTES:
1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
3. MW-2V was orginially intended for vertical delineation but has been converted to a temporary piezometer due to low groundwater recharge.This location will be abandoned in the future.

Legend

- Downgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Groundwater Divide
- **MW-1** Well ID
  510.76 Groundwater Elevation

N

0 500 1,000 2,000 Feet

SCALE	1:6000
DATE	6/23/2023
DRAWN BY	KWR
CHECKED BY	GFB

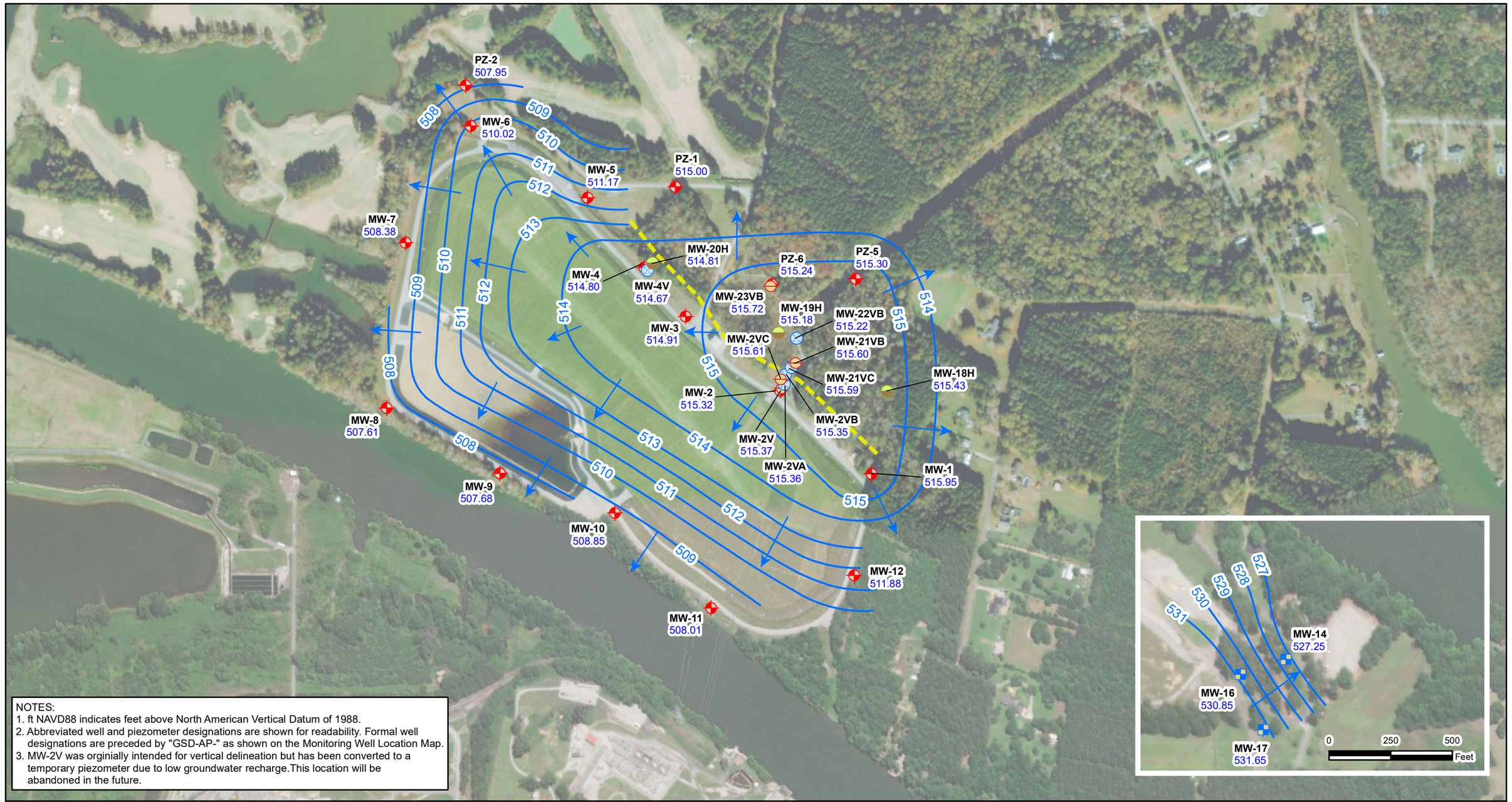
DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP
OCTOBER 24, 2022
PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 6A

Southern Company



NOTES:
1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
3. MW-2V was orginially intended for vertical delineation but has been converted to a temporary piezometer due to low groundwater recharge.This location will be abandoned in the future.

Legend

- Downgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Groundwater Divide
- **MW-1** / 515.95 — Well ID / Groundwater Elevation

N

0 500 1,000 2,000 Feet

SCALE	1:6000
DATE	6/23/2023
DRAWN BY	KWR
CHECKED BY	GFB

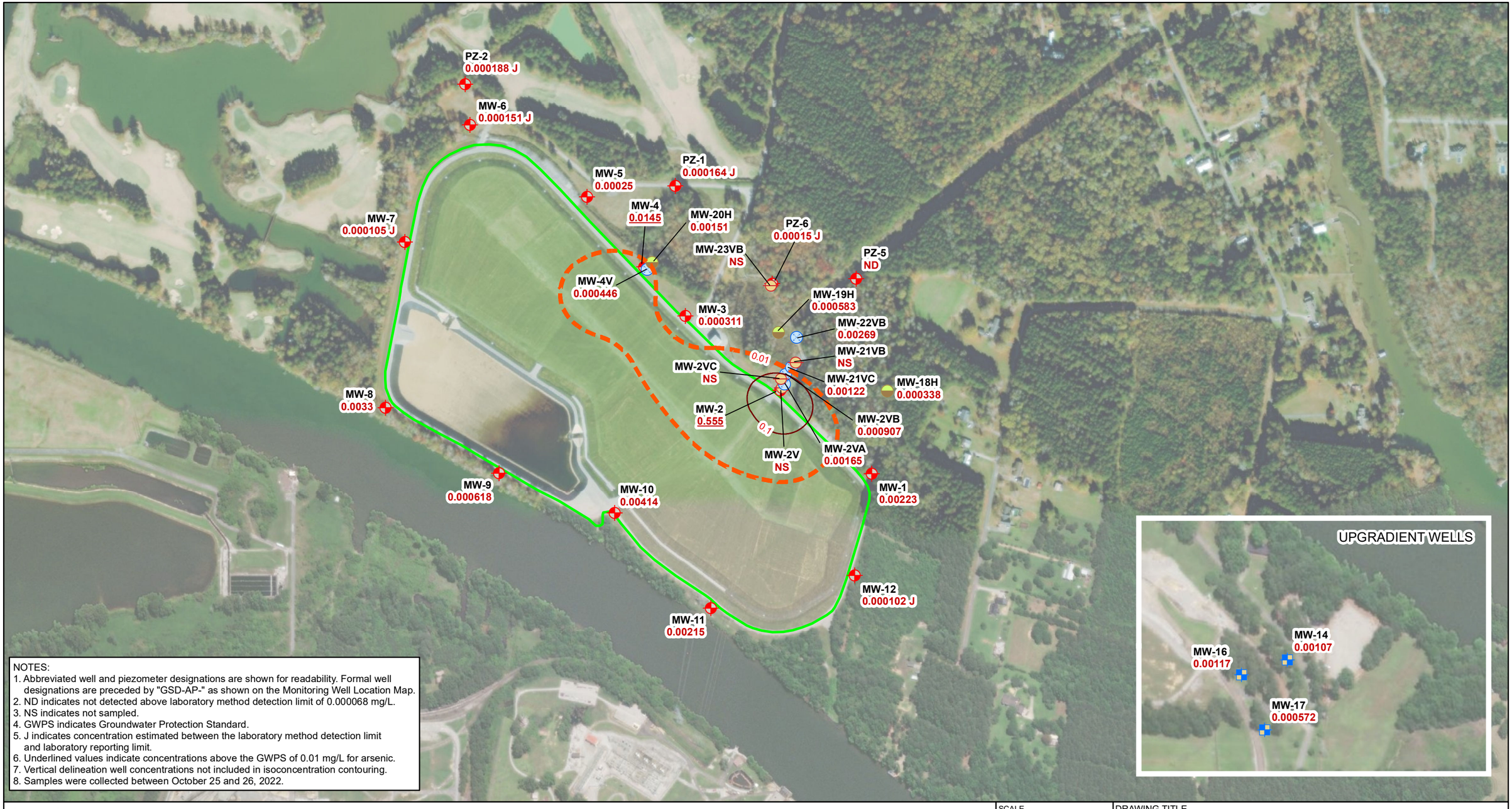
DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP JUNE 5, 2023 PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 6B

Southern Company



NOTES:
1. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
2. ND indicates not detected above laboratory method detection limit of 0.000068 mg/L.
3. NS indicates not sampled.
4. GWPS indicates Groundwater Protection Standard.
5. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
6. Underlined values indicate concentrations above the GWPS of 0.01 mg/L for arsenic.
7. Vertical delineation well concentrations not included in isoconcentration contouring.
8. Samples were collected between October 25 and 26, 2022.

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Approximate Arsenic Groundwater Protection Standard Contour (0.01 mg/L)
- Arsenic Concentration Contour (mg/L)
- Ash Pond Boundary

MW-11 Well ID
0.00216 Arsenic Concentration (mg/L)

N

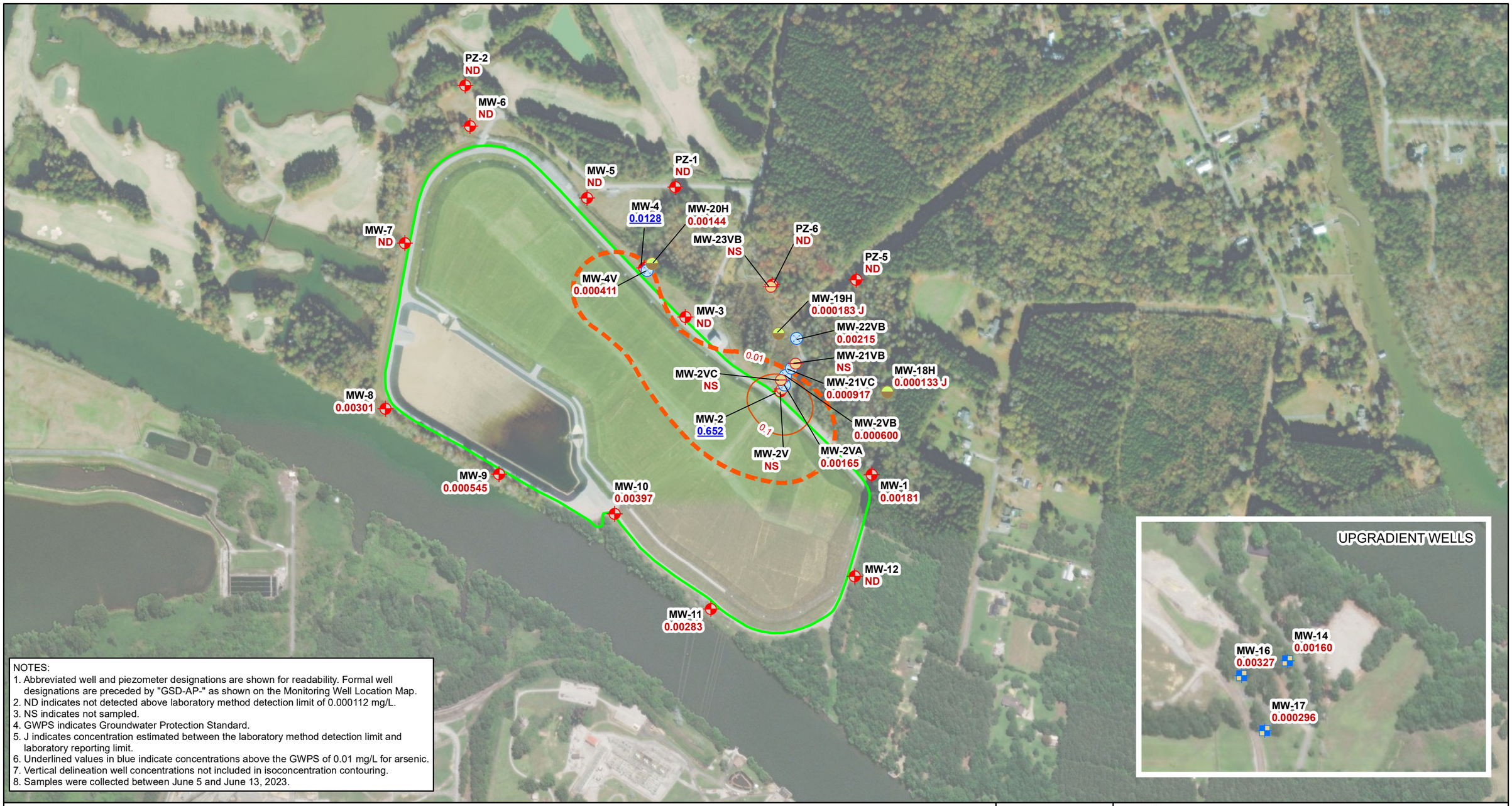
0 250 500 1,000 1,500 Feet

SCALE	1:6000
DATE	12/22/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

DRAWING TITLE
ARSENIC ISOCONCENTRATION MAP
OCTOBER 2022
PLANT GADSDEN ASH POND

FIGURE NO
FIGURE 7A

Southern Company



NOTES:
1. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
2. ND indicates not detected above laboratory method detection limit of 0.000112 mg/L.
3. NS indicates not sampled.
4. GWPS indicates Groundwater Protection Standard.
5. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
6. Underlined values in blue indicate concentrations above the GWPS of 0.01 mg/L for arsenic.
7. Vertical delineation well concentrations not included in isoconcentration contouring.
8. Samples were collected between June 5 and June 13, 2023.

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Approximate Arsenic Groundwater Protection Standard Contour (0.01 mg/L)
- Arsenic Concentration Contour (mg/L)
- Ash Pond Boundary
- **MW-11** Well ID
  0.00283 Arsenic Concentration (mg/L)

N

0 250 500 1,000 1,500 Feet

SCALE	1:6000
DATE	7/20/2023
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	ACP

DRAWING TITLE
ARSENIC ISOCONCENTRATION MAP
JUNE 2023
PLANT GADSDEN ASH POND

FIGURE NO
FIGURE 7B

Southern Company

PZ-2
ND
MW-6
ND
MW-5
ND
PZ-1
ND
MW-7
ND
MW-20H
ND
PZ-6
ND
MW-4
ND
MW-23VB
NS
PZ-5
ND
MW-4V
0.0226
MW-19H
ND
MW-22VB
0.0616
MW-3
ND
MW-21VB
NS
0.04
MW-21VC
0.262
MW-18H
ND
MW-2VC
NS
MW-2VB
0.141
MW-2
0.0304
MW-2V
NS
MW-2VA
0.0748
MW-8
ND
MW-9
ND
MW-10
ND
MW-1
ND
MW-12
ND
MW-11
ND

UPGRADIENT WELLS

MW-14
ND
MW-16
ND
MW-17
0.00897 J

NOTES:
1. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
2. ND indicates not detected above laboratory method detection limit of 0.007105 mg/L.
3. NS indicates not sampled.
4. GWPS indicates Groundwater Protection Standard.
5. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
6. Underlined values indicate concentrations above the GWPS of 0.04 mg/L for lithium.
7. Samples were collected between October 25 and 26, 2022.

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Approximate Lithium Groundwater Protection Standard Contour (0.04 mg/L)
- Ash Pond Boundary

MW-2 Well ID
0.0304 Lithium Concentration (mg/L)

N

0 250 500 1,000 1,500 Feet

SCALE	1:6000
DATE	12/22/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

DRAWING TITLE
LITHIUM ISOCONCENTRATION MAP
OCTOBER 2022
PLANT GADSDEN ASH POND

FIGURE NO
FIGURE 8A

Southern Company

PZ-2
ND
MW-6
ND
MW-5
ND
PZ-1
ND
MW-7
ND
MW-20H
ND
MW-4
ND
MW-23VB
NS
PZ-6
ND
PZ-5
ND
MW-4V
0.0189 J
MW-19H
ND
MW-22VB
0.0517
MW-3
ND
MW-21VB
NS
0.04
MW-21VC
0.205
MW-18H
ND
MW-8
ND
MW-2VC
NS
MW-2VB
0.125
MW-2
0.0258
MW-2V
NS
MW-2VA
0.0668
MW-1
ND
MW-9
ND
MW-10
ND
MW-12
ND
MW-11
ND

UPGRADIENT WELLS

MW-14
ND
MW-16
ND
MW-17
0.0101 J

NOTES:
1. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
2. ND indicates not detected above laboratory method detection limit of 0.007105 mg/L.
3. NS indicates not sampled.
4. GWPS indicates Groundwater Protection Standard.
5. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
6. Underlined values in blue indicate concentrations above the GWPS of 0.04 mg/L for lithium.
7. Samples were collected between June 5 and June 13, 2023.

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Approximate Lithium Groundwater Protection Standard Contour (0.04 mg/L)
- Ash Pond Boundary

MW-2 Well ID
0.0258 Lithium Concentration (mg/L)

N

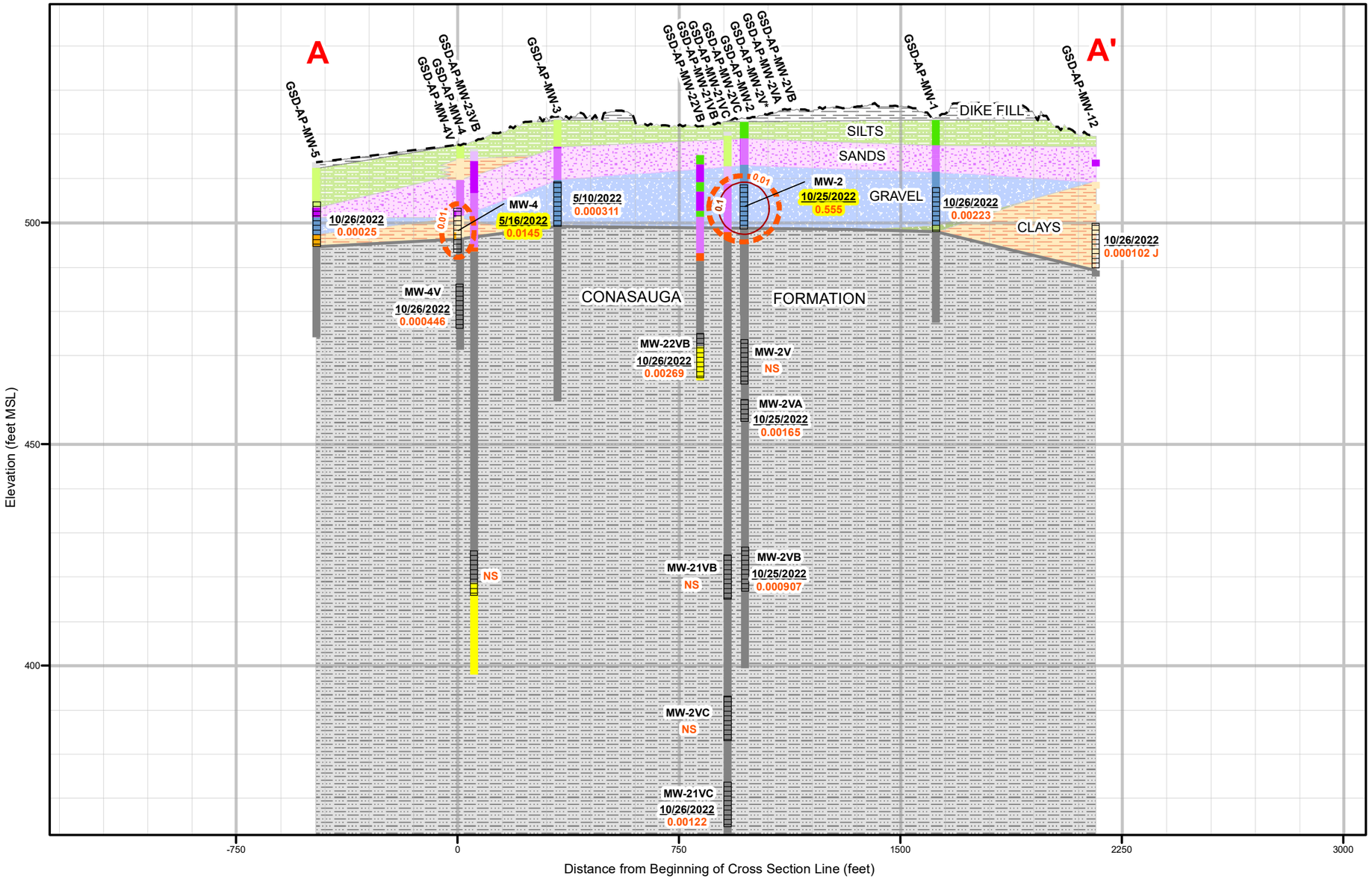
0 250 500 1,000 1,500 Feet

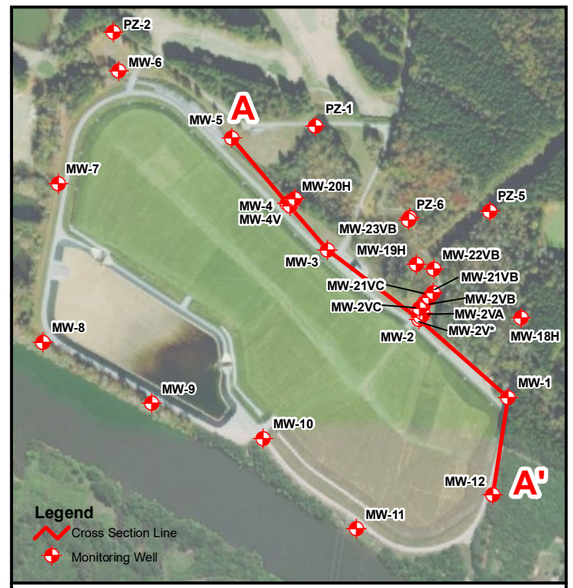
SCALE	1:6000
DATE	7/20/2023
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

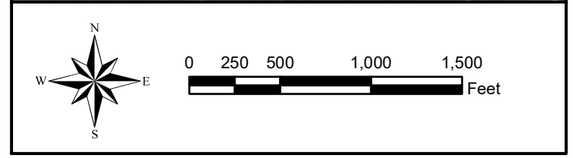
DRAWING TITLE
LITHIUM ISOCONCENTRATION MAP
JUNE 2023
PLANT GADSDEN ASH POND

FIGURE NO
FIGURE 8B

Southern Company







Notes:
1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.
4. *GSD-AP-MW-2V is utilized for water levels only and was not sampled.
5. Groundwater samples were collected between October 25 and 26, 2022.
6. ND indicates not detected above laboratory method detection limit of 0.000068 mg/L.
7. NS indicates not sampled.
8. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
9. GWPS indicates Groundwater Protection Standard.
10. Highlighted values indicate concentrations above the GWPS of 0.01 mg/L for arsenic.

Legend

- Approximate Arsenic Groundwater Protection Standard Contour (0.01 mg/L)
- Arsenic Isoconcentration Contour (mg/L)
- Screen Interval
- Ground Surface Elevation
- Unit Boundary
- 0.00122 As Concentration (mg/L)

Borehole Descriptions

- Topsoil/Fill
- Lean and Sandy Lean Clay
- Fat Clay
- Silty Clay
- Silt
- Sandy Silt
- Silty Sand
- Well-graded Sand
- Poorly-graded Sands
- Clay, Sand, and Gravel Mix
- Well-graded Gravel
- Mudstone/Shale
- Dolomite or Limestone

Geologic Units

- Dike Fill
- Clays
- Silts
- Sands
- Gravel
- Undifferentiated Clay, Sand, and Gravel
- Mudstone/Shale

HORIZONTAL SCALE	1:4600
DATE	12/20/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

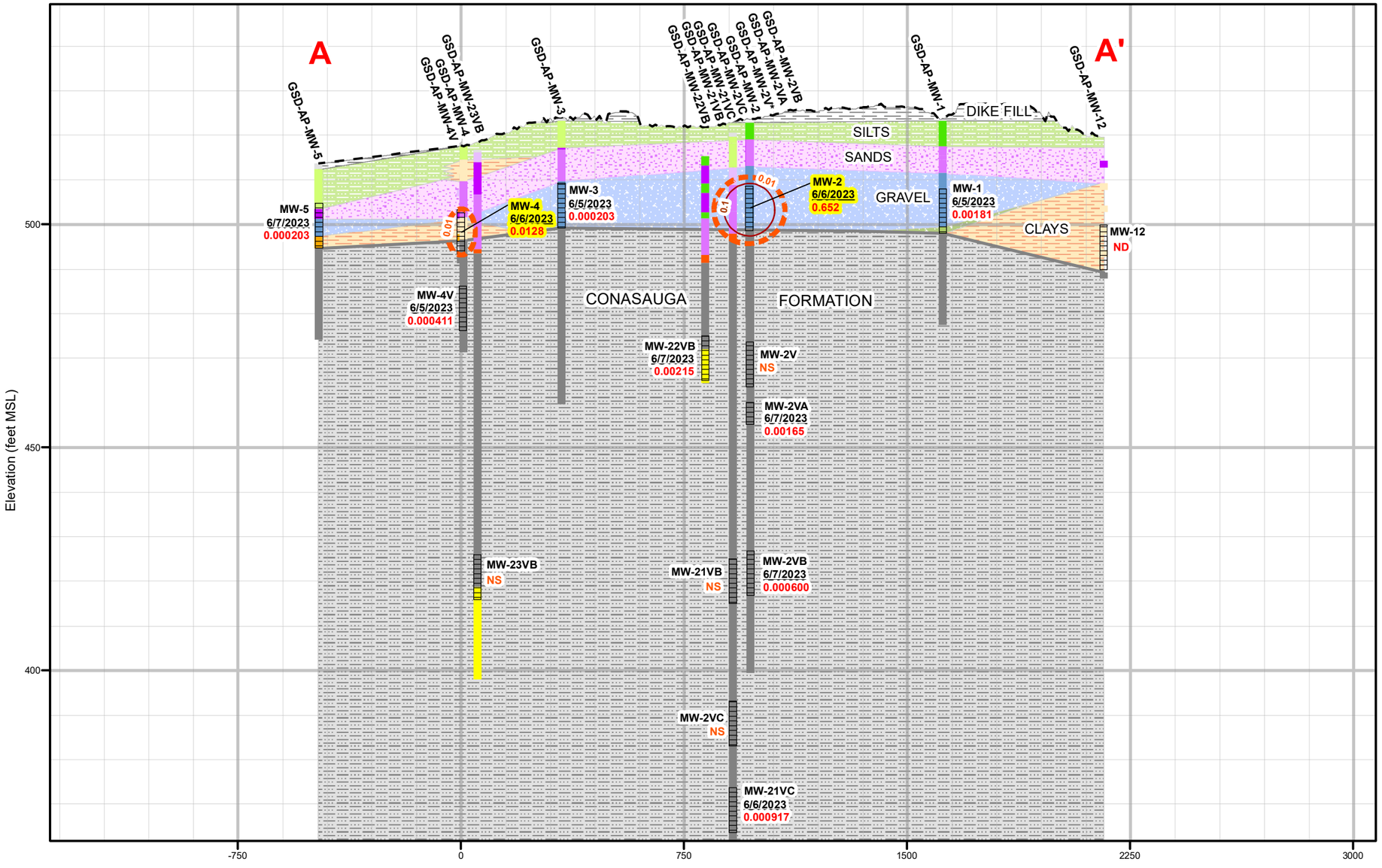
DRAWING TITLE

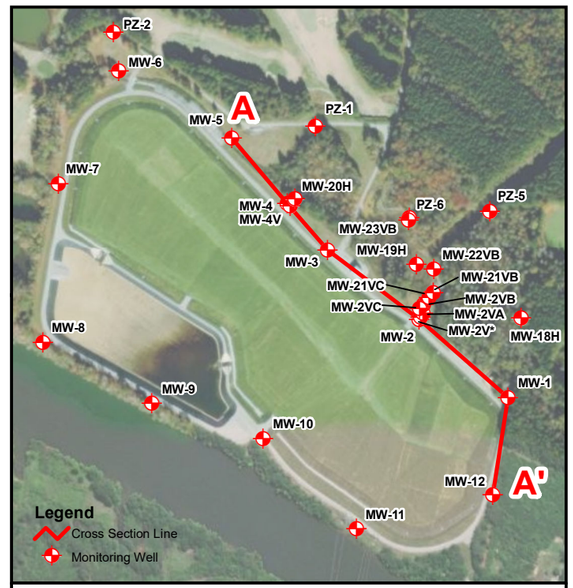
ARSENIC CONCENTRATIONS ALONG GEOLOGIC CROSS-SECTION A - A' PLANT GADSDEN ASH POND

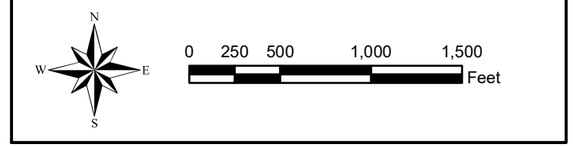
FIGURE NO

FIGURE 9A

Southern Company







Notes:
1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.
4. *GSD-AP-MW-2V is utilized for water levels only and was not sampled.
5. Groundwater samples were collected between June 5 and June 13, 2023.
6. ND indicates not detected above laboratory method detection limit of 0.000112 mg/L.
7. NS indicates not sampled.
8. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
9. GWPS indicates Groundwater Protection Standard.
10. Highlighted values indicate concentrations above the GWPS of 0.01 mg/L for arsenic.

Legend

- Approximate Arsenic Groundwater Protection Standard Contour (0.01 mg/L)
- Arsenic Isoconcentration Contour (mg/L)
- Screen Interval
- Ground Surface Elevation

0.00165 As Concentration (mg/L)

Borehole Descriptions

- Topsoil/Fill
- Lean and Sandy Lean Clay
- Fat Clay
- Silty Clay
- Silt
- Sandy Silt
- Silty Sand
- Well-graded Sand
- Poorly-graded Sands
- Clay, Sand, and Gravel Mix
- Well-graded Gravel
- Mudstone/Shale
- Dolomite or Limestone
- Unit Boundary

Geologic Units

- Dike Fill
- Clays
- Silts
- Sands
- Gravel
- Undifferentiated Clay, Sand, and Gravel
- Mudstone/Shale

HORIZONTAL SCALE	1:4600
DATE	7/20/2023
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

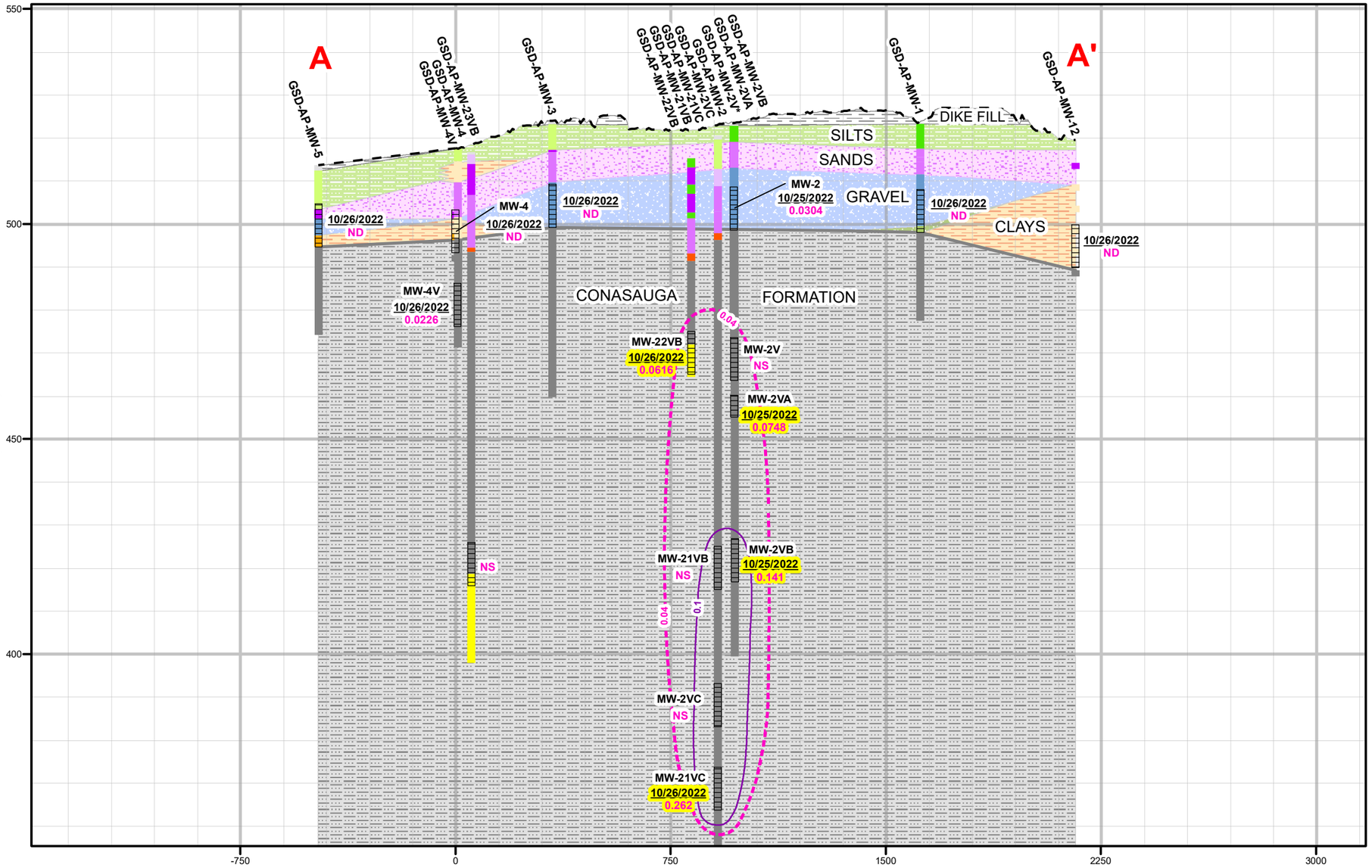
DRAWING TITLE

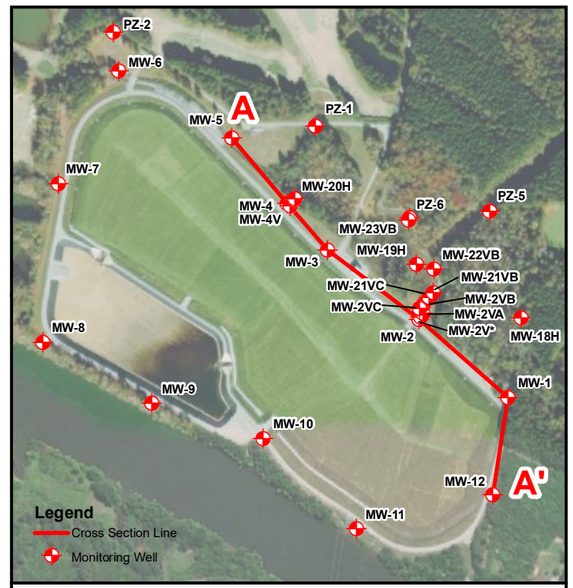
ARSENIC CONCENTRATIONS ALONG GEOLOGIC CROSS-SECTION A - A' PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 9B

Southern Company





Notes:
1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.
4. *GSD-AP-MW-2V is utilized for water levels only and was not sampled.
5. Groundwater samples were collected between October 25 and 26, 2022.
6. ND indicates not detected above laboratory method detection limit of 0.007105 mg/L.
7. NS indicates not sampled.
8. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
9. GWPS indicates Groundwater Protection Standard.
10. Highlighted values indicate concentrations above the GWPS of 0.04 mg/L for lithium.

Legend

- Approximate Lithium Groundwater Protection Standard Contour (0.04 mg/L)
- Lithium Isoconcentration Contour (mg/L)
- Screen Interval
- Ground Surface Elevation
- Unit Boundary
- 0.0616 Lithium Concentration (mg/L)

Borehole Descriptions

- Topsoil/Fill
- Lean and Sandy Lean Clay
- Fat Clay
- Silty Clay
- Silt
- Sandy Silt
- Silty Sand
- Well-graded Sand
- Poorly-graded Sands
- Clay, Sand, and Gravel Mix
- Well-graded Gravel
- Mudstone/Shale
- Dolomite or Limestone

Geologic Units

- Dike Fill
- Clays
- Silts
- Sands
- Gravel
- Undifferentiated Clay, Sand, and Gravel
- Mudstone/Shale

HORIZONTAL SCALE	1:4800
DATE	12/22/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

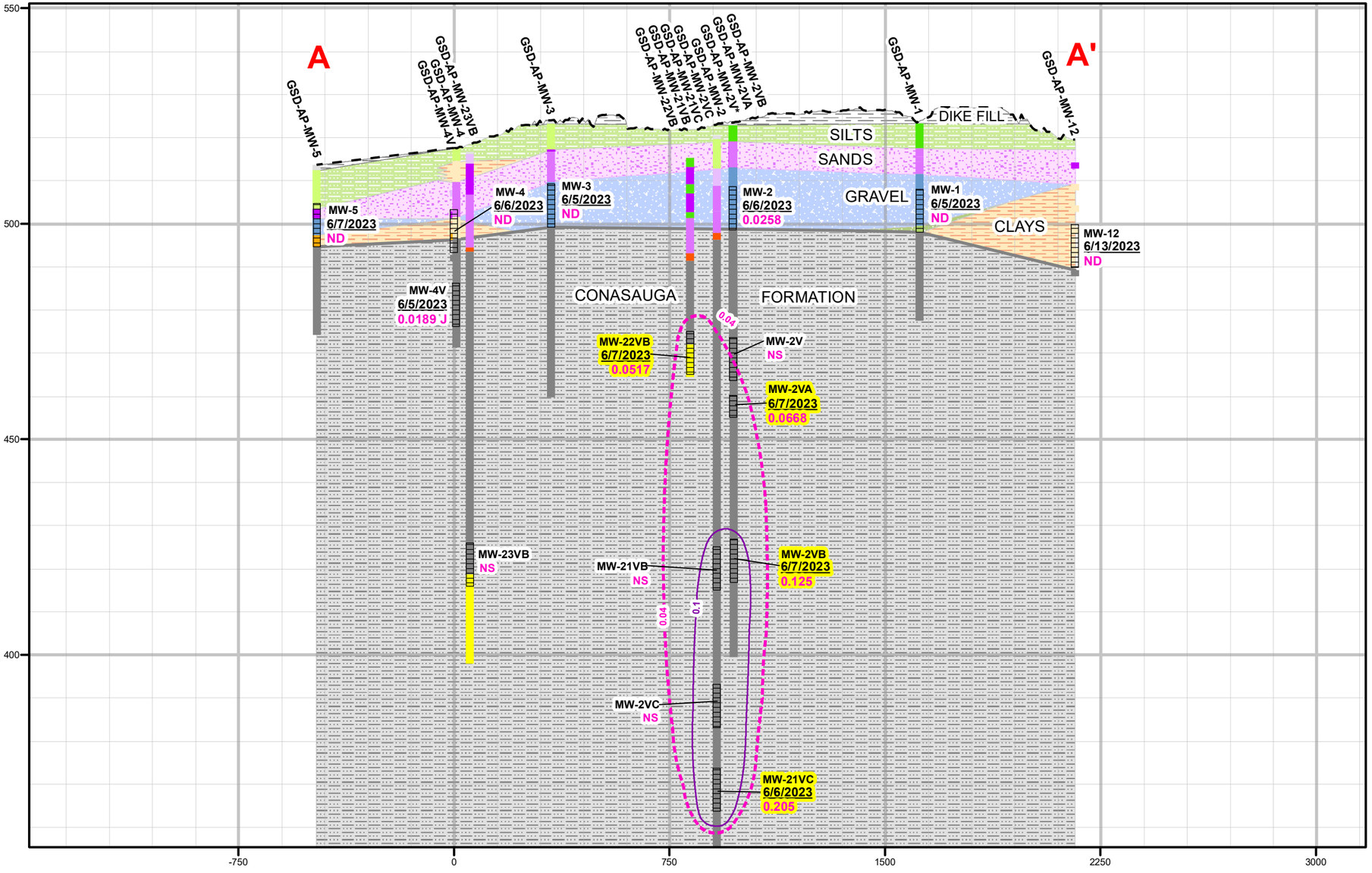
DRAWING TITLE

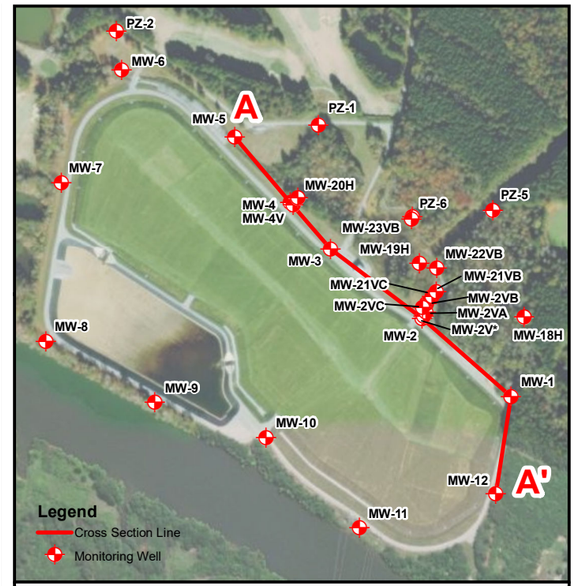
LITHIUM CONCENTRATIONS ALONG GEOLOGIC CROSS-SECTION A - A' PLANT GADSDEN ASH POND

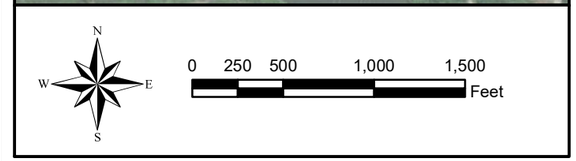
FIGURE NO

FIGURE 10A

Southern Company







Notes:
1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.
4. *GSD-AP-MW-2V is utilized for water levels only and was not sampled.
5. Groundwater samples were collected between June 5 and June 13, 2023.
6. ND indicates not detected above laboratory method detection limit of 0.007105 mg/L.
7. NS indicates not sampled.
8. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
9. GWPS indicates Groundwater Protection Standard.
10. Highlighted values indicate concentrations above the GWPS of 0.04 mg/L for lithium.

Legend

- Approximate Lithium Groundwater Protection Standard Contour (0.04 mg/L)
- Lithium Isoconcentration Contour (mg/L)
- Screen Interval
- Ground Surface Elevation
- 0.0517 Lithium Concentration (mg/L)

Borehole Descriptions

- Topsoil/Fill
- Lean and Sandy Lean Clay
- Fat Clay
- Silty Clay
- Silt
- Sandy Silt
- Silty Sand
- Well-graded Sand
- Poorly-graded Sands
- Clay, Sand, and Gravel Mix
- Well-graded Gravel
- Mudstone/Shale
- Dolomite or Limestone
- Unit Boundary

Geologic Units

- Dike Fill
- Clays
- Silts
- Sands
- Gravel
- Undifferentiated Clay, Sand, and Gravel
- Mudstone/Shale

HORIZONTAL SCALE	1:4800
DATE	7/20/2023
DRAWN BY	KAR
TECH REVIEW	KWR
CHECKED BY	ACP

DRAWING TITLE

LITHIUM CONCENTRATIONS ALONG GEOLOGIC CROSS-SECTION A - A' PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 10B

Southern Company

Appendix A

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-14								
		06/27/2018	07/18/2018	08/06/2018	09/05/2018	09/24/2018	10/24/2018	12/05/2018	02/05/2019	02/28/2019
Appendix III										
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Calcium	mg/L	16.6	15.3	13.8	12.1	11.8	10.2	9.14	15.1	21.4
Chloride	mg/L	3.1	3.4	2.8	2.8	3.1	2.8	2.2	3.12	3.45
Fluoride	mg/L	0.18	0.23	0.23	0.22	0.2	0.14	0.07 J	<0.05	<0.05
pH_Field	SU	3.95	4.02	4.07	4.07	4.07	4.1	4.1	4.02	3.94
Sulfate	mg/L	120	120	110	86	80	68	54	126	207
TDS	mg/L	219	195	175	153	127	125	101	180	287
Appendix IV										
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--
Arsenic	mg/L	0.00165 J	0.00117 J	<0.001	<0.001	0.00148 J	<0.001	<0.001	0.00119 J	--
Barium	mg/L	0.0338	0.03	0.0274	0.0275	0.0264	0.0276	0.0256	0.0314	--
Beryllium	mg/L	0.00134 J	0.00133 J	0.00129 J	0.00106 J	0.000991 J	0.00082 J	0.00141 J	0.0011 J	--
Cadmium	mg/L	0.00064 J	0.000679 J	0.000536 J	0.000479 J	0.00039 J	0.000436 J	0.000307 J	0.000515 J	--
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	0.0382	0.0366	0.0308	0.0291	0.0286	0.0269	0.0215	0.0359	--
Combined Radium	pCi/L	0.616	0.859	0.654	0.855	0.787	1.14	0.64	0.873	--
Lead	mg/L	0.00158 J	0.00152 J	0.00143 J	0.00118 J	0.00156 J	0.00121 J	0.00117 J	0.00156 J	--
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
Mercury	mg/L	0.000661	0.000398 J	0.00042 J	0.00037 J	0.000329 J	<0.00025	0.000253 J	0.000664	--
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-14								GSD-AP-MW-
		08/20/2019	04/16/2020	08/25/2020	03/22/2021	10/12/2021	05/09/2022	10/26/2022	06/06/2023	12/06/2017
Appendix III										
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.135
Calcium	mg/L	14.4	20.1	13.1	12.2	11.8	14.5	8.97	14.9	42
Chloride	mg/L	3.27	3.74	3.03	3.15	2.87	3	2.59	3.2	6.9
Fluoride	mg/L	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.09 J
pH_Field	SU	4	3.93	4.03	3.25	4.04	3.6	4.07	3.82	6.83
Sulfate	mg/L	106	191	98.4	83.8	95.7	125	52.6	116	11
TDS	mg/L	265	280	160	--	--	--	--	--	215
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006
Arsenic	mg/L	0.00216 J	0.00483 J	0.002 J	0.00188	0.00131	0.00274	0.00107	0.0016	0.00247 J
Barium	mg/L	0.0274	0.0327	0.0291	0.0254	0.0286	0.0365	0.0238	0.0423	0.308
Beryllium	mg/L	0.00129 J	0.00157 J	0.00117 J	0.000918 J	0.00117	0.00126	0.000737 J	0.00139	<0.0006
Cadmium	mg/L	0.000622 J	0.00101	0.000584 J	0.000407	0.000587	0.000627	0.000368	0.00062	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	0.000771 J	0.000593 J	0.000868 J	0.000428 J	0.000838 J	<0.002
Cobalt	mg/L	0.0391	0.056	0.0365	0.0262	0.0291	0.0416	0.0202	0.0432	<0.002
Combined Radium	pCi/L	0.774	0.865	0.976	1.04	1.61	1.31	0.457 U	1.35	0.585 U
Lead	mg/L	0.00176 J	0.00258 J	0.0018 J	0.00143	0.00156	0.00194	0.00127	0.00202	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	0.000301 J	0.000558	<0.0003	0.000363 J	<0.0003	0.00039 J	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-10								
		02/07/2018	04/24/2018	06/27/2018	08/07/2018	10/22/2018	12/04/2018	02/06/2019	02/26/2019	08/22/2019
Appendix III										
Boron	mg/L	0.12	0.144	0.0903 J	0.106	0.107	0.103	0.105	0.146	0.0951 J
Calcium	mg/L	47.6	50.1	37.1	37.4	36.3	42.1	41.3	53.3	38.5
Chloride	mg/L	6.1	--	5.6	5.1	5.5	5.6	6.24	8.28	5.66
Fluoride	mg/L	0.08 J	--	0.09 J	0.04 J	0.1	0.07 J	0.107	0.0813 J	0.084 J
pH_Field	SU	6.82	6.74	6.67	6.72	6.73	6.77	6.67	6.77	6.37
Sulfate	mg/L	19	--	<1.4	<1.4	<1.4	11	16.8	38.4	6.74
TDS	mg/L	237	242	194	195	184	215	208	252	194
Appendix IV										
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008
Arsenic	mg/L	0.00192 J	0.00218 J	0.00419 J	0.00365 J	0.00404 J	0.00332 J	0.00333 J	--	0.00394 J
Barium	mg/L	0.289	0.359	0.307	0.25	0.29	0.305	0.265	--	0.302
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Combined Radium	pCi/L	0.474	0.463 U	0.678	0.495 U	0.36 U	0.407 U	0.537	--	-0.021 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	0.000302 J	<0.0003	--	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-10							GSD-AP-MW-16	
		04/15/2020	08/26/2020	03/23/2021	10/11/2021	05/10/2022	10/26/2022	06/13/2023	10/24/2018	11/14/2018
Appendix III										
Boron	mg/L	0.164	0.108	0.188	0.09 J	0.097 J	0.0868 J	0.0864 J	0.0261 J	0.0209 J
Calcium	mg/L	54.1	37.8	57	38.2	42.2	39.5	36.4	18	14.9
Chloride	mg/L	6.49	5.39	7.14	5.72	5.72	5.87	5.45	3.3	3.6
Fluoride	mg/L	0.112	0.0997 J	0.101	0.201	0.0918 J	0.0929 J	0.0805 J	0.11	0.1
pH_Field	SU	6.85	6.73	6.87	6.72	6.39	6.84	6.55	5.27	4.99
Sulfate	mg/L	50.7	10.5	60.1	7.75	11.6	4.42	21.9	44	44
TDS	mg/L	262	186	--	--	--	--	--	107	96.7
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	<0.0008
Arsenic	mg/L	0.00236 J	0.00422 J	0.00163	0.0037	0.00361	0.00414	0.00397	<0.001	<0.001
Barium	mg/L	0.35	0.322	0.395	0.292	0.318	0.278	0.294	0.0499	0.0458
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000307 J	0.000417 J
Chromium	mg/L	<0.002	<0.002	0.00035 J	0.000285 J	0.000305 J	0.000207 J	0.000348 J	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	0.00037	0.000886	0.000907	0.000907	0.000866	0.0129	0.0114
Combined Radium	pCi/L	0.64 U	0.221 U	0.83 U	6.52	0.421 U	0.42 U	1.38	0.564	-0.0027 U
Lead	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	0.000204	0.000451	0.000466	0.000438	<0.005075	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-16								
		11/28/2018	12/05/2018	12/18/2018	01/03/2019	01/24/2019	02/05/2019	02/28/2019	08/19/2019	04/15/2020
Appendix III										
Boron	mg/L	0.0239 J	<0.02	<0.02	--	0.0271 J	0.0245 J	<0.02	<0.03	<0.03
Calcium	mg/L	14.8	14.8	16.4	--	19.6	20.8	21.5	12.8	13.1
Chloride	mg/L	3.5	3.3	3.6	3.4	3.91	3.94	4.15	3.42	3.39
Fluoride	mg/L	0.1	0.11	0.14	0.16	<0.05	<0.05	<0.05	<0.05	<0.06
pH_Field	SU	4.74	4.76	4.57	--	4.45	4.3	4.35	4.57	4.49
Sulfate	mg/L	46	51	76	94	135	183	192	66.6	92.8
TDS	mg/L	102	103	126	--	212	269	261	121	155
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.0008	--	0.000922 J	<0.0008	--	<0.0008	<0.0008
Arsenic	mg/L	0.00124 J	0.00113 J	0.00113 J	--	0.00257 J	0.00355 J	--	0.00228 J	0.0034 J
Barium	mg/L	0.0476	0.0475	0.0461	--	0.0485	0.0354	--	0.0314	0.028
Beryllium	mg/L	0.00133 J	<0.0006	0.000761 J	--	0.000703 J	0.000711 J	--	<0.0006	<0.0006
Cadmium	mg/L	0.000387 J	0.000317 J	0.000438 J	--	0.000736 J	0.00101	--	0.000499 J	0.000697 J
Chromium	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0168	0.0161	0.0234	--	0.04	0.0538	--	0.0247	0.0373
Combined Radium	pCi/L	0.222 U	0.288 U	0.822	0.844	0.162 U	0.431 U	--	0.377 U	0.449 U
Lead	mg/L	<0.001	<0.001	<0.001	--	0.00114 J	0.00135 J	--	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	--	0.000411 J	0.000473 J	--	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-16						GSD-AP-MW-11		
		08/25/2020	03/22/2021	10/06/2021	05/17/2022	10/25/2022	06/06/2023	12/06/2017	02/07/2018	04/24/2018
Appendix III										
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.12	0.109	0.124
Calcium	mg/L	12.2	18.4	13.4	19.7	8.46	17.2	70	72.4	72.3
Chloride	mg/L	2.94	3.61	3.17	3.58	3.24	3.31	6.3	5.4	--
Fluoride	mg/L	0.0863 J	<0.06	<0.06	<0.06	<0.06	<0.06	0.06 J	0.05 J	--
pH_Field	SU	4.2	3.45	4.16	4.34	4.64	3.65	6.81	6.74	6.62
Sulfate	mg/L	74.1	128	93.5	139	37.1	121	83	84	--
TDS	mg/L	131	--	--	--	--	--	312	323	324
Appendix IV										
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.00237 J	0.00614	0.00207	0.00457	0.00117	0.00327	0.00279 J	0.00252 J	0.00283 J
Barium	mg/L	0.0261	0.0278	0.0215	0.0288	0.029	0.0315	0.349	0.297	0.338
Beryllium	mg/L	<0.0006	0.000537 J	0.000487 J	0.000606 J	<0.000406	0.000707 J	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	0.000507 J	0.000852	0.00068	0.00108	0.000203 J	0.000937	<0.0002	<0.0003	<0.0003
Chromium	mg/L	<0.002	0.000546 J	0.000455 J	0.000589 J	0.000275 J	0.00053 J	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0294	0.0469	0.0321	0.0563	0.013	0.0511	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.851	0.942 U	1.16 U	1.01	0.406 U	0.85 U	0.891 U	0.786	0.935
Lead	mg/L	0.0011 J	0.0016	0.00116	0.00178	0.000634	0.00152	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	0.000775	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-11								
		06/27/2018	08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/22/2019	04/14/2020	08/26/2020
Appendix III										
Boron	mg/L	0.111	0.135	0.114	0.124	0.112	0.14	0.272	0.154	0.257
Calcium	mg/L	73.1	76	70.2	74	73.1	82.2	133	82.4	111
Chloride	mg/L	5.4	5.2	5.4	5.3	5.89	6.2	4.64	5.46	4.74
Fluoride	mg/L	0.06 J	0.06 J	0.06 J	<0.032	0.0678 J	0.0985 J	<0.05	0.0878 J	<0.06
pH_Field	SU	6.69	6.67	6.73	6.67	6.58	6.56	6.26	6.63	6.38
Sulfate	mg/L	95	110	78	97	113	135	305	146	280
TDS	mg/L	333	346	311	343	317	360	555	372	517
Appendix IV										
Antimony	mg/L	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.00289 J	0.00265 J	0.00287 J	0.00271 J	0.00272 J	--	0.00229 J	0.00286 J	0.00246 J
Barium	mg/L	0.338	0.307	0.311	0.331	0.286	--	0.214	0.168	0.165
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.00756	<0.002	0.00599
Combined Radium	pCi/L	0.537	1.28	1.3	1.05	0.779	--	1.34 U	0.922 U	1.28
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-11					GSD-AP-MW-12			
		03/23/2021	10/12/2021	05/17/2022	10/26/2022	06/13/2023	12/06/2017	02/08/2018	04/24/2018	06/27/2018
Appendix III										
Boron	mg/L	0.142	0.125	0.139	0.306	0.143	0.0605 J	0.0527 J	0.0476 J	0.0539 J
Calcium	mg/L	75.9	78.6	80.6	129	94.5	49	50	50.5	56.3
Chloride	mg/L	5.54	5.8	5.92	4.98	5.51	6.2	6.1	--	5.5
Fluoride	mg/L	0.0819 J	0.134	<0.06	0.069 J	0.105 J	<0.032	<0.032	--	<0.032
pH_Field	SU	6.58	6.66	6.44	6.2	6.4	5.6	5.44	5.41	5.45
Sulfate	mg/L	135	142	145	278	150	200	200	--	240
TDS	mg/L	--	--	--	--	--	371	367	365	421
Appendix IV										
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.00275	0.00272	0.00281	0.00215	0.00283	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.169	0.17	0.195	0.117	0.126	0.0501	0.0375	0.0405	0.0466
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000596 J	0.00064 J	0.000702 J	0.000732 J
Chromium	mg/L	0.000513 J	0.000267 J	0.000385 J	0.000318 J	0.000426 J	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.000388	0.000275	0.00044	0.009	0.000517	0.00221 J	0.00221 J	0.00257 J	0.00266 J
Combined Radium	pCi/L	0.592 U	1.02 U	1.01 U	0.505 U	1.1 U	0.435 U	0.477	0.695	0.183 U
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.000124 J	0.000152 J	0.000121 J	<0.000102	<0.005075	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-12								
		08/08/2018	10/23/2018	12/05/2018	02/06/2019	02/27/2019	08/22/2019	04/14/2020	08/26/2020	03/23/2021
Appendix III										
Boron	mg/L	0.0637 J	0.0696 J	0.0652 J	0.051 J	0.0494 J	0.0625 J	0.0377 J	0.0698 J	0.0452 J
Calcium	mg/L	65.7	68.3	64.3	52.3	60.2	89.4	40	68.4	42
Chloride	mg/L	5.3	5.8	6	5.92	5.88	6.31	5.74	5.91	6.3
Fluoride	mg/L	<0.032	0.04 J	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06
pH_Field	SU	5.46	5.47	5.45	5.31	5.4	5.35	5.39	5.63	5.5
Sulfate	mg/L	260	280	280	249	257	339	155	282	160
TDS	mg/L	479	507	479	385	422	501	278	472	--
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005
Barium	mg/L	0.0448	0.054	0.0493	0.0357	--	0.0455	0.0279	0.0503	0.0315
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	0.000587 J	0.000552 J	0.000661 J	0.000601 J	--	0.000755 J	0.000425 J	0.000618 J	0.000405
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000431 J
Cobalt	mg/L	0.00251 J	0.00399 J	0.00466 J	0.00475 J	--	0.00658	0.0035 J	0.00547	0.00378
Combined Radium	pCi/L	0.817	0.796	0.498 U	-0.0241 U	--	0.145 U	0.643 U	1.31	0.565 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-12				GSD-AP-MW-17				
		10/05/2021	05/10/2022	10/26/2022	06/13/2023	10/24/2018	11/14/2018	11/28/2018	12/05/2018	12/18/2018
Appendix III										
Boron	mg/L	0.0661 J	0.066 J	0.0995 J	0.0902 J	0.0357 J	0.0348 J	0.0313 J	0.0363 J	0.033 J
Calcium	mg/L	55.8	48.2	60.2	53.2	28.3	27.5	20.7	25.3	20.9
Chloride	mg/L	6.26	5.64	5.76	5.18	4	3.6	3.5	3.2	3.4
Fluoride	mg/L	<0.06	<0.06	<0.06	0.0795 J	0.23	0.2	0.19	0.19	0.15
pH_Field	SU	5.19	4.78	5.52	5.48	7.92	8.23	8.95	8.77	8.99
Sulfate	mg/L	195	193	230	212	16	13	11	12	11
TDS	mg/L	--	--	--	--	184	170	167	185	164
Appendix IV										
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<6.8e-005	<8.1e-005	0.000102 J	<0.000112	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0417	0.0377	0.0376	0.0356	0.218	0.203	0.191	0.209	0.199
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	0.000367	0.000332	0.000299	0.000334	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.000339 J	0.000414 J	0.000276 J	0.000484 J	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.00448	0.0049	0.00603	0.0058	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium	pCi/L	1.48	0.531 U	0.446 U	0.515 U	0.694	0.398 U	0.428 U	0.302 U	0.535 U
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	0.0111 J	0.0124 J	0.0121 J
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<6.8e-005	<0.000102	<0.000102	<0.005075	0.00507 J	0.00358 J	0.00322 J	0.00256 J	0.00215 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-17								
		01/03/2019	01/24/2019	02/05/2019	02/28/2019	08/19/2019	04/16/2020	08/24/2020	03/22/2021	10/06/2021
Appendix III										
Boron	mg/L	--	0.0307 J	0.0306 J	0.0206 J	0.0341 J	0.0331 J	0.0303 J	0.0333 J	0.0305 J
Calcium	mg/L	--	17	17.1	18.6	25.3	30.7	30.8	31	31
Chloride	mg/L	3.2	3.15	2.98	3.05	2.8	2.93	2.82	2.94	2.98
Fluoride	mg/L	0.19	0.168	0.192	0.182	0.187	0.166	0.163	0.18	0.175
pH_Field	SU	--	9.42	9.23	9.48	7.93	8.1	8.17	7.85	7.92
Sulfate	mg/L	10	10.2	10.4	9.86	8.74	11.5	10	10.6	10.2
TDS	mg/L	--	137	138	140	240	166	162	--	--
Appendix IV										
Antimony	mg/L	--	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00031	0.000263
Barium	mg/L	--	0.206	0.168	--	0.259	0.257	0.312	0.29	0.307
Beryllium	mg/L	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	--	<0.002	<0.002	--	<0.002	0.00267 J	<0.002	0.000509 J	0.000273 J
Cobalt	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000133 J	0.000126 J
Combined Radium	pCi/L	0.64	0.331 U	0.307 U	--	0.683	0.603	0.404 U	0.497 U	2.01
Lead	mg/L	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	--	0.0134 J	0.0126 J	--	<0.01	0.0127 J	<0.01	0.0083 J	0.00881 J
Mercury	mg/L	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	0.00211 J	0.00205 J	--	<0.002	<0.002	<0.002	0.000723	0.000453

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-17			GSD-AP-MW-1					
		05/09/2022	10/25/2022	06/06/2023	12/06/2017	02/06/2018	04/23/2018	06/26/2018	08/07/2018	10/22/2018
Appendix III										
Boron	mg/L	0.0347 J	0.0308 J	<0.03	1.28	1.29	1.21	1.25	1.21	1.22
Calcium	mg/L	28.4	30.7	23	271	275	269	268	259	240
Chloride	mg/L	3.01	2.88	2.93	6.2	5.9	--	5.7	5.3	5.6
Fluoride	mg/L	0.191	0.15	0.113 J	0.1	0.08 J	--	0.08 J	0.07 J	0.07 J
pH_Field	SU	7.29	7.97	7.8	6.5	6.48	6.36	6.32	6.32	6.2
Sulfate	mg/L	10	9.25	12.4	650	560	--	670	660	580
TDS	mg/L	--	--	--	1300	1310	1210	1250	1220	1150
Appendix IV										
Antimony	mg/L	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008
Arsenic	mg/L	0.000233	0.000572	0.000296	0.00179 J	0.00191 J	0.0023 J	0.00306 J	0.00336 J	0.00451 J
Barium	mg/L	0.309	0.292	0.278	0.0807	0.0546	0.0488	0.0479	0.0402	0.0427
Beryllium	mg/L	<0.000406	<0.000406	0.000473 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	0.000132 J	<6.8e-005	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.000257 J	0.000357 J	0.000529 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.000113 J	0.000311	<6.8e-005	0.00818 J	0.0123	0.0204	0.0224	0.0193	0.0243
Combined Radium	pCi/L	0.56 U	0.776 U	0.524 U	0.694 U	0.641	-0.0527 U	0.162 U	0.87	0.691
Lead	mg/L	<6.8e-005	0.000196 J	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.00859 J	0.00897 J	0.0101 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.000465	0.000466	<0.005075	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-1								
		12/04/2018	02/05/2019	02/26/2019	08/21/2019	04/15/2020	08/25/2020	03/16/2021	10/05/2021	05/10/2022
Appendix III										
Boron	mg/L	1.08	1.2	1.15	1.24	1.13	1.11	1.08	1.02	0.943
Calcium	mg/L	254	292	254	272	231	218	218	198	166
Chloride	mg/L	5.8	5.8	5.92	5.26	5.5	5.59	6.2	6.1	5.97
Fluoride	mg/L	0.04 J	0.0525 J	<0.05	<0.05	<0.06	<0.06	<0.06	0.0601 J	<0.06
pH_Field	SU	6.31	6.1	6.11	6.01	5.65	6	5.87	5.79	5.77
Sulfate	mg/L	580	702	748	708	647	642	593	567	508
TDS	mg/L	1090	1200	1210	1200	1060	1060	--	--	--
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00471 J	0.00365 J	--	0.00444 J	0.00309 J	0.00435 J	0.0029	0.00356	0.00221
Barium	mg/L	0.0434	0.0439	--	0.037	0.0329	0.0358	0.0331	0.0304	0.0275
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	0.000102 J	0.000102 J	0.000217
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000376 J	0.000228 J	0.000254 J
Cobalt	mg/L	0.0166	0.0264	--	0.0242	0.0178	0.0193	0.0184	0.0169	0.0136
Combined Radium	pCi/L	0.213 U	0.637	--	0.643 U	0.538 U	0.502 U	0.722 U	1.21	0.761 U
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-1		GSD-AP-MW-2						
		10/26/2022	06/05/2023	12/06/2017	02/06/2018	04/23/2018	06/27/2018	08/07/2018	10/22/2018	12/04/2018
Appendix III										
Boron	mg/L	0.977	0.88	0.758	0.733	0.608	0.619	0.697	0.754	0.737
Calcium	mg/L	200	166	128	130	95.9	99.4	107	107	120
Chloride	mg/L	6.02	6.12	4.1	3.1	--	2.2	2.6	2.8	4.1
Fluoride	mg/L	<0.06	<0.06	0.3	0.27	--	0.28	0.24	0.24	0.15
pH_Field	SU	5.86	5.68	6.61	6.66	6.54	6.63	6.57	6.55	6.52
Sulfate	mg/L	512	406	210	190	--	130	150	160	170
TDS	mg/L	--	--	574	572	414	440	485	484	504
Appendix IV										
Antimony	mg/L	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.00223	0.00181	0.809	0.774	0.643	1.01	0.988	1.01	0.553
Barium	mg/L	0.028	0.0272	0.0842	0.0716	0.0518	0.0578	0.0566	0.0536	0.0589
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	0.00013 J	0.000275	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.000321 J	0.000271 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0152	0.0118	0.0246	0.0243	0.0258	0.0362	0.0332	0.0438	0.0252
Combined Radium	pCi/L	0.38 U	1.09 U	0.772 U	0.679	0.447 U	0.117 U	1.22	0.996	0.739
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.007105	0.092	0.0817	0.051	0.0734	0.0764	0.0804	0.0474
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.000198 J	<0.005075	0.0254	0.0239	0.0165	0.0302	0.0209	0.0198	0.0118

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2								
		02/05/2019	02/26/2019	08/20/2019	04/15/2020	08/25/2020	03/24/2021	10/11/2021	05/16/2022	10/25/2022
Appendix III										
Boron	mg/L	0.575	0.566	0.566	0.461	0.528	0.437	0.459	0.381	0.5
Calcium	mg/L	80.6	79.6	92.3	69.2	80.5	61.5	87.1	58.2	86.9
Chloride	mg/L	2.56	3.03	2.24	2.16	2	2.29	2.43	2.18	2.45
Fluoride	mg/L	0.207	0.264	0.252	0.21	0.273	0.194	0.283	0.151	0.271
pH_Field	SU	6.47	6.54	6.3	6.45	6.65	6.49	6.59	6.16	6.64
Sulfate	mg/L	145	148	110	116	114	101	112	84.3	111
TDS	mg/L	366	372	369	300	339	--	--	--	--
Appendix IV										
Antimony	mg/L	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.000538 J
Arsenic	mg/L	0.74	--	0.825	0.709	0.727	0.489	0.424	0.569	0.555
Barium	mg/L	0.0418	--	0.0685	0.0607	0.0812	0.0676	0.0807	0.0974	0.0888
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	--	<0.0003	<0.0003	<0.0003	6.88e-005 J	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	--	<0.002	<0.002	<0.002	0.00047 J	0.000479 J	0.000342 J	0.00022 J
Cobalt	mg/L	0.0362	--	0.0366	0.0324	0.0298	0.0316	0.0165	0.0366	0.0302
Combined Radium	pCi/L	1.09	--	0.553 U	0.182 U	0.43 U	0.769 U	2.38	1.06	0.683 U
Lead	mg/L	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	9.28e-005 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0545	--	0.0583	0.0406	0.041	0.0318	0.0225	0.0271	0.0304
Mercury	mg/L	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0196	--	0.027	0.0202	0.0269	0.0164	0.0204	0.0201	0.0202

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2	GSD-AP-MW-3							
		06/06/2023	12/06/2017	02/06/2018	04/24/2018	06/27/2018	08/07/2018	10/22/2018	12/03/2018	02/05/2019
Appendix III										
Boron	mg/L	0.367	0.959	1.04	0.979	0.982	1	1.08	1.05	1.01
Calcium	mg/L	60.7	125	110	88.8	80.8	88.5	92.7	105	68.6
Chloride	mg/L	2.02	7.6	7.6	--	7.3	7.6	6.9	6.8	6.95
Fluoride	mg/L	0.204	0.13	0.08 J	--	0.07 J	0.09 J	0.11	0.08 J	0.064 J
pH_Field	SU	6.63	6.54	6.39	6.02	6.07	6.28	6.3	6.38	5.83
Sulfate	mg/L	73.9	250	230	--	230	200	190	200	263
TDS	mg/L	--	628	556	510	486	487	450	492	428
Appendix IV										
Antimony	mg/L	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.652	0.00101 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.115	0.126	0.0721	0.0492	0.0453	0.0431	0.0541	0.0545	0.0363
Beryllium	mg/L	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.000313 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.04	0.0302	0.0371	0.0251	0.0234	0.0223	0.03	0.0238	0.0232
Combined Radium	pCi/L	0.907 U	0.643 U	0.209 U	0.596	0.363 U	0.788	0.749	0.749	0.299 U
Lead	mg/L	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0258	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003
Molybdenum	mg/L	0.0203	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-3								
		02/25/2019	08/20/2019	04/13/2020	08/26/2020	03/22/2021	10/05/2021	05/10/2022	10/26/2022	06/05/2023
Appendix III										
Boron	mg/L	1.08	1.06	1.19	1.16	1.13	1.01	0.998	0.85	0.858
Calcium	mg/L	70.6	74.1	69.5	75.7	64.9	65.9	58.5	55.3	55.4
Chloride	mg/L	6.55	6.07	5.95	5.89	5.26	5.09	4.59	4.38	4.57
Fluoride	mg/L	<0.05	0.0592 J	<0.06	<0.06	<0.06	<0.06	0.0714 J	<0.06	<0.06
pH_Field	SU	5.93	5.73	5.83	5.87	5.51	5.76	5.95	5.97	5.66
Sulfate	mg/L	246	222	256	246	254	228	215	206	170
TDS	mg/L	441	416	433	455	--	--	--	--	--
Appendix IV										
Antimony	mg/L	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	--	<0.001	<0.001	<0.001	0.0002 J	0.000207	0.000162 J	0.000311	0.000119 J
Barium	mg/L	--	0.0405	0.0349	0.0363	0.0354	0.0344	0.0287	0.0306	0.0291
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	--	<0.0003	0.000438 J	<0.0003	0.00039	0.000213	0.00035	0.000147 J	0.00035
Chromium	mg/L	--	<0.002	<0.002	<0.002	0.000293 J	0.000234 J	0.000286 J	0.000276 J	0.000326 J
Cobalt	mg/L	--	0.0257	0.0209	0.0191	0.0183	0.016	0.0147	0.0132	0.0118
Combined Radium	pCi/L	--	0.709 U	0.942 U	0.177 U	0.263 U	3.21	0.189 U	0.551 U	0.422 U
Lead	mg/L	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-4								
		12/07/2017	02/06/2018	04/24/2018	06/26/2018	08/06/2018	10/22/2018	12/03/2018	02/05/2019	02/26/2019
Appendix III										
Boron	mg/L	0.515	0.541	0.475	0.444	0.474	0.496	0.51	0.43	0.411
Calcium	mg/L	30.1	30.6	27.8	26.2	27.5	27.7	32.3	25.5	26.4
Chloride	mg/L	8.5	8.8	--	8.7	11	8.6	9.1	9.81	13
Fluoride	mg/L	0.25	0.24	--	0.22	0.22	0.24	0.22	0.259	0.246
pH_Field	SU	6.73	6.76	6.66	6.61	6.68	6.63	6.67	6.63	6.64
Sulfate	mg/L	<1.4	<1.4	--	<1.4	<1.4	<1.4	<1.4	5.38	5.1
TDS	mg/L	189	206	193	180	182	204	168	158	191
Appendix IV										
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--
Arsenic	mg/L	0.0132	0.0105	0.0124	0.0132	0.013	0.0144	0.0119	0.0107	--
Barium	mg/L	0.239	0.206	0.217	0.208	0.189	0.209	0.214	0.173	--
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	0.0252	0.0243	0.027	0.0242	0.0205	0.0259	0.0228	0.0263	--
Combined Radium	pCi/L	1.04 U	0.989	0.405 U	1.03	0.622	1.06	0.697	0.467 U	--
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-4								GSD-AP-MW-5
		08/20/2019	04/15/2020	08/26/2020	03/24/2021	10/05/2021	05/16/2022	10/26/2022	06/06/2023	12/07/2017
Appendix III										
Boron	mg/L	0.399	0.344	0.398	0.326	0.344	0.342	0.371	0.415	0.566
Calcium	mg/L	23.5	22	22.8	23.1	27.4	30.7	33.6	39.8	48.2
Chloride	mg/L	9.62	9.27	8.96	8.61	9.83	8.19	7.88	6.68	8.7
Fluoride	mg/L	0.197	0.238	0.251	0.227	0.214	0.247	0.283	0.198	0.06 J
pH_Field	SU	6.33	6.77	6.68	6.86	6.58	6.61	6.67	6.74	6.32
Sulfate	mg/L	7.34	17.2	15.5	19.9	37.8	49.4	61.8	88.7	19
TDS	mg/L	164	170	168	--	--	--	--	--	215
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006
Arsenic	mg/L	0.0141	0.0121	0.0133	0.011	0.0148	0.0132	0.0145	0.0128	<0.001
Barium	mg/L	0.188	0.159	0.181	0.171	0.208	0.23	0.239	0.255	0.279
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	0.000323 J	<0.000203	0.000227 J	<0.000203	0.000206 J	<0.002
Cobalt	mg/L	0.0293	0.0252	0.0231	0.0268	0.0238	0.0289	0.0289	0.0299	0.00331 J
Combined Radium	pCi/L	0.814	-0.0841 U	0.26 U	0.664 U	1.75	0.978	0.609 U	1.17 U	0.885 U
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	0.00118	0.00111	0.00122	0.00106	<0.005075	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-5								
		02/06/2018	04/25/2018	06/27/2018	08/07/2018	10/23/2018	12/05/2018	02/05/2019	02/27/2019	08/20/2019
Appendix III										
Boron	mg/L	0.614	0.498	0.446	0.442	0.436	0.456	0.453	0.457	0.378
Calcium	mg/L	47.8	41.8	36.9	37.6	35.3	36.3	36.6	39.6	33.7
Chloride	mg/L	8.5	--	7.1	6.9	6.7	6.7	7.24	7.38	6.53
Fluoride	mg/L	0.05 J	--	0.06 J	0.06 J	0.07 J	0.04 J	0.0651 J	0.0578 J	0.0567 J
pH_Field	SU	6.27	6.14	6.15	6.18	6.15	6.15	6.08	6.11	6.11
Sulfate	mg/L	20	--	18	20	18	20	24.3	24.7	21.3
TDS	mg/L	204	192	180	183	169	177	198	185	174
Appendix IV										
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Barium	mg/L	0.195	0.26	0.249	0.216	0.26	0.245	0.215	--	0.238
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Cobalt	mg/L	0.00323 J	0.00258 J	0.00218 J	<0.002	0.0023 J	0.00233 J	0.0021 J	--	0.00223 J
Combined Radium	pCi/L	0.524	0.341 U	0.546	1.09	1.01	0.876	0.551 U	--	0.206 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-5							GSD-AP-MW-6	
		04/13/2020	08/24/2020	03/16/2021	10/05/2021	05/09/2022	10/26/2022	06/07/2023	12/07/2017	02/08/2018
Appendix III										
Boron	mg/L	0.359	0.329	0.328	0.26	0.261	0.23	0.234	0.063 J	0.0508 J
Calcium	mg/L	43	35.5	38.1	36	38.4	39.5	46.5	29.8	24.3
Chloride	mg/L	6.48	6.64	7.14	6.78	6.81	6.4	6.81	10	9.5
Fluoride	mg/L	0.0688 J	0.0607 J	0.065 J	0.122	0.0682 J	0.0845 J	<0.06	0.06 J	0.04 J
pH_Field	SU	6.18	6.11	6.22	6.24	5.43	6.44	6.25	6.38	6.29
Sulfate	mg/L	21.9	21.2	18.8	14.4	15.5	16.6	27.5	10	11
TDS	mg/L	192	175	--	--	--	--	--	136	122
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	8.17e-005 J	0.000162 J	8.3e-005 J	0.000222	<0.000112	<0.001	<0.001
Barium	mg/L	0.241	0.238	0.217	0.221	0.236	0.231	0.226	0.0809	0.0566
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0003
Chromium	mg/L	<0.002	<0.002	0.000397 J	0.000275 J	0.000529 J	<0.000203	0.000272 J	<0.002	<0.002
Cobalt	mg/L	<0.002	0.00222 J	0.00136	0.00108	0.00101	0.000936	0.000715	0.00592 J	0.00297 J
Combined Radium	pCi/L	1.19	0.482 U	0.709 U	1.44	1.16	0.643 U	1.06 U	0.394 U	0.489
Lead	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<6.8e-005	0.000142 J	0.000114 J	0.000371	<0.005075	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-6								
		04/25/2018	06/26/2018	08/07/2018	10/23/2018	12/03/2018	02/05/2019	02/26/2019	08/20/2019	04/13/2020
Appendix III										
Boron	mg/L	0.0548 J	0.0571 J	0.0571 J	0.0636 J	0.0568 J	0.0517 J	0.0491 J	0.0608 J	0.0561 J
Calcium	mg/L	19.8	17.8	18.3	18.1	16.6	14.4	16	15.1	12.5
Chloride	mg/L	--	9.5	9	9.9	8.7	8.76	8.63	9.55	8.6
Fluoride	mg/L	--	0.05 J	0.05 J	0.06 J	<0.032	0.0583 J	0.0618 J	<0.05	<0.06
pH_Field	SU	6.15	6.09	6.16	6.1	6.09	6.04	6.17	5.4	5.82
Sulfate	mg/L	--	11	12	11	12	13.7	14	12.3	13.9
TDS	mg/L	102	106	71.3	105	102	86.7	91.3	98.7	90.7
Appendix IV										
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.0553	0.0604	0.0542	0.0608	0.0633	0.05	--	0.0731	0.0635
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Combined Radium	pCi/L	-0.0902 U	0.245 U	0.439 U	0.243 U	0.304 U	0.196 U	--	-0.086 U	0.0901 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-6						GSD-AP-MW-7		
		08/26/2020	03/17/2021	10/05/2021	05/10/2022	10/26/2022	06/05/2023	12/07/2017	02/08/2018	04/25/2018
Appendix III										
Boron	mg/L	0.0633 J	0.0563 J	0.0649 J	0.0681 J	0.0788 J	0.0776 J	0.102	0.0787 J	0.0734 J
Calcium	mg/L	12.9	11.3	11.4	10.8	12.2	10.6	23.4	20.1	17.4
Chloride	mg/L	9.21	8.59	9.09	8.84	9.4	10.9	7.9	6.7	--
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.09 J	0.07 J	--
pH_Field	SU	5.96	5.92	5.74	5.51	5.98	5.68	6.62	6.39	6.17
Sulfate	mg/L	13.1	13.7	14.2	14.7	12.2	15.1	14	10	--
TDS	mg/L	91.3	--	--	--	--	--	137	124	106
Appendix IV										
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<6.8e-005	<6.8e-005	<8.1e-005	0.000151 J	<0.000112	<0.001	<0.001	<0.001
Barium	mg/L	0.0771	0.0656	0.0741	0.0755	0.0702	0.0809	0.083	0.0756	0.0764
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0003	<0.0003
Chromium	mg/L	<0.002	0.000338 J	0.000246 J	<0.000203	0.000222 J	0.000252 J	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	0.00102	0.00104	0.00114	0.0012	0.00113	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.416 U	0.539 U	1.36	0.0979 U	0.432 U	0.704 U	0.895 U	0.322 U	0.0097 U
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-7								
		06/26/2018	08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/21/2019	04/15/2020	08/26/2020
Appendix III										
Boron	mg/L	0.094 J	0.103	0.106	0.085 J	0.0733 J	0.0548 J	0.091 J	0.0534 J	0.0665 J
Calcium	mg/L	21.8	25.4	25.6	19	16.4	15.6	23.5	14	16.7
Chloride	mg/L	7.4	7.7	8	6.7	6.84	6.21	7.35	4.99	6.19
Fluoride	mg/L	0.09 J	0.1	0.1	0.06 J	<0.05	0.0824 J	0.068 J	0.0775 J	<0.06
pH_Field	SU	6.38	6.56	6.54	6.33	6.13	6.12	5.97	6.16	6.11
Sulfate	mg/L	11	13	13	9.8	10.8	8.98	11.8	7.95	9.19
TDS	mg/L	129	142	142	121	108	103	133	102	109
Appendix IV										
Antimony	mg/L	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001
Barium	mg/L	0.0799	0.0791	0.0898	0.0789	0.0685	--	0.0946	0.0653	0.0845
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.587	0.364 U	0.703	0.325 U	0.0774 U	--	-0.0134 U	0.526 U	0.691 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	0.00034 J	<0.0003	--	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-7					GSD-AP-MW-8			
		03/23/2021	10/05/2021	05/10/2022	10/26/2022	06/13/2023	12/07/2017	02/08/2018	04/25/2018	06/26/2018
Appendix III										
Boron	mg/L	0.0587 J	0.0673 J	0.0465 J	0.0839 J	0.0428 J	0.0828 J	0.0691 J	0.0571 J	0.0634 J
Calcium	mg/L	12.5	15.9	9.95	21.4	8.71	66.1	58	56.3	57.7
Chloride	mg/L	4.87	6.43	3.96	7.09	3.43	5.2	4.1	--	5
Fluoride	mg/L	<0.06	0.0933 J	0.0627 J	0.128	<0.06	0.14	0.11	--	0.1
pH_Field	SU	6.04	6.06	5.08	6.44	5.98	6.81	6.73	6.61	6.59
Sulfate	mg/L	8.08	9.19	7.13	11.4	6.16	6.5	8.9	--	7.5
TDS	mg/L	--	--	--	--	--	253	229	223	232
Appendix IV										
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<6.8e-005	6.94e-005 J	<8.1e-005	0.000105 J	<0.000112	0.00313 J	0.00247 J	0.00291 J	0.00265 J
Barium	mg/L	0.0602	0.0716	0.0527	0.0852	0.0544	0.244	0.135	0.224	0.181
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	9.7e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	0.000189 J	<0.0002	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.000406 J	0.000248 J	0.000245 J	<0.000203	0.000328 J	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.00102	0.000182 J	0.0004	0.00016 J	0.00463	0.00212 J	<0.002	0.00204 J	<0.002
Combined Radium	pCi/L	0.45 U	1.27	0.599 U	0.559 U	1.08	7.45 U	0.549	0.65	0.436 U
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<6.8e-005	9.55e-005 J	<0.000102	0.000169 J	<0.005075	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-8								
		08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/21/2019	04/14/2020	08/26/2020	03/23/2021
Appendix III										
Boron	mg/L	0.0659 J	0.0666 J	0.0617 J	0.0586 J	0.0428 J	0.0569 J	0.0474 J	0.0501 J	0.0476 J
Calcium	mg/L	51.2	50.9	51.9	55	53.4	71.5	56.2	55.5	48.9
Chloride	mg/L	4.8	4.4	4.2	5.84	6.52	5.89	5.21	5.16	5.3
Fluoride	mg/L	0.1	0.11	0.08 J	<0.05	0.108	0.0648 J	0.0845 J	0.0732 J	0.0802 J
pH_Field	SU	6.6	6.64	6.68	6.62	6.56	6.16	6.49	6.29	6.47
Sulfate	mg/L	7.3	7.8	8.2	9.53	8.25	10.8	12.5	16.1	9.21
TDS	mg/L	208	209	213	212	211	226	222	215	--
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.00203 J	0.00246 J	0.00328 J	0.00325 J	--	0.00302 J	0.00295 J	0.00304 J	0.00282
Barium	mg/L	0.134	0.17	0.189	0.226	--	0.194	0.262	0.235	0.249
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	8.32e-005 J
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.0003 J
Cobalt	mg/L	<0.002	<0.002	<0.002	0.00232 J	--	0.00303 J	0.00385 J	0.00388 J	0.003
Combined Radium	pCi/L	0.486 U	0.319 U	0.875	0.378 U	--	0.552 U	0.641 U	0.339 U	0.662 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105
Mercury	mg/L	<0.00025	<0.00025	0.000284 J	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000357

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-8				GSD-AP-MW-9				
		10/12/2021	05/11/2022	10/26/2022	06/07/2023	12/07/2017	02/08/2018	04/25/2018	06/26/2018	08/08/2018
Appendix III										
Boron	mg/L	0.0462 J	0.037 J	0.0526 J	0.0355 J	0.0614 J	0.0531 J	0.0551 J	0.0568 J	0.0524 J
Calcium	mg/L	66.3	61.9	63.7	56.3	38.7	38.8	40.3	39.9	42.3
Chloride	mg/L	5.6	5.13	5.72	5.02	7	--	--	6.4	5.5
Fluoride	mg/L	0.123	0.0695 J	0.0911 J	0.128	0.12	--	--	0.13	0.12
pH_Field	SU	6.61	6.25	6.68	6.37	6.93	6.96	6.89	6.85	6.94
Sulfate	mg/L	16	11.8	10.1	12.5	9	--	--	8.5	6.7
TDS	mg/L	--	--	--	--	183	--	180	191	192
Appendix IV										
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008
Arsenic	mg/L	0.00287	0.00323	0.0033	0.00301	0.00112 J	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.203	0.32	0.224	0.303	0.187	0.148	0.158	0.16	0.161
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	7.28e-005 J	<6.8e-005	<6.8e-005	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.000203	0.000217 J	<0.000203	0.000245 J	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.00298	0.00461	0.00266	0.00299	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.291 U	0.475 U	0.528 U	0.682 U	0.226 U	0.071 U	0.569	0.43 U	0.656
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.000319	0.000403	0.000422	<0.005075	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-9								
		10/23/2018	12/05/2018	02/06/2019	02/27/2019	08/21/2019	04/14/2020	08/26/2020	03/23/2021	10/12/2021
Appendix III										
Boron	mg/L	0.0576 J	0.0561 J	0.0627 J	0.0474 J	0.0524 J	0.0562 J	0.0565 J	0.0609 J	0.0632 J
Calcium	mg/L	39.8	43.8	34.9	42.5	50.9	43.6	43.2	38.1	35.4
Chloride	mg/L	6.7	5.9	7.26	6.77	6.16	7.27	6.57	7.42	7.78
Fluoride	mg/L	0.13	0.04 J	<0.05	0.147	0.0984 J	0.133	0.13	0.132	0.147
pH_Field	SU	6.93	6.94	6.73	6.85	6.61	7.02	6.75	6.85	6.9
Sulfate	mg/L	9.4	7.8	17	12.4	11.3	15.9	12.9	15.7	18
TDS	mg/L	185	200	151	186	200	187	192	--	--
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	<0.001	0.00111 J	<0.001	--	<0.001	0.00118 J	<0.001	0.00063	0.000635
Barium	mg/L	0.183	0.186	0.128	--	0.183	0.186	0.202	0.157	0.147
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000422 J	0.00031 J
Cobalt	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00103	0.00113
Combined Radium	pCi/L	0.395 U	0.52 U	0.244 U	--	1.53 U	0.119 U	1.18	0.694 U	0.311 U
Lead	mg/L	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00027	0.000177 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-9			GSD-AP-PZ-1					
		05/11/2022	10/26/2022	06/12/2023	06/27/2018	07/18/2018	08/07/2018	09/05/2018	09/24/2018	10/22/2018
Appendix III										
Boron	mg/L	0.0636 J	0.0595 J	0.062 J	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Calcium	mg/L	36.9	47.7	37.8	39.4	38.4	36.7	43.6	44.5	45
Chloride	mg/L	7.2	6.99	7.07	3.6	3.8	3.3	3.4	3.8	3.3
Fluoride	mg/L	0.108 J	0.119 J	0.13	0.13	0.11	0.11	0.13	0.13	0.13
pH_Field	SU	6.7	7.07	6.81	6.79	6.8	6.73	6.75	6.83	6.76
Sulfate	mg/L	17.7	13.8	18.9	2.2 J	2.5 J	<1.4	1.4 J	<1.4	1.7 J
TDS	mg/L	--	--	--	144	156	140	154	165	148
Appendix IV										
Antimony	mg/L	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.000555	0.000618	0.000545	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.16	0.154	0.146	0.115	0.116	0.0906	0.116	0.125	0.102
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	0.00021 J	<0.000203	0.000345 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.000908	0.000812	0.000874	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium	pCi/L	0.605 U	0.572 U	0.395 U	0.188 U	0.314 U	0.279 U	0.589	0.772	0.621
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.000236	0.000276	<0.005075	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-1								
		12/03/2018	02/05/2019	02/25/2019	08/20/2019	04/13/2020	08/24/2020	03/24/2021	10/05/2021	05/09/2022
Appendix III										
Boron	mg/L	<0.02	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	33.7	30.1	25.3	38.3	25.9	29	22.2	25.4	18.9
Chloride	mg/L	3.2	3.78	3.75	3.52	3.36	3.35	3.45	3.23	3.46
Fluoride	mg/L	0.08 J	0.0934 J	<0.05	0.0889 J	0.103	0.114	0.0725 J	<0.06	0.0824 J
pH_Field	SU	6.6	6.66	6.6	6.3	6.66	6.64	5.85	6.46	6.03
Sulfate	mg/L	2.1 J	3.99	3.86	3.73	3.83	4.16	2.88	2.17	2.51
TDS	mg/L	127	113	107	141	104	114	--	--	--
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005
Barium	mg/L	0.0784	0.0578	--	0.097	0.0529	0.0733	0.0525	0.0811	0.057
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000442 J	0.000352 J	0.000274 J
Cobalt	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	0.000436	0.000139 J
Combined Radium	pCi/L	0.188 U	0.274 U	--	0.663	-0.129 U	0.177 U	0.245 U	2.07	0.784 U
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	9.88e-005 J	7.3e-005 J	<0.000102

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-1		GSD-AP-PZ-2						
		10/26/2022	06/07/2023	04/13/2020	08/24/2020	03/17/2021	10/05/2021	05/09/2022	10/26/2022	06/05/2023
Appendix III										
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	23.1	20.9	16.1	24.8	5.21	17.6	7.02	27.5	13.4
Chloride	mg/L	3.39	3.37	5.42	5.46	5.53	5.79	5.51	5.09	5.7
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	6.66	5.9	5.84	6	5.34	5.72	4.35	6.16	5.2
Sulfate	mg/L	3.43	2.38	1.48	3.88	1.64	5.29	1.15 J	3.32	1.31 J
TDS	mg/L	--	--	88	115	--	--	--	--	--
Appendix IV										
Antimony	mg/L	<0.000508	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	0.000164 J	<0.000112	<0.001	<0.001	8.26e-005 J	9.28e-005 J	0.000101 J	0.000188 J	<0.000112
Barium	mg/L	0.0682	0.0635	0.0832	0.132	0.045	0.118	0.0593	0.133	0.0862
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	0.00033 J	<0.002	<0.002	0.000764 J	0.000346 J	0.000617 J	<0.000203	0.00029 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	0.00489 J	0.00237 J	0.00616	0.00287	0.00691	0.0021	0.00444
Combined Radium	pCi/L	0.561 U	1.09 U	0.472 U	-0.00312 U	0.756 U	1.13	0.352 U	0.391 U	0.662 U
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	0.000191 J	0.000121 J	0.000178 J	<6.8e-005	0.000394
Lithium	mg/L	<0.007105	<0.007105	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.000102	<0.005075	<0.002	<0.002	<6.8e-005	0.00028	<0.000102	0.00022	<0.005075

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-5								
		06/27/2018	07/18/2018	08/08/2018	09/05/2018	09/24/2018	10/23/2018	12/03/2018	02/07/2019	02/25/2019
Appendix III										
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Calcium	mg/L	4.56	3.92	3.74	3.38	3.25	3.37	3.67	2.89	2.95
Chloride	mg/L	4.2	4.1	3.3	3.7	3.9	4	3.6	3.72	3.95
Fluoride	mg/L	0.05 J	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	<0.032	<0.05	<0.05
pH_Field	SU	5.81	5.74	5.7	5.61	5.59	5.6	5.73	5.44	5.46
Sulfate	mg/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	0.639 J	<0.5
TDS	mg/L	48.7	46	48	47.3	44.7	35.3	48.7	42.7	40.7
Appendix IV										
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.00114 J	--
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Barium	mg/L	0.154	0.15	0.119	0.123	0.112	0.125	0.126	0.0602	--
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	0.000304 J	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	0.00341 J	0.00341 J	0.00221 J	0.00202 J	<0.002	<0.002	0.00227 J	<0.002	--
Combined Radium	pCi/L	0.259 U	0.434	0.763	0.631	0.588	0.383 U	0.736	0.0202 U	--
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-5								GSD-AP-PZ-6
		08/21/2019	04/15/2020	08/24/2020	03/16/2021	10/12/2021	05/10/2022	10/26/2022	06/13/2023	06/27/2018
Appendix III										
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02
Calcium	mg/L	3.04	2.93	2.94	2.9	2.94	2.87	3.09	2.82	3.89
Chloride	mg/L	3.85	3.83	3.96	3.98	4.07	4.12	4.03	3.88	4.1
Fluoride	mg/L	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.04 J
pH_Field	SU	5.13	5.31	4.65	5.47	5.33	5.38	5.31	5.1	5.44
Sulfate	mg/L	1.21	0.554 J	<0.5	1.02	0.895 J	1.02 J	0.992 J	<0.6	<1.4
TDS	mg/L	46	41.3	42.7	--	--	--	--	--	44
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	8.08e-005 J	<6.8e-005	<8.1e-005	<8.1e-005	<0.000112	<0.001
Barium	mg/L	0.085	0.0535	0.0565	0.0553	0.0494	0.0497	0.0474	0.0456	0.0298
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<6.8e-005	8.42e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	0.000534 J	0.000337 J	0.000368 J	0.000251 J	0.000463 J	<0.002
Cobalt	mg/L	0.00225 J	<0.002	<0.002	0.000384	8.08e-005 J	0.00015 J	<6.8e-005	0.000155 J	<0.002
Combined Radium	pCi/L	0.442 U	0.432 U	0.454 U	0.32 U	0.963 U	0.659 U	1.08	0.739 U	0.231 U
Lead	mg/L	<0.001	<0.001	<0.001	0.00013 J	<6.8e-005	<6.8e-005	<6.8e-005	7.78e-005 J	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-6								
		07/18/2018	08/08/2018	09/05/2018	09/24/2018	10/23/2018	12/03/2018	02/07/2019	02/25/2019	08/21/2019
Appendix III										
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03
Calcium	mg/L	3.8	3.89	3.78	3.73	3.79	3.79	3.75	3.81	3.71
Chloride	mg/L	4.3	3.8	3.9	4.2	4.1	3.8	4.15	4.2	4
Fluoride	mg/L	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	<0.032	<0.05	<0.05	<0.05
pH_Field	SU	5.58	5.55	5.56	5.57	5.55	5.6	5.51	5.54	5.44
Sulfate	mg/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	1.69	1.53	1.62
TDS	mg/L	42.7	46	67.3	49.3	31.3	46	32.7	31.3	42.7
Appendix IV										
Antimony	mg/L	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.00181 J	--	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Barium	mg/L	0.0312	0.0265	0.0291	0.029	0.0298	0.0307	0.028	--	0.0312
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Combined Radium	pCi/L	0.676	0.496	0.62	-0.12 U	0.352 U	0.238 U	0.395 U	--	-0.00256 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-6							GSD-AP-MW-2VA	
		04/15/2020	08/24/2020	03/16/2021	10/12/2021	05/10/2022	10/26/2022	06/13/2023	04/15/2020	07/01/2020
Appendix III										
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.587	--
Calcium	mg/L	3.56	3.45	3.44	3.29	3.24	3.42	3.14	5	--
Chloride	mg/L	3.71	3.59	3.66	3.68	3.68	3.5	3.38	6.47	--
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	2.51	--
pH_Field	SU	5.52	5.38	5.56	5.41	5.57	5.43	5.15	8.6	8.36
Sulfate	mg/L	1.68	1.31	1.7	1.34	1.28 J	1.7 J	1.14 J	4.18	--
TDS	mg/L	37.3	37.3	--	--	--	--	--	324	--
Appendix IV										
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	--
Arsenic	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005	0.00015 J	<0.000112	<0.001	--
Barium	mg/L	0.0296	0.031	0.0293	0.0303	0.0309	0.0282	0.0277	0.2	--
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	--
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	--
Chromium	mg/L	<0.002	<0.002	0.000534 J	0.000307 J	0.00037 J	0.000224 J	0.000291 J	<0.002	--
Cobalt	mg/L	<0.002	<0.002	0.000108 J	0.000142 J	0.000121 J	7.79e-005 J	8.43e-005 J	<0.002	--
Combined Radium	pCi/L	0.000738 U	0.404 U	0.589 U	1.57	0.468 U	0.283 U	0.33 U	0.231 U	--
Lead	mg/L	<0.001	<0.001	8.35e-005 J	0.000119 J	0.000118 J	<6.8e-005	<6.8e-005	<0.001	--
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	0.0783	0.069
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	0.00286	<0.0003	<0.0003	<0.0003	--
Molybdenum	mg/L	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2VA						GSD-AP-MW-2VB		
		08/25/2020	03/22/2021	10/06/2021	05/16/2022	10/25/2022	06/07/2023	03/30/2021	10/12/2021	05/16/2022
Appendix III										
Boron	mg/L	0.552	0.537	0.54	0.556	0.555	0.576	0.605	0.617	0.622
Calcium	mg/L	4.97	5.71	5.38	5.22	5.52	5.05	3.71	3.96	3.81
Chloride	mg/L	6.4	6.65	6.82	6.86	6.86	6.98	32	38	38.8
Fluoride	mg/L	2.4	2.33	2.56	2.59	2.41	2.51	6.09	5.97	6.14
pH_Field	SU	8.43	8.34	8.36	8.1	8.33	7.81	8.52	8.62	8.48
Sulfate	mg/L	4.83	2.04	2.44	1.15 J	2.13	2.39	10.3	15.2	10
TDS	mg/L	321	--	--	--	--	--	--	--	--
Appendix IV										
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	0.000539 J	<0.00071	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00135 J	0.00145	0.00139	0.00135	0.00165	0.00165	0.000278	0.000426	0.000393
Barium	mg/L	0.135	0.114	0.12	0.132	0.137	0.154	0.313	0.242	0.322
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	0.000433 J	0.00025 J	0.000288 J	<0.000203	0.000262 J	0.00112	0.000353 J	0.000264 J
Cobalt	mg/L	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000116 J	<6.8e-005	<6.8e-005
Combined Radium	pCi/L	0.807	0.58 U	0.746 U	0.285 U	0.849	0.449 U	0.185 U	0.323 U	0.253 U
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0666	0.0666	0.0685	0.0612	0.0748	0.0668	0.13	0.129	0.111
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00323 J	0.00386	0.00363	0.00357	0.00361	<0.005075	0.000673	0.00156	0.000955

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2VB		GSD-AP-MW-4V						
		10/25/2022	06/07/2023	04/15/2020	08/26/2020	03/24/2021	10/11/2021	05/11/2022	10/26/2022	06/05/2023
Appendix III										
Boron	mg/L	0.628	0.651	0.0634 J	0.0611 J	0.0618 J	0.0596 J	0.062 J	0.0618 J	0.0624 J
Calcium	mg/L	4.99	6.41	23.9	23.5	22.9	23	22.6	23	23
Chloride	mg/L	49	65.3	5.16	5.37	5.55	5.65	5.48	5.53	5.72
Fluoride	mg/L	5.77	5.43	0.218	0.217	0.212	0.23	0.175	0.164	0.206
pH_Field	SU	8.33	8.25	7.93	7.83	8.01	7.82	7.91	7.92	7.72
Sulfate	mg/L	18	33.6	1.25	1.21	1.39	1.7	1.73 J	2.36	3.68
TDS	mg/L	--	--	218	239	--	--	--	--	--
Appendix IV										
Antimony	mg/L	<0.000508	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	0.000907	0.0006	<0.001	<0.001	0.00034	0.000366	0.000309	0.000446	0.000411
Barium	mg/L	0.346	0.385	0.457	0.534	0.477	0.483	0.525	0.474	0.521
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	0.000284 J	<0.002	<0.002	0.000402 J	0.000314 J	0.000239 J	0.000214 J	0.000367 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<0.002	<0.002	8.16e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	6.97e-005 J
Combined Radium	pCi/L	0.529 U	0.758 U	0.329 U	0.839	0.725 U	1.58	0.576 U	0.725 U	0.433 U
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.141	0.125	0.0219	0.0203	0.0203	0.0198 J	0.0187 J	0.0226	0.0189 J
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00135	<0.005075	<0.002	<0.002	0.00188	0.00173	0.00135	0.00135	<0.005075

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-21VC				GSD-AP-MW-22VB				GSD-AP-MW-
		10/06/2021	05/17/2022	10/26/2022	06/06/2023	10/11/2021	05/17/2022	10/26/2022	06/07/2023	04/15/2020
Appendix III										
Boron	mg/L	0.532	0.548	0.559	0.569	0.378	0.385	0.4	0.361	0.124
Calcium	mg/L	3.46	3.3	3.6	3.22	9.35	9.99	9.75	10	19.1
Chloride	mg/L	166	188	181	163	1.72	1.69	1.56	2.05	6
Fluoride	mg/L	8.34	8.22	7.57	7.65	1.43	1.27	1.36	1.12	<0.06
pH_Field	SU	8.53	8.31	8.31	8.41	8.13	8.29	8.11	7.41	5.1
Sulfate	mg/L	8.35	19.1	23.9	18.7	13.8	6.55	3.55	6.49	67.1
TDS	mg/L	--	--	--	--	--	--	--	--	126
Appendix IV										
Antimony	mg/L	0.00051 J	0.000508 J	0.000695 J	<0.00071	0.00167	<0.000508	<0.000508	<0.00071	<0.0008
Arsenic	mg/L	0.00162	0.0014	0.00122	0.000917	0.00408	0.00303	0.00269	0.00215	<0.001
Barium	mg/L	0.374	0.435	0.431	0.433	0.238	0.276	0.257	0.253	0.0389
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003
Chromium	mg/L	0.00111	0.00104	<0.000203	0.000256 J	0.000412 J	0.00032 J	<0.000203	0.000364 J	<0.002
Cobalt	mg/L	0.000205	0.000193 J	<6.8e-005	<6.8e-005	<6.8e-005	8.2e-005 J	<6.8e-005	<6.8e-005	<0.002
Combined Radium	pCi/L	1.78	0.4 U	0.755 U	0.476 U	1.29	0.306 U	0.426 U	0.444 U	0.419 U
Lead	mg/L	0.000225	0.000216	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000312	<0.001
Lithium	mg/L	0.227	0.196	0.262	0.205	0.0544	0.0499	0.0616	0.0517	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00107	0.00194	0.00238	<0.005075	0.00538	0.0028	0.0019	<0.005075	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-18H						GSD-AP-MW-19H		
		08/25/2020	03/16/2021	10/12/2021	05/10/2022	10/26/2022	06/12/2023	04/14/2020	06/01/2020	08/26/2020
Appendix III										
Boron	mg/L	0.105	0.0545 J	0.0717 J	0.0883 J	0.0784 J	0.0772 J	0.448	--	0.39
Calcium	mg/L	14.9	5.77	10.3	12.4	10	10.8	32.9	--	39.3
Chloride	mg/L	5.79	3.85	4.59	6.38	5.44	5.72	7.35	--	7.03
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	--	<0.06
pH_Field	SU	5.13	5.08	5.12	4.87	4.81	4.52	5.79	--	6.33
Sulfate	mg/L	52.6	18.5	36.7	42.1	37.3	36.9	75.3	--	72.9
TDS	mg/L	107	--	--	--	--	--	190	--	202
Appendix IV										
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	--	<0.0008
Arsenic	mg/L	<0.001	0.000136 J	0.00019 J	0.000154 J	0.000338	0.000133 J	<0.001	--	<0.001
Barium	mg/L	0.0388	0.0243	0.0298	0.0361	0.0349	0.0312	0.153	--	0.201
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	--	<0.0006
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	--	<0.0003
Chromium	mg/L	<0.002	0.000363 J	0.000209 J	0.00025 J	<0.000203	0.000457 J	<0.002	--	<0.002
Cobalt	mg/L	<0.002	0.000577	0.000615	0.000302	0.000452	0.000225	0.00886	--	0.0101
Combined Radium	pCi/L	1.45	0.405 U	0.383 U	0.576 U	0.165 U	0.564 U	42.6	0.215 U	0.265 U
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	--	<0.001
Lithium	mg/L	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	--	<0.01
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003
Molybdenum	mg/L	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002	--	<0.002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-19H					GSD-AP-MW-20H			
		03/23/2021	10/11/2021	05/16/2022	10/26/2022	06/12/2023	04/14/2020	08/26/2020	03/23/2021	10/11/2021
Appendix III										
Boron	mg/L	0.41	0.328	0.334	0.327	0.34	0.308	0.308	0.419	0.504
Calcium	mg/L	31.7	40	26.9	51.6	28	51.5	47.6	57.6	63.4
Chloride	mg/L	7.11	7.04	7.1	7.04	6.98	6.64	6.73	6.33	6.37
Fluoride	mg/L	<0.06	0.0779 J	<0.06	<0.06	<0.06	0.125	0.103	0.108	0.127
pH_Field	SU	5.88	6.08	5.24	6.25	5.81	6.02	6.36	6.38	6.36
Sulfate	mg/L	71.8	61.7	60.2	54.6	60.4	135	112	168	174
TDS	mg/L	--	--	--	--	--	323	310	--	--
Appendix IV										
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.000512	0.000846	0.000187 J	0.000583	0.000183 J	0.00287 J	0.00186 J	0.00226	0.00191
Barium	mg/L	0.148	0.17	0.124	0.158	0.101	0.189	0.197	0.217	0.134
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	0.000124 J	0.000151 J	<6.8e-005	8.42e-005 J	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000404 J	0.000475 J	0.000277 J	<0.000203	0.000381 J	<0.002	<0.002	0.000417 J	0.000246 J
Cobalt	mg/L	0.00674	0.00579	0.00496	0.00292	0.00377	0.0122	0.0104	0.0125	0.00995
Combined Radium	pCi/L	0.562 U	0.202 U	0.471 U	0.401 U	0.973 U	0.0962 U	0.413 U	0.847 U	1.09 U
Lead	mg/L	0.000201 J	0.000155 J	0.000151 J	<6.8e-005	0.000234	<0.001	<0.001	<6.8e-005	8.19e-005 J
Lithium	mg/L	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<6.8e-005	0.000118 J	<0.000102	0.000136 J	<0.005075	<0.002	<0.002	0.000481	0.000312

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS		
		GSD-AP-MW-20H		
		05/17/2022	10/26/2022	06/05/2023
Appendix III				
Boron	mg/L	0.632	0.584	0.771
Calcium	mg/L	74.7	76.3	70.5
Chloride	mg/L	6.22	5.91	5.58
Fluoride	mg/L	<0.06	0.121 J	0.112 J
pH_Field	SU	5.74	6.36	6.13
Sulfate	mg/L	187	158	172
TDS	mg/L	--	--	--
Appendix IV				
Antimony	mg/L	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	0.002	0.00151	0.00144
Barium	mg/L	0.115	0.0993	0.0865
Beryllium	mg/L	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000215 J	<0.000203	0.000265 J
Cobalt	mg/L	0.0102	0.00924	0.0089
Combined Radium	pCi/L	0.551 U	0.958 U	0.624 U
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000405	0.00033	<0.005075

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-14								
		06/27/2018	07/18/2018	08/06/2018	09/05/2018	09/24/2018	10/24/2018	12/05/2018	02/05/2019	02/28/2019
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00208 J	0.00387 J	--
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-14								GSD-AP-MW-
		08/20/2019	04/16/2020	08/25/2020	03/22/2021	10/12/2021	05/09/2022	10/26/2022	06/06/2023	12/06/2017
Appendix IV										
Selenium	mg/L	0.00328 J	0.00608 J	0.00247 J	0.00488	0.00287	0.00394	0.00151	0.0022	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-10								
		02/07/2018	04/24/2018	06/27/2018	08/07/2018	10/22/2018	12/04/2018	02/06/2019	02/26/2019	08/22/2019
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-10							GSD-AP-MW-16	
		04/15/2020	08/26/2020	03/23/2021	10/11/2021	05/10/2022	10/26/2022	06/13/2023	10/24/2018	11/14/2018
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-16								
		11/28/2018	12/05/2018	12/18/2018	01/03/2019	01/24/2019	02/05/2019	02/28/2019	08/19/2019	04/15/2020
Appendix IV										
Selenium	mg/L	<0.002	0.00349 J	0.00395 J	--	0.00707 J	0.00938 J	--	0.00316 J	0.00434 J
Thallium	mg/L	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-16						GSD-AP-MW-11		
		08/25/2020	03/22/2021	10/06/2021	05/17/2022	10/25/2022	06/06/2023	12/06/2017	02/07/2018	04/24/2018
Appendix IV										
Selenium	mg/L	0.00262 J	0.0134	0.00262	0.00609	0.00118	0.00301	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-11								
		06/27/2018	08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/22/2019	04/14/2020	08/26/2020
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-11					GSD-AP-MW-12			
		03/23/2021	10/12/2021	05/17/2022	10/26/2022	06/13/2023	12/06/2017	02/08/2018	04/24/2018	06/27/2018
Appendix IV										
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
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Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-12								
		08/08/2018	10/23/2018	12/05/2018	02/06/2019	02/27/2019	08/22/2019	04/14/2020	08/26/2020	03/23/2021
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-12				GSD-AP-MW-17				
		10/05/2021	05/10/2022	10/26/2022	06/13/2023	10/24/2018	11/14/2018	11/28/2018	12/05/2018	12/18/2018
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-17								
		01/03/2019	01/24/2019	02/05/2019	02/28/2019	08/19/2019	04/16/2020	08/24/2020	03/22/2021	10/06/2021
Appendix IV										
Selenium	mg/L	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-17			GSD-AP-MW-1					
		05/09/2022	10/25/2022	06/06/2023	12/06/2017	02/06/2018	04/23/2018	06/26/2018	08/07/2018	10/22/2018
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	7.03e-005 J	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-1								
		12/04/2018	02/05/2019	02/26/2019	08/21/2019	04/15/2020	08/25/2020	03/16/2021	10/05/2021	05/10/2022
Appendix IV										
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	0.000112 J	<6.8e-005	0.000141 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-1		GSD-AP-MW-2						
		10/26/2022	06/05/2023	12/06/2017	02/06/2018	04/23/2018	06/27/2018	08/07/2018	10/22/2018	12/04/2018
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	0.000101 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000213 J	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2								
		02/05/2019	02/26/2019	08/20/2019	04/15/2020	08/25/2020	03/24/2021	10/11/2021	05/16/2022	10/25/2022
Appendix IV										
Selenium	mg/L	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	0.000256 J	--	0.000322 J	0.000318 J	0.000347 J	0.00037	0.000294	0.000414	0.000361

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2	GSD-AP-MW-3							
		06/06/2023	12/06/2017	02/06/2018	04/24/2018	06/27/2018	08/07/2018	10/22/2018	12/03/2018	02/05/2019
Appendix IV										
Selenium	mg/L	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	0.000425	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-3								
		02/25/2019	08/20/2019	04/13/2020	08/26/2020	03/22/2021	10/05/2021	05/10/2022	10/26/2022	06/05/2023
Appendix IV										
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	0.000121 J	0.000136 J	0.000113 J	0.00011 J	0.000104 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-4								
		12/07/2017	02/06/2018	04/24/2018	06/26/2018	08/06/2018	10/22/2018	12/03/2018	02/05/2019	02/26/2019
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-4								GSD-AP-MW-5
		08/20/2019	04/15/2020	08/26/2020	03/24/2021	10/05/2021	05/16/2022	10/26/2022	06/06/2023	12/07/2017
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-5								
		02/06/2018	04/25/2018	06/27/2018	08/07/2018	10/23/2018	12/05/2018	02/05/2019	02/27/2019	08/20/2019
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-5							GSD-AP-MW-6	
		04/13/2020	08/24/2020	03/16/2021	10/05/2021	05/09/2022	10/26/2022	06/07/2023	12/07/2017	02/08/2018
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-6								
		04/25/2018	06/26/2018	08/07/2018	10/23/2018	12/03/2018	02/05/2019	02/26/2019	08/20/2019	04/13/2020
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-6						GSD-AP-MW-7		
		08/26/2020	03/17/2021	10/05/2021	05/10/2022	10/26/2022	06/05/2023	12/07/2017	02/08/2018	04/25/2018
Appendix IV										
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-7								
		06/26/2018	08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/21/2019	04/15/2020	08/26/2020
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-7					GSD-AP-MW-8			
		03/23/2021	10/05/2021	05/10/2022	10/26/2022	06/13/2023	12/07/2017	02/08/2018	04/25/2018	06/26/2018
Appendix IV										
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-8								
		08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/21/2019	04/14/2020	08/26/2020	03/23/2021
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-8				GSD-AP-MW-9				
		10/12/2021	05/11/2022	10/26/2022	06/07/2023	12/07/2017	02/08/2018	04/25/2018	06/26/2018	08/08/2018
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-9								
		10/23/2018	12/05/2018	02/06/2019	02/27/2019	08/21/2019	04/14/2020	08/26/2020	03/23/2021	10/12/2021
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-9			GSD-AP-PZ-1					
		05/11/2022	10/26/2022	06/12/2023	06/27/2018	07/18/2018	08/07/2018	09/05/2018	09/24/2018	10/22/2018
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-1								
		12/03/2018	02/05/2019	02/25/2019	08/20/2019	04/13/2020	08/24/2020	03/24/2021	10/05/2021	05/09/2022
Appendix IV										
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-1		GSD-AP-PZ-2						
		10/26/2022	06/07/2023	04/13/2020	08/24/2020	03/17/2021	10/05/2021	05/09/2022	10/26/2022	06/05/2023
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-5								
		06/27/2018	07/18/2018	08/08/2018	09/05/2018	09/24/2018	10/23/2018	12/03/2018	02/07/2019	02/25/2019
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-5								GSD-AP-PZ-6
		08/21/2019	04/15/2020	08/24/2020	03/16/2021	10/12/2021	05/10/2022	10/26/2022	06/13/2023	06/27/2018
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-6								
		07/18/2018	08/08/2018	09/05/2018	09/24/2018	10/23/2018	12/03/2018	02/07/2019	02/25/2019	08/21/2019
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-PZ-6							GSD-AP-MW-2VA	
		04/15/2020	08/24/2020	03/16/2021	10/12/2021	05/10/2022	10/26/2022	06/13/2023	04/15/2020	07/01/2020
Appendix IV										
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	--
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	--

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2VA						GSD-AP-MW-2VB		
		08/25/2020	03/22/2021	10/06/2021	05/16/2022	10/25/2022	06/07/2023	03/30/2021	10/12/2021	05/16/2022
Appendix IV										
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-2VB		GSD-AP-MW-4V						
		10/25/2022	06/07/2023	04/15/2020	08/26/2020	03/24/2021	10/11/2021	05/11/2022	10/26/2022	06/05/2023
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-21VC				GSD-AP-MW-22VB				GSD-AP-MW-
		10/06/2021	05/17/2022	10/26/2022	06/06/2023	10/11/2021	05/17/2022	10/26/2022	06/07/2023	04/15/2020
Appendix IV										
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-18H						GSD-AP-MW-19H		
		08/25/2020	03/16/2021	10/12/2021	05/10/2022	10/26/2022	06/12/2023	04/14/2020	06/01/2020	08/26/2020
Appendix IV										
Selenium	mg/L	<0.002	0.000935 J	0.000679 J	0.00125	0.00117	0.000931 J	<0.002	--	<0.002
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	--	<0.0002

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS								
		GSD-AP-MW-19H					GSD-AP-MW-20H			
		03/23/2021	10/11/2021	05/16/2022	10/26/2022	06/12/2023	04/14/2020	08/26/2020	03/23/2021	10/11/2021
Appendix IV										
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	0.000145 J	0.00013 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (12/06/2017 - 06/13/2023)
APC Plant Gadsden
Gadsden County Alabama

Analyte	Units	GROUNDWATER MONITORING WELLS		
		GSD-AP-MW-20H		
		05/17/2022	10/26/2022	06/05/2023
Appendix IV				
Selenium	mg/L	<0.000508	<0.000508	<0.000508
Thallium	mg/L	0.000132 J	0.000149 J	0.000125 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
4. < - Constituent was analyzed for, but was not detected above the MDL and is considered a non-detect. Value is displayed as less than the PQL.
5. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
6. Annual sampling for Appendix IV constituents only was completed following initiation of assessment monitoring. Appendix III constituents were not required during this monitoring event.

Appendix B

Southern Company

Appendix B. Historical Groundwater Elevations Summary

Plant Gadsden Ash Pond
12/04/2017 - 06/05/2023

Well	Hydraulic Location	Geologic Unit	Measure Date														
			12/04/17	02/06/18	04/23/18	04/25/18	06/25/18	08/06/18	10/22/18	12/03/18	02/04/19	02/25/19	06/10/19	06/17/19	08/19/19	04/13/20	08/24/20
GSD-AP-MW-14	Upgradient	Alluvium					526.46	526.24	525.80	526.19	527.65	528.41	527.07	526.95	526.25	528.26	526.07
GSD-AP-MW-16	Upgradient	Alluvium							529.67	529.75	531.32	531.98	530.55	530.43	529.71	531.91	529.60
GSD-AP-MW-17	Upgradient	Alluvium							531.30	530.77	532.25	534.03	531.23	531.08	530.30	532.80	530.65
GSD-AP-MW-10	Downgradient	Alluvium	509.82	509.66	509.75	509.95	509.54	509.79	508.95	509.64	509.91	511.85	509.34	509.22	508.72	509.73	509.13
GSD-AP-MW-11	Downgradient	Alluvium	507.46	507.93	508.66	509.31	508.09	508.26	507.53	509.29	509.06	511.67	508.12	508.07	507.59	509.18	507.99
GSD-AP-MW-12	Downgradient	Alluvium	511.62	513.11	514.13	514.06	510.80	510.99	509.64	512.76	514.11	515.43	511.29	510.97	508.94	514.20	509.66
GSD-AP-MW-1	Downgradient	Alluvium	513.72	514.90	517.40	517.34	513.69	512.90	511.57	513.12	517.76	519.26	514.50	514.19	511.97	517.91	512.36
GSD-AP-MW-2	Downgradient	Alluvium	513.78	514.70	516.38	516.33	513.63	513.03	511.73	513.15	516.64	518.15	514.30	514.01	512.01	516.67	512.37
GSD-AP-MW-3	Downgradient	Alluvium	513.81	514.75	516.19	515.79	513.55	513.09	511.90	513.50	515.98	517.38	514.21	512.85	512.03	516.42	512.48
GSD-AP-MW-4	Downgradient	Alluvium	513.76	514.69	516.05	515.63	513.46	513.08	511.89	513.54	515.78	517.13	514.13	513.76	512.00	515.99	512.57
GSD-AP-MW-5	Downgradient	Alluvium	510.81	511.80	512.49	512.17	510.60	510.60	509.64	511.52	512.09	513.01	511.13	510.89	508.72	512.38	510.36
GSD-AP-MW-6	Downgradient	Alluvium	509.89	510.60	511.08	510.78	509.72	509.85	509.05	510.58	510.70	511.64	510.02	509.87	507.89	511.28	509.81
GSD-AP-MW-7	Downgradient	Alluvium	507.66	508.62	509.52	509.68	507.90	507.96	507.54	509.41	509.82	513.85	508.34	508.20	506.95	510.09	507.64
GSD-AP-MW-8	Downgradient	Alluvium	506.85	506.90	508.02	508.88	507.88	507.98	507.37	508.98	508.46	511.45	507.78	507.86	507.62	509.16	507.98
GSD-AP-MW-9	Downgradient	Alluvium	505.87	506.86	507.85	508.67	507.90	508.06	507.39	508.69	508.46	511.42	507.83	508.02	507.61	508.71	508.06
GSD-AP-PZ-1	Downgradient	Alluvium	512.46	514.52	517.21	517.14	512.36	511.31	509.79	512.92	517.22	518.98	513.54	513.10	510.07	517.30	510.78
GSD-AP-PZ-2	Downgradient	Alluvium	506.92	507.81	508.58	509.21	507.98	508.19	507.51	509.29	509.02	511.33	508.15	508.11	507.31	509.12	508.13
GSD-AP-PZ-5	Downgradient	Alluvium			517.67	517.52	512.60	511.42	509.93	512.73	517.72	519.28	513.81	513.36	510.37	518.21	511.00
GSD-AP-PZ-6	Downgradient	Alluvium			517.39	517.27	512.57	511.44	509.95	513.05	517.43	518.72	513.82	513.32	510.30	517.75	510.99
GSD-AP-MW-2VA	Vertical Delineation	Conasauga Formation														519.33	512.43
GSD-AP-MW-2VB	Vertical Delineation	Conasauga Formation															
GSD-AP-MW-4V	Vertical Delineation	Conasauga Formation														516.09	512.39
GSD-AP-MW-21VC	Vertical Delineation	Conasauga - Knox Contact (Fault Zone)															
GSD-AP-MW-22VB	Vertical Delineation	Conasauga - Knox Contact (Fault Zone)															
GSD-AP-MW-18H	Horizontal Delineation	Alluvium														518.59	511.07
GSD-AP-MW-19H	Horizontal Delineation	Alluvium														516.97	511.36
GSD-AP-MW-20H	Horizontal Delineation	Alluvium														516.28	512.47
GSD-AP-MW-2V	Piezometer	Conasauga Formation														516.60	512.43
GSD-AP-MW-2VC	Piezometer	Conasauga Formation															
GSD-AP-MW-21VB	Piezometer	Conasauga - Knox Contact (Fault Zone)															
GSD-AP-MW-23VB	Piezometer	Conasauga - Knox Contact (Fault Zone)															

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.

Well	Hydraulic Location	Geologic Unit					
			03/15/21	10/04/21	05/05/22	10/24/22	06/05/23
GSD-AP-MW-14	Upgradient	Alluvium	527.24		527.40	525.88	527.25
GSD-AP-MW-16	Upgradient	Alluvium	530.64		530.93	529.41	530.85
GSD-AP-MW-17	Upgradient	Alluvium	531.68		531.70	530.02	531.65
GSD-AP-MW-10	Downgradient	Alluvium	508.82		509.05	508.35	508.85
GSD-AP-MW-11	Downgradient	Alluvium	507.92		508.32	507.50	508.02
GSD-AP-MW-12	Downgradient	Alluvium	513.06		512.20	508.36	511.88
GSD-AP-MW-1	Downgradient	Alluvium	516.98	513.76	516.18	510.76	515.95
GSD-AP-MW-2	Downgradient	Alluvium	516.10	513.65	515.54	510.75	515.32
GSD-AP-MW-3	Downgradient	Alluvium	515.58		515.04	510.82	514.91
GSD-AP-MW-4	Downgradient	Alluvium	515.41		514.94	510.86	514.80
GSD-AP-MW-5	Downgradient	Alluvium	511.63		511.48	508.00	511.17
GSD-AP-MW-6	Downgradient	Alluvium	510.32		510.16	507.51	510.02
GSD-AP-MW-7	Downgradient	Alluvium	508.87		508.75	506.64	508.38
GSD-AP-MW-8	Downgradient	Alluvium	507.18		507.97	507.68	507.61
GSD-AP-MW-9	Downgradient	Alluvium	507.19		507.98	507.70	507.68
GSD-AP-PZ-1	Downgradient	Alluvium	516.46	513.04	515.45	508.63	515.00
GSD-AP-PZ-2	Downgradient	Alluvium	507.85		508.25	507.17	507.95
GSD-AP-PZ-5	Downgradient	Alluvium	516.90		515.92	509.05	515.30
GSD-AP-PZ-6	Downgradient	Alluvium	516.73		515.77	508.98	515.24
GSD-AP-MW-2VA	Vertical Delineation	Conasauga Formation	516.13	513.65	515.56	510.75	515.36
GSD-AP-MW-2VB	Vertical Delineation	Conasauga Formation	516.15	513.51	515.59	510.72	515.35
GSD-AP-MW-4V	Vertical Delineation	Conasauga Formation	515.31		514.81	510.75	514.67
GSD-AP-MW-21VC	Vertical Delineation	Conasauga - Knox Contact (Fault Zone)			515.83	510.87	515.59
GSD-AP-MW-22VB	Vertical Delineation	Conasauga - Knox Contact (Fault Zone)			515.68	509.52	515.22
GSD-AP-MW-18H	Horizontal Delineation	Alluvium	517.02		516.01	509.19	515.43
GSD-AP-MW-19H	Horizontal Delineation	Alluvium	516.29		515.58	509.60	515.18
GSD-AP-MW-20H	Horizontal Delineation	Alluvium	515.39		514.90	510.82	514.81
GSD-AP-MW-2V	Piezometer	Conasauga Formation	516.13	513.67	515.54	510.77	515.37
GSD-AP-MW-2VC	Piezometer	Conasauga Formation			515.84	510.91	515.61
GSD-AP-MW-21VB	Piezometer	Conasauga - Knox Contact (Fault Zone)			515.61	510.62	515.60
GSD-AP-MW-23VB	Piezometer	Conasauga - Knox Contact (Fault Zone)			515.92	509.52	515.72

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.

Appendix C

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Plant Gadsden Ash Pond

2022 Compliance Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.
    - The DO sensor for the Aquatroll quit working after samples for wells MW-16 and MW-17 had been collected. Sampling with this instrument ceased for the day, but no final DO LCS data was able to be acquired. Customer approved the use of the DO field data as representative of the above wells mentioned.

Water Level Record/Well Inspection
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	06/05/2023	Weather	sunny 75
Location	Gadsden Ash Pond		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1006	10.42	✔	✔	✔	✔	✔	
PZ-1	0928	6.64	✔	✔	✔	✔	✔	
MW-2	0934	10.84	✔	✔	✔	✔	✔	
MW-2V	0936	9.94	✔	✔	✔	✔	✔	
MW-2VA	0938	9.58	✔	✔	✔	✔	✔	
MW-2VB	0941	7.21	✔	✔	✔	✔	✔	
MW-2VC	0940	7.26	✔	✔	✔	✔	✔	
PZ-2	0912	8.54	✔	✔	✔	✔	✔	
MW-3	1045	11.89	✔	✔	✔	✔	✔	DFG
MW-4	1051	5.80	✔	✔	✔	✔	✔	DFG
MW-4V	1049	5.66	✔	✔	✔	✔	✔	DFG
MW-5	0925	5.10	✔	✔	✔	✔	✔	
PZ-5	1106	8.96	✔	✔	✔	✔	✔	
MW-6	0910	5.21	✔	✔	✔	✔	✔	
PZ-6	1101	4.36	✔	✔	✔	✔	✔	
MW-7	1051	11.48	✔	✔	✔	✔	✔	Ants present in well
MW-8	1041	11.61	✔	✔	✔	✔	✔	
MW-9	1037	12.68	✔	✔	✔	✔	✔	
MW-10	1033	22.06	✔	✔	✔	✔	✔	
MW-11	1017	8.99	✔	✔	✔	✔	✔	
MW-12	1026	9.94	✔	✔	✔	✔	✔	
MW-13	NA	NA	✔	✔	✔	✔	✔	
MW-14	0815	21.09	✔	✔	✔	✔	✔	
MW-15	NA	NA	✔	✔	✔	✔	✔	
MW-16	0811	24.98	✔	✔	✔	✔	✔	
MW-17	0808	18.46	✔	✔	✔	✔	✔	
MW-18H	1010	9.02	✔	✔	✔	✔	✔	
MW-19H	0956	2.14	✔	✔	✔	✔	✔	
MW-20H	1053	1.87	✔	✔	✔	✔	✔	DFG
MW-21VB	0946	4.64	✔	✔	✔	✔	✔	
MW-21VC	0945	5.54	✔	✔	✔	✔	✔	
MW-22VB	0950	2.79	✔	✔	✔	✔	✔	
MW-23VB	1104	3.31	✔	✔	✔	✔	✔	

Water Level Record/Well Inspection
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	06/05/2023	Weather	Sunny 75
Location	Gadsden Ash Pond		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
TPZ-1	1124	Dry	☐	☐	☐	☐	☐	
TPZ-2	1123	16.89	☐	☐	☐	☐	☐	
TPZ-3	1121	19.00	☐	☐	☐	☐	☐	
TPZ-4	1120	16.58	☐	☐	☐	☐	☐	

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 8:37	536.09	uS/cm
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 8:37	0.19	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 8:37	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 8:37	-67.41	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 8:37	6.65	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 8:37	20.3	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 8:37	90.1	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 8:42	547.28	uS/cm
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 8:42	0.17	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 8:42	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 8:42	-64.16	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 8:42	6.65	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 8:42	20.29	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 8:42	87	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 8:47	562.83	uS/cm
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 8:47	0.15	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 8:47	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 8:47	-61.98	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 8:47	6.65	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 8:47	20.31	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 8:47	26.5	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 8:52	583.69	uS/cm
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 8:52	0.13	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 8:52	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 8:52	-59.08	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 8:52	6.62	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 8:52	20.3	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 8:52	13.5	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 8:57	589.7	uS/cm
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 8:57	0.11	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 8:57	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 8:57	-58.47	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 8:57	6.62	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 8:57	20.31	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 8:57	11.4	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 9:02	589.06	uS/cm
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 9:02	0.11	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 9:02	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 9:02	-58.57	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 9:02	6.64	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 9:02	20.31	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 9:02	9.29	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 9:07	592.22	uS/cm
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 9:07	0.1	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 9:07	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 9:07	-57.86	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 9:07	6.63	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 9:07	20.31	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 9:07	6.65	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	10/25/2022 9:12	594.44	uS/cm

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2	DO	DO	10/25/2022 9:12	0.1	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	10/25/2022 9:12	15.45	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	10/25/2022 9:12	-57.73	mv
APCO-GSD-AP-MW-2	PH	pH	10/25/2022 9:12	6.64	SU
APCO-GSD-AP-MW-2	SULFIDE	Sulfide	10/25/2022 9:12	0	mg/L
APCO-GSD-AP-MW-2	TEMP	Temperature	10/25/2022 9:12	20.34	C
APCO-GSD-AP-MW-2	TURB	Turbidity	10/25/2022 9:12	6.21	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-14	COND	Conductivity	10/26/2022 8:03	168.3	uS/cm
APCO-GSD-AP-MW-14	DO	DO	10/26/2022 8:03	4.09	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	10/26/2022 8:03	22.53	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	10/26/2022 8:03	265.88	mv
APCO-GSD-AP-MW-14	PH	pH	10/26/2022 8:03	4.07	SU
APCO-GSD-AP-MW-14	TEMP	Temperature	10/26/2022 8:03	18.77	C
APCO-GSD-AP-MW-14	TURB	Turbidity	10/26/2022 8:03	4.5	NTU
APCO-GSD-AP-MW-14	COND	Conductivity	10/26/2022 8:08	173.46	uS/cm
APCO-GSD-AP-MW-14	DO	DO	10/26/2022 8:08	4.06	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	10/26/2022 8:08	22.53	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	10/26/2022 8:08	264.94	mv
APCO-GSD-AP-MW-14	PH	pH	10/26/2022 8:08	4.08	SU
APCO-GSD-AP-MW-14	TEMP	Temperature	10/26/2022 8:08	18.81	C
APCO-GSD-AP-MW-14	TURB	Turbidity	10/26/2022 8:08	3.21	NTU
APCO-GSD-AP-MW-14	COND	Conductivity	10/26/2022 8:13	177.62	uS/cm
APCO-GSD-AP-MW-14	DO	DO	10/26/2022 8:13	4.08	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	10/26/2022 8:13	22.53	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	10/26/2022 8:13	286.52	mv
APCO-GSD-AP-MW-14	PH	pH	10/26/2022 8:13	4.07	SU
APCO-GSD-AP-MW-14	TEMP	Temperature	10/26/2022 8:13	18.66	C
APCO-GSD-AP-MW-14	TURB	Turbidity	10/26/2022 8:13	2.47	NTU
APCO-GSD-AP-MW-14	COND	Conductivity	10/26/2022 8:18	178.64	uS/cm
APCO-GSD-AP-MW-14	DO	DO	10/26/2022 8:18	4.05	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	10/26/2022 8:18	22.53	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	10/26/2022 8:18	301.57	mv
APCO-GSD-AP-MW-14	PH	pH	10/26/2022 8:18	4.07	SU
APCO-GSD-AP-MW-14	SULFIDE	Sulfide	10/26/2022 8:18	0	mg/L
APCO-GSD-AP-MW-14	TEMP	Temperature	10/26/2022 8:18	18.74	C
APCO-GSD-AP-MW-14	TURB	Turbidity	10/26/2022 8:18	2.21	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-11	COND	Conductivity	10/26/2022 13:44	785.02	uS/cm
APCO-GSD-AP-MW-11	DO	DO	10/26/2022 13:44	0.09	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	10/26/2022 13:44	10.15	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	10/26/2022 13:44	25.37	mv
APCO-GSD-AP-MW-11	PH	pH	10/26/2022 13:44	6.18	SU
APCO-GSD-AP-MW-11	TEMP	Temperature	10/26/2022 13:44	20.08	C
APCO-GSD-AP-MW-11	TURB	Turbidity	10/26/2022 13:44	4.21	NTU
APCO-GSD-AP-MW-11	COND	Conductivity	10/26/2022 13:49	785.93	uS/cm
APCO-GSD-AP-MW-11	DO	DO	10/26/2022 13:49	0.07	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	10/26/2022 13:49	10.15	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	10/26/2022 13:49	20.48	mv
APCO-GSD-AP-MW-11	PH	pH	10/26/2022 13:49	6.19	SU
APCO-GSD-AP-MW-11	TEMP	Temperature	10/26/2022 13:49	20.06	C
APCO-GSD-AP-MW-11	TURB	Turbidity	10/26/2022 13:49	5.8	NTU
APCO-GSD-AP-MW-11	COND	Conductivity	10/26/2022 13:54	789.86	uS/cm
APCO-GSD-AP-MW-11	DO	DO	10/26/2022 13:54	0.07	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	10/26/2022 13:54	10.15	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	10/26/2022 13:54	17.18	mv
APCO-GSD-AP-MW-11	PH	pH	10/26/2022 13:54	6.2	SU
APCO-GSD-AP-MW-11	TEMP	Temperature	10/26/2022 13:54	20.04	C
APCO-GSD-AP-MW-11	TURB	Turbidity	10/26/2022 13:54	6.6	NTU
APCO-GSD-AP-MW-11	COND	Conductivity	10/26/2022 13:59	793.94	uS/cm
APCO-GSD-AP-MW-11	DO	DO	10/26/2022 13:59	0.06	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	10/26/2022 13:59	10.15	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	10/26/2022 13:59	14.54	mv
APCO-GSD-AP-MW-11	PH	pH	10/26/2022 13:59	6.2	SU
APCO-GSD-AP-MW-11	SULFIDE	Sulfide	10/26/2022 13:59	0	mg/L
APCO-GSD-AP-MW-11	TEMP	Temperature	10/26/2022 13:59	20.1	C
APCO-GSD-AP-MW-11	TURB	Turbidity	10/26/2022 13:59	5.04	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-12	COND	Conductivity	10/26/2022 14:35	478.39	uS/cm
APCO-GSD-AP-MW-12	DO	DO	10/26/2022 14:35	0.14	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	10/26/2022 14:35	13.6	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	10/26/2022 14:35	194.19	mv
APCO-GSD-AP-MW-12	PH	pH	10/26/2022 14:35	5.54	SU
APCO-GSD-AP-MW-12	TEMP	Temperature	10/26/2022 14:35	19.16	C
APCO-GSD-AP-MW-12	TURB	Turbidity	10/26/2022 14:35	2.73	NTU
APCO-GSD-AP-MW-12	COND	Conductivity	10/26/2022 14:40	561.6	uS/cm
APCO-GSD-AP-MW-12	DO	DO	10/26/2022 14:40	0.11	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	10/26/2022 14:40	13.6	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	10/26/2022 14:40	186.14	mv
APCO-GSD-AP-MW-12	PH	pH	10/26/2022 14:40	5.54	SU
APCO-GSD-AP-MW-12	TEMP	Temperature	10/26/2022 14:40	19.01	C
APCO-GSD-AP-MW-12	TURB	Turbidity	10/26/2022 14:40	2.79	NTU
APCO-GSD-AP-MW-12	COND	Conductivity	10/26/2022 14:45	584.7	uS/cm
APCO-GSD-AP-MW-12	DO	DO	10/26/2022 14:45	0.1	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	10/26/2022 14:45	13.6	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	10/26/2022 14:45	186.29	mv
APCO-GSD-AP-MW-12	PH	pH	10/26/2022 14:45	5.52	SU
APCO-GSD-AP-MW-12	TEMP	Temperature	10/26/2022 14:45	19.06	C
APCO-GSD-AP-MW-12	TURB	Turbidity	10/26/2022 14:45	2.35	NTU
APCO-GSD-AP-MW-12	COND	Conductivity	10/26/2022 14:50	586.4	uS/cm
APCO-GSD-AP-MW-12	DO	DO	10/26/2022 14:50	0.09	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	10/26/2022 14:50	13.6	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	10/26/2022 14:50	192.4	mv
APCO-GSD-AP-MW-12	PH	pH	10/26/2022 14:50	5.52	SU
APCO-GSD-AP-MW-12	SULFIDE	Sulfide	10/26/2022 14:50	0	mg/L
APCO-GSD-AP-MW-12	TEMP	Temperature	10/26/2022 14:50	19.08	C
APCO-GSD-AP-MW-12	TURB	Turbidity	10/26/2022 14:50	2.52	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-20H	COND	Conductivity	10/26/2022 12:46	597.96	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	10/26/2022 12:46	0.06	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	10/26/2022 12:46	5.95	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	10/26/2022 12:46	34.19	mv
APCO-GSD-AP-MW-20H	PH	pH	10/26/2022 12:46	6.36	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	10/26/2022 12:46	18.89	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	10/26/2022 12:46	28.2	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	10/26/2022 12:51	598.66	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	10/26/2022 12:51	0.04	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	10/26/2022 12:51	5.95	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	10/26/2022 12:51	34.14	mv
APCO-GSD-AP-MW-20H	PH	pH	10/26/2022 12:51	6.34	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	10/26/2022 12:51	18.88	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	10/26/2022 12:51	10.88	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	10/26/2022 12:56	599.27	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	10/26/2022 12:56	0.04	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	10/26/2022 12:56	5.95	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	10/26/2022 12:56	33.36	mv
APCO-GSD-AP-MW-20H	PH	pH	10/26/2022 12:56	6.34	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	10/26/2022 12:56	18.89	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	10/26/2022 12:56	6.78	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	10/26/2022 13:01	599.74	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	10/26/2022 13:01	0.04	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	10/26/2022 13:01	5.95	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	10/26/2022 13:01	32.17	mv
APCO-GSD-AP-MW-20H	PH	pH	10/26/2022 13:01	6.32	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	10/26/2022 13:01	18.91	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	10/26/2022 13:01	5.28	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	10/26/2022 13:06	600.06	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	10/26/2022 13:06	0.04	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	10/26/2022 13:06	5.95	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	10/26/2022 13:06	30.46	mv
APCO-GSD-AP-MW-20H	PH	pH	10/26/2022 13:06	6.36	SU
APCO-GSD-AP-MW-20H	SULFIDE	Sulfide	10/26/2022 13:06	0	mg/L
APCO-GSD-AP-MW-20H	TEMP	Temperature	10/26/2022 13:06	18.9	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	10/26/2022 13:06	4.82	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-3	COND	Conductivity	10/26/2022 9:28	494.68	uS/cm
APCO-GSD-AP-MW-3	DO	DO	10/26/2022 9:28	0.12	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	10/26/2022 9:28	16.02	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	10/26/2022 9:28	153.47	mv
APCO-GSD-AP-MW-3	PH	pH	10/26/2022 9:28	5.97	SU
APCO-GSD-AP-MW-3	TEMP	Temperature	10/26/2022 9:28	20.62	C
APCO-GSD-AP-MW-3	TURB	Turbidity	10/26/2022 9:28	1.66	NTU
APCO-GSD-AP-MW-3	COND	Conductivity	10/26/2022 9:33	508.16	uS/cm
APCO-GSD-AP-MW-3	DO	DO	10/26/2022 9:33	0.09	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	10/26/2022 9:33	16.02	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	10/26/2022 9:33	162.66	mv
APCO-GSD-AP-MW-3	PH	pH	10/26/2022 9:33	5.96	SU
APCO-GSD-AP-MW-3	TEMP	Temperature	10/26/2022 9:33	20.59	C
APCO-GSD-AP-MW-3	TURB	Turbidity	10/26/2022 9:33	1.7	NTU
APCO-GSD-AP-MW-3	COND	Conductivity	10/26/2022 9:38	516.23	uS/cm
APCO-GSD-AP-MW-3	DO	DO	10/26/2022 9:38	0.08	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	10/26/2022 9:38	16.02	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	10/26/2022 9:38	165	mv
APCO-GSD-AP-MW-3	PH	pH	10/26/2022 9:38	5.98	SU
APCO-GSD-AP-MW-3	TEMP	Temperature	10/26/2022 9:38	20.56	C
APCO-GSD-AP-MW-3	TURB	Turbidity	10/26/2022 9:38	1.67	NTU
APCO-GSD-AP-MW-3	COND	Conductivity	10/26/2022 9:43	514.86	uS/cm
APCO-GSD-AP-MW-3	DO	DO	10/26/2022 9:43	0.07	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	10/26/2022 9:43	16.02	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	10/26/2022 9:43	167.33	mv
APCO-GSD-AP-MW-3	PH	pH	10/26/2022 9:43	5.97	SU
APCO-GSD-AP-MW-3	SULFIDE	Sulfide	10/26/2022 9:43	0	mg/L
APCO-GSD-AP-MW-3	TEMP	Temperature	10/26/2022 9:43	20.51	C
APCO-GSD-AP-MW-3	TURB	Turbidity	10/26/2022 9:43	1.58	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 11:40	440.52	uS/cm
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 11:40	0.11	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 11:40	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 11:40	-79.23	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 11:40	6.62	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 11:40	20.13	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 11:40	14.4	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 11:45	441.63	uS/cm
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 11:45	0.08	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 11:45	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 11:45	-83.51	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 11:45	6.64	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 11:45	20.11	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 11:45	10.73	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 11:50	441.16	uS/cm
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 11:50	0.07	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 11:50	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 11:50	-85.9	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 11:50	6.65	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 11:50	20.09	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 11:50	6.88	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 11:55	441.17	uS/cm
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 11:55	0.11	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 11:55	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 11:55	-85.38	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 11:55	6.68	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 11:55	20.05	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 11:55	7.22	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 12:00	440.51	uS/cm
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 12:00	0.1	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 12:00	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 12:00	-84.81	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 12:00	6.63	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 12:00	20.06	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 12:00	6.35	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 12:05	439.59	uS/cm
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 12:05	0.1	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 12:05	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 12:05	-84.85	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 12:05	6.67	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 12:05	20.1	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 12:05	5.71	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 12:10	440.05	uS/cm
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 12:10	0.1	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 12:10	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 12:10	-85.14	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 12:10	6.67	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 12:10	20.1	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 12:10	5.05	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	10/26/2022 12:15	439.89	uS/cm

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4	DO	DO	10/26/2022 12:15	0.1	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	10/26/2022 12:15	9.85	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	10/26/2022 12:15	-85.64	mv
APCO-GSD-AP-MW-4	PH	pH	10/26/2022 12:15	6.67	SU
APCO-GSD-AP-MW-4	SULFIDE	Sulfide	10/26/2022 12:15	0	mg/L
APCO-GSD-AP-MW-4	TEMP	Temperature	10/26/2022 12:15	20.14	C
APCO-GSD-AP-MW-4	TURB	Turbidity	10/26/2022 12:15	5.32	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:23	381.49	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:23	0.16	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:23	9.65	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:23	-71	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:23	7.82	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:23	18.92	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:23	2.6	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:28	382.04	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:28	0.13	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:28	17.1	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:28	-138.1	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:28	7.83	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:28	18.88	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:28	1.99	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:33	393.24	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:33	0.15	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:33	17.65	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:33	-130.11	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:33	7.59	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:33	18.79	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:33	2.93	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:38	393.48	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:38	0.13	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:38	19.1	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:38	-145.14	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:38	7.79	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:38	18.83	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:38	1.91	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:43	393.69	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:43	0.17	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:43	19.45	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:43	-150.08	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:43	7.85	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:43	18.72	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:43	2.63	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:48	393.22	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:48	0.16	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:48	19.6	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:48	-155.16	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:48	7.92	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:48	18.72	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:48	2.16	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:53	392.99	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:53	0.15	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:53	19.75	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:53	-158.67	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:53	7.91	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:53	18.68	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:53	2.18	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	10/26/2022 10:58	391.47	uS/cm

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4V	DO	DO	10/26/2022 10:58	0.3	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	10/26/2022 10:58	19.15	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	10/26/2022 10:58	-154.36	mv
APCO-GSD-AP-MW-4V	PH	pH	10/26/2022 10:58	7.92	SU
APCO-GSD-AP-MW-4V	SULFIDE	Sulfide	10/26/2022 10:58	0	mg/L
APCO-GSD-AP-MW-4V	TEMP	Temperature	10/26/2022 10:58	18.65	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	10/26/2022 10:58	2.19	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-1	COND	Conductivity	10/26/2022 13:53	1076.64	uS/cm
APCO-GSD-AP-MW-1	DO	DO	10/26/2022 13:53	0.12	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	10/26/2022 13:53	15.66	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	10/26/2022 13:53	131.74	mv
APCO-GSD-AP-MW-1	PH	pH	10/26/2022 13:53	5.82	SU
APCO-GSD-AP-MW-1	TEMP	Temperature	10/26/2022 13:53	18.43	C
APCO-GSD-AP-MW-1	TURB	Turbidity	10/26/2022 13:53	7.38	NTU
APCO-GSD-AP-MW-1	COND	Conductivity	10/26/2022 13:58	1081.67	uS/cm
APCO-GSD-AP-MW-1	DO	DO	10/26/2022 13:58	0.1	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	10/26/2022 13:58	15.66	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	10/26/2022 13:58	127.55	mv
APCO-GSD-AP-MW-1	PH	pH	10/26/2022 13:58	5.84	SU
APCO-GSD-AP-MW-1	TEMP	Temperature	10/26/2022 13:58	18.43	C
APCO-GSD-AP-MW-1	TURB	Turbidity	10/26/2022 13:58	1.95	NTU
APCO-GSD-AP-MW-1	COND	Conductivity	10/26/2022 14:03	1082.36	uS/cm
APCO-GSD-AP-MW-1	DO	DO	10/26/2022 14:03	0.09	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	10/26/2022 14:03	15.66	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	10/26/2022 14:03	124.89	mv
APCO-GSD-AP-MW-1	PH	pH	10/26/2022 14:03	5.85	SU
APCO-GSD-AP-MW-1	TEMP	Temperature	10/26/2022 14:03	18.41	C
APCO-GSD-AP-MW-1	TURB	Turbidity	10/26/2022 14:03	1.48	NTU
APCO-GSD-AP-MW-1	COND	Conductivity	10/26/2022 14:08	1082.91	uS/cm
APCO-GSD-AP-MW-1	DO	DO	10/26/2022 14:08	0.08	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	10/26/2022 14:08	15.66	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	10/26/2022 14:08	122.63	mv
APCO-GSD-AP-MW-1	PH	pH	10/26/2022 14:08	5.86	SU
APCO-GSD-AP-MW-1	SULFIDE	Sulfide	10/26/2022 14:08	0	mg/L
APCO-GSD-AP-MW-1	TEMP	Temperature	10/26/2022 14:08	18.47	C
APCO-GSD-AP-MW-1	TURB	Turbidity	10/26/2022 14:08	1.15	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VA	COND	Conductivity	10/25/2022 9:55	586.66	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	10/25/2022 9:55	0.15	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	10/25/2022 9:55	18.68	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	10/25/2022 9:55	-144.96	mv
APCO-GSD-AP-MW-2VA	PH	pH	10/25/2022 9:55	8.16	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	10/25/2022 9:55	19.05	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	10/25/2022 9:55	2.65	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	10/25/2022 10:00	583.37	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	10/25/2022 10:00	0.16	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	10/25/2022 10:00	22.53	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	10/25/2022 10:00	-156.36	mv
APCO-GSD-AP-MW-2VA	PH	pH	10/25/2022 10:00	8.18	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	10/25/2022 10:00	19.04	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	10/25/2022 10:00	2.21	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	10/25/2022 10:05	582.49	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	10/25/2022 10:05	0.15	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	10/25/2022 10:05	25.28	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	10/25/2022 10:05	-163.8	mv
APCO-GSD-AP-MW-2VA	PH	pH	10/25/2022 10:05	8.21	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	10/25/2022 10:05	19.16	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	10/25/2022 10:05	2.05	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	10/25/2022 10:10	582.67	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	10/25/2022 10:10	0.13	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	10/25/2022 10:10	28.76	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	10/25/2022 10:10	-168.75	mv
APCO-GSD-AP-MW-2VA	PH	pH	10/25/2022 10:10	8.23	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	10/25/2022 10:10	19.24	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	10/25/2022 10:10	2.11	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	10/25/2022 10:15	586.49	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	10/25/2022 10:15	0.38	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	10/25/2022 10:15	29.19	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	10/25/2022 10:15	-167.26	mv
APCO-GSD-AP-MW-2VA	PH	pH	10/25/2022 10:15	8.22	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	10/25/2022 10:15	20.62	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	10/25/2022 10:15	1.96	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	10/25/2022 10:20	587.54	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	10/25/2022 10:20	0.48	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	10/25/2022 10:20	29.29	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	10/25/2022 10:20	-168.31	mv
APCO-GSD-AP-MW-2VA	PH	pH	10/25/2022 10:20	8.27	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	10/25/2022 10:20	20.69	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	10/25/2022 10:20	1.8	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	10/25/2022 10:25	587.02	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	10/25/2022 10:25	0.56	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	10/25/2022 10:25	29.38	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	10/25/2022 10:25	-169.61	mv
APCO-GSD-AP-MW-2VA	PH	pH	10/25/2022 10:25	8.33	SU
APCO-GSD-AP-MW-2VA	SULFIDE	Sulfide	10/25/2022 10:25	0	mg/L
APCO-GSD-AP-MW-2VA	TEMP	Temperature	10/25/2022 10:25	20.78	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	10/25/2022 10:25	1.82	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:16	1162.86	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:16	0.13	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:16	15.68	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:16	-157.07	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:16	8.22	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:16	19.14	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:16	0.94	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:21	1029.41	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:21	0.13	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:21	19.11	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:21	-170.97	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:21	8.18	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:21	19.06	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:21	1.26	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:26	1000.66	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:26	0.15	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:26	22.48	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:26	-178.07	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:26	8.18	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:26	18.99	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:26	0.88	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:31	991.07	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:31	0.18	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:31	25.73	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:31	-177.23	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:31	8.15	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:31	18.9	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:31	0.72	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:36	992.96	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:36	0.35	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:36	26.63	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:36	-180.47	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:36	8.2	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:36	20.22	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:36	0.75	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:41	1013.78	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:41	0.36	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:41	26.92	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:41	-180.81	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:41	8.23	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:41	20.36	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:41	0.78	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:46	1018.98	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:46	0.36	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:46	27.07	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:46	-183.15	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:46	8.31	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:46	20.36	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:46	0.7	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:51	1018.66	uS/cm

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:51	0.36	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:51	27.26	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:51	-182.81	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:51	8.32	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:51	20.65	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:51	0.96	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 11:56	1011.73	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 11:56	0.48	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 11:56	27.32	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 11:56	-181.45	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 11:56	8.33	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 11:56	21.26	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 11:56	0.8	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	10/25/2022 12:01	1015.36	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	10/25/2022 12:01	0.48	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	10/25/2022 12:01	27.39	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	10/25/2022 12:01	-180.1	mv
APCO-GSD-AP-MW-2VB	PH	pH	10/25/2022 12:01	8.33	SU
APCO-GSD-AP-MW-2VB	SULFIDE	Sulfide	10/25/2022 12:01	0	mg/L
APCO-GSD-AP-MW-2VB	TEMP	Temperature	10/25/2022 12:01	22.14	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	10/25/2022 12:01	0.77	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 12:52	132.56	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 12:52	8.3	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 12:52	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 12:52	360.89	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 12:52	4.68	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 12:52	17.23	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 12:52	1.34	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 12:57	145.04	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 12:57	8.11	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 12:57	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 12:57	362.3	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 12:57	4.82	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 12:57	17.2	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 12:57	0.8	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 13:02	152.68	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 13:02	8.03	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 13:02	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 13:02	366.9	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 13:02	4.82	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 13:02	17.23	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 13:02	0.91	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 13:07	165.1	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 13:07	7.82	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 13:07	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 13:07	370.65	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 13:07	4.83	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 13:07	17.21	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 13:07	0.92	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 13:12	172.6	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 13:12	7.76	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 13:12	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 13:12	372.63	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 13:12	4.84	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 13:12	17.24	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 13:12	0.77	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 13:17	174.44	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 13:17	7.73	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 13:17	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 13:17	373.3	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 13:17	4.83	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 13:17	17.24	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 13:17	0.75	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 13:22	181.38	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 13:22	7.7	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 13:22	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 13:22	370.67	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 13:22	4.83	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 13:22	17.25	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 13:22	0.72	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	10/26/2022 13:27	181.03	uS/cm

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-18H	DO	DO	10/26/2022 13:27	7.68	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	10/26/2022 13:27	15.32	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	10/26/2022 13:27	369	mv
APCO-GSD-AP-MW-18H	PH	pH	10/26/2022 13:27	4.81	SU
APCO-GSD-AP-MW-18H	SULFIDE	Sulfide	10/26/2022 13:27	0	mg/L
APCO-GSD-AP-MW-18H	TEMP	Temperature	10/26/2022 13:27	17.16	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	10/26/2022 13:27	0.81	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-19H	COND	Conductivity	10/26/2022 10:07	375.29	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	10/26/2022 10:07	0.12	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	10/26/2022 10:07	8.02	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	10/26/2022 10:07	19.88	mv
APCO-GSD-AP-MW-19H	PH	pH	10/26/2022 10:07	6.39	SU
APCO-GSD-AP-MW-19H	TEMP	Temperature	10/26/2022 10:07	18.74	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	10/26/2022 10:07	4.32	NTU
APCO-GSD-AP-MW-19H	COND	Conductivity	10/26/2022 10:12	368.53	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	10/26/2022 10:12	0.11	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	10/26/2022 10:12	8.02	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	10/26/2022 10:12	33.79	mv
APCO-GSD-AP-MW-19H	PH	pH	10/26/2022 10:12	6.31	SU
APCO-GSD-AP-MW-19H	TEMP	Temperature	10/26/2022 10:12	18.73	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	10/26/2022 10:12	2.94	NTU
APCO-GSD-AP-MW-19H	COND	Conductivity	10/26/2022 10:17	364.75	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	10/26/2022 10:17	0.11	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	10/26/2022 10:17	8.02	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	10/26/2022 10:17	39.89	mv
APCO-GSD-AP-MW-19H	PH	pH	10/26/2022 10:17	6.28	SU
APCO-GSD-AP-MW-19H	TEMP	Temperature	10/26/2022 10:17	18.6	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	10/26/2022 10:17	2.28	NTU
APCO-GSD-AP-MW-19H	COND	Conductivity	10/26/2022 10:22	362.9	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	10/26/2022 10:22	0.11	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	10/26/2022 10:22	8.02	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	10/26/2022 10:22	45.29	mv
APCO-GSD-AP-MW-19H	PH	pH	10/26/2022 10:22	6.25	SU
APCO-GSD-AP-MW-19H	SULFIDE	Sulfide	10/26/2022 10:22	0	mg/L
APCO-GSD-AP-MW-19H	TEMP	Temperature	10/26/2022 10:22	18.57	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	10/26/2022 10:22	2.09	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-21VC	COND	Conductivity	10/26/2022 8:12	1565.3	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	10/26/2022 8:12	0.14	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	10/26/2022 8:12	13.56	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	10/26/2022 8:12	-141.84	mv
APCO-GSD-AP-MW-21VC	PH	pH	10/26/2022 8:12	8.23	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	10/26/2022 8:12	17.92	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	10/26/2022 8:12	10.71	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	10/26/2022 8:17	1558.2	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	10/26/2022 8:17	0.15	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	10/26/2022 8:17	14.96	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	10/26/2022 8:17	-154.63	mv
APCO-GSD-AP-MW-21VC	PH	pH	10/26/2022 8:17	8.24	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	10/26/2022 8:17	17.85	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	10/26/2022 8:17	2.36	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	10/26/2022 8:22	1566.35	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	10/26/2022 8:22	0.14	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	10/26/2022 8:22	16.51	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	10/26/2022 8:22	-159.59	mv
APCO-GSD-AP-MW-21VC	PH	pH	10/26/2022 8:22	8.26	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	10/26/2022 8:22	17.74	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	10/26/2022 8:22	2.46	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	10/26/2022 8:27	1565.88	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	10/26/2022 8:27	0.17	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	10/26/2022 8:27	16.54	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	10/26/2022 8:27	-160.61	mv
APCO-GSD-AP-MW-21VC	PH	pH	10/26/2022 8:27	8.28	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	10/26/2022 8:27	17.56	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	10/26/2022 8:27	1.26	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	10/26/2022 8:32	1578.14	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	10/26/2022 8:32	0.16	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	10/26/2022 8:32	16.62	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	10/26/2022 8:32	-161.82	mv
APCO-GSD-AP-MW-21VC	PH	pH	10/26/2022 8:32	8.29	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	10/26/2022 8:32	17.64	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	10/26/2022 8:32	1.2	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	10/26/2022 8:37	1576.52	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	10/26/2022 8:37	0.17	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	10/26/2022 8:37	16.68	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	10/26/2022 8:37	-161.89	mv
APCO-GSD-AP-MW-21VC	PH	pH	10/26/2022 8:37	8.31	SU
APCO-GSD-AP-MW-21VC	SULFIDE	Sulfide	10/26/2022 8:37	0	mg/L
APCO-GSD-AP-MW-21VC	TEMP	Temperature	10/26/2022 8:37	17.59	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	10/26/2022 8:37	1.12	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-22VB	COND	Conductivity	10/26/2022 9:13	431.62	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	10/26/2022 9:13	0.23	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	10/26/2022 9:13	9.97	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	10/26/2022 9:13	-137.7	mv
APCO-GSD-AP-MW-22VB	PH	pH	10/26/2022 9:13	8.03	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	10/26/2022 9:13	17.54	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	10/26/2022 9:13	1.39	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	10/26/2022 9:18	429.1	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	10/26/2022 9:18	0.18	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	10/26/2022 9:18	10.34	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	10/26/2022 9:18	-148.88	mv
APCO-GSD-AP-MW-22VB	PH	pH	10/26/2022 9:18	8.05	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	10/26/2022 9:18	17.48	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	10/26/2022 9:18	1.5	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	10/26/2022 9:23	426.03	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	10/26/2022 9:23	0.21	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	10/26/2022 9:23	10.63	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	10/26/2022 9:23	-154.33	mv
APCO-GSD-AP-MW-22VB	PH	pH	10/26/2022 9:23	8.07	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	10/26/2022 9:23	17.42	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	10/26/2022 9:23	1.24	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	10/26/2022 9:28	426.3	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	10/26/2022 9:28	0.22	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	10/26/2022 9:28	10.58	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	10/26/2022 9:28	-157.56	mv
APCO-GSD-AP-MW-22VB	PH	pH	10/26/2022 9:28	8.1	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	10/26/2022 9:28	17.49	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	10/26/2022 9:28	1.08	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	10/26/2022 9:33	425.07	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	10/26/2022 9:33	0.23	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	10/26/2022 9:33	10.58	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	10/26/2022 9:33	-160.45	mv
APCO-GSD-AP-MW-22VB	PH	pH	10/26/2022 9:33	8.11	SU
APCO-GSD-AP-MW-22VB	SULFIDE	Sulfide	10/26/2022 9:33	0	mg/L
APCO-GSD-AP-MW-22VB	TEMP	Temperature	10/26/2022 9:33	17.45	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	10/26/2022 9:33	0.97	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-5	COND	Conductivity	10/26/2022 12:05	125.45	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	10/26/2022 12:05	4.1	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	10/26/2022 12:05	15.36	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	10/26/2022 12:05	277.68	mv
APCO-GSD-AP-PZ-5	PH	pH	10/26/2022 12:05	5.2	SU
APCO-GSD-AP-PZ-5	TEMP	Temperature	10/26/2022 12:05	16.93	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	10/26/2022 12:05	3.99	NTU
APCO-GSD-AP-PZ-5	COND	Conductivity	10/26/2022 12:10	124.81	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	10/26/2022 12:10	4.09	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	10/26/2022 12:10	15.36	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	10/26/2022 12:10	283.26	mv
APCO-GSD-AP-PZ-5	PH	pH	10/26/2022 12:10	5.35	SU
APCO-GSD-AP-PZ-5	TEMP	Temperature	10/26/2022 12:10	16.93	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	10/26/2022 12:10	3.23	NTU
APCO-GSD-AP-PZ-5	COND	Conductivity	10/26/2022 12:15	124.71	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	10/26/2022 12:15	4.09	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	10/26/2022 12:15	15.36	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	10/26/2022 12:15	291.91	mv
APCO-GSD-AP-PZ-5	PH	pH	10/26/2022 12:15	5.33	SU
APCO-GSD-AP-PZ-5	TEMP	Temperature	10/26/2022 12:15	16.87	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	10/26/2022 12:15	2.3	NTU
APCO-GSD-AP-PZ-5	COND	Conductivity	10/26/2022 12:20	124.69	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	10/26/2022 12:20	4.1	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	10/26/2022 12:20	15.36	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	10/26/2022 12:20	298.14	mv
APCO-GSD-AP-PZ-5	PH	pH	10/26/2022 12:20	5.31	SU
APCO-GSD-AP-PZ-5	SULFIDE	Sulfide	10/26/2022 12:20	0	mg/L
APCO-GSD-AP-PZ-5	TEMP	Temperature	10/26/2022 12:20	16.9	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	10/26/2022 12:20	1.84	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-6	COND	Conductivity	10/26/2022 11:06	123.44	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	10/26/2022 11:06	5.21	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	10/26/2022 11:06	10.76	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	10/26/2022 11:06	232.21	mv
APCO-GSD-AP-PZ-6	PH	pH	10/26/2022 11:06	5.18	SU
APCO-GSD-AP-PZ-6	TEMP	Temperature	10/26/2022 11:06	19.32	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	10/26/2022 11:06	13.5	NTU
APCO-GSD-AP-PZ-6	COND	Conductivity	10/26/2022 11:11	123.99	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	10/26/2022 11:11	5.3	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	10/26/2022 11:11	10.76	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	10/26/2022 11:11	245.1	mv
APCO-GSD-AP-PZ-6	PH	pH	10/26/2022 11:11	5.35	SU
APCO-GSD-AP-PZ-6	TEMP	Temperature	10/26/2022 11:11	19.29	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	10/26/2022 11:11	8.68	NTU
APCO-GSD-AP-PZ-6	COND	Conductivity	10/26/2022 11:16	124.5	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	10/26/2022 11:16	5.33	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	10/26/2022 11:16	10.76	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	10/26/2022 11:16	251.83	mv
APCO-GSD-AP-PZ-6	PH	pH	10/26/2022 11:16	5.43	SU
APCO-GSD-AP-PZ-6	TEMP	Temperature	10/26/2022 11:16	19.27	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	10/26/2022 11:16	5.53	NTU
APCO-GSD-AP-PZ-6	COND	Conductivity	10/26/2022 11:21	124.63	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	10/26/2022 11:21	5.35	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	10/26/2022 11:21	10.76	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	10/26/2022 11:21	255.13	mv
APCO-GSD-AP-PZ-6	PH	pH	10/26/2022 11:21	5.43	SU
APCO-GSD-AP-PZ-6	SULFIDE	Sulfide	10/26/2022 11:21	0	mg/L
APCO-GSD-AP-PZ-6	TEMP	Temperature	10/26/2022 11:21	19.3	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	10/26/2022 11:21	3.99	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-5	COND	Conductivity	10/26/2022 9:34	297.09	uS/cm
APCO-GSD-AP-MW-5	DO	DO	10/26/2022 9:34	0.11	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	10/26/2022 9:34	7.93	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	10/26/2022 9:34	62.15	mv
APCO-GSD-AP-MW-5	PH	pH	10/26/2022 9:34	6.47	SU
APCO-GSD-AP-MW-5	TEMP	Temperature	10/26/2022 9:34	20.4	C
APCO-GSD-AP-MW-5	TURB	Turbidity	10/26/2022 9:34	3.53	NTU
APCO-GSD-AP-MW-5	COND	Conductivity	10/26/2022 9:39	295.34	uS/cm
APCO-GSD-AP-MW-5	DO	DO	10/26/2022 9:39	0.13	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	10/26/2022 9:39	7.93	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	10/26/2022 9:39	70.57	mv
APCO-GSD-AP-MW-5	PH	pH	10/26/2022 9:39	6.42	SU
APCO-GSD-AP-MW-5	TEMP	Temperature	10/26/2022 9:39	20.44	C
APCO-GSD-AP-MW-5	TURB	Turbidity	10/26/2022 9:39	2.4	NTU
APCO-GSD-AP-MW-5	COND	Conductivity	10/26/2022 9:44	296.29	uS/cm
APCO-GSD-AP-MW-5	DO	DO	10/26/2022 9:44	0.1	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	10/26/2022 9:44	7.93	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	10/26/2022 9:44	71.29	mv
APCO-GSD-AP-MW-5	PH	pH	10/26/2022 9:44	6.44	SU
APCO-GSD-AP-MW-5	TEMP	Temperature	10/26/2022 9:44	20.52	C
APCO-GSD-AP-MW-5	TURB	Turbidity	10/26/2022 9:44	2.38	NTU
APCO-GSD-AP-MW-5	COND	Conductivity	10/26/2022 9:49	297.31	uS/cm
APCO-GSD-AP-MW-5	DO	DO	10/26/2022 9:49	0.09	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	10/26/2022 9:49	7.93	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	10/26/2022 9:49	71.19	mv
APCO-GSD-AP-MW-5	PH	pH	10/26/2022 9:49	6.44	SU
APCO-GSD-AP-MW-5	SULFIDE	Sulfide	10/26/2022 9:49	0	mg/L
APCO-GSD-AP-MW-5	TEMP	Temperature	10/26/2022 9:49	20.5	C
APCO-GSD-AP-MW-5	TURB	Turbidity	10/26/2022 9:49	2.35	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-6	COND	Conductivity	10/26/2022 11:38	146.7	uS/cm
APCO-GSD-AP-MW-6	DO	DO	10/26/2022 11:38	0.13	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	10/26/2022 11:38	7.16	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	10/26/2022 11:38	98.05	mv
APCO-GSD-AP-MW-6	PH	pH	10/26/2022 11:38	5.99	SU
APCO-GSD-AP-MW-6	TEMP	Temperature	10/26/2022 11:38	19.55	C
APCO-GSD-AP-MW-6	TURB	Turbidity	10/26/2022 11:38	0.43	NTU
APCO-GSD-AP-MW-6	COND	Conductivity	10/26/2022 11:43	146.46	uS/cm
APCO-GSD-AP-MW-6	DO	DO	10/26/2022 11:43	0.11	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	10/26/2022 11:43	7.21	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	10/26/2022 11:43	104.48	mv
APCO-GSD-AP-MW-6	PH	pH	10/26/2022 11:43	5.95	SU
APCO-GSD-AP-MW-6	TEMP	Temperature	10/26/2022 11:43	19.54	C
APCO-GSD-AP-MW-6	TURB	Turbidity	10/26/2022 11:43	0.11	NTU
APCO-GSD-AP-MW-6	COND	Conductivity	10/26/2022 11:48	146.14	uS/cm
APCO-GSD-AP-MW-6	DO	DO	10/26/2022 11:48	0.1	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	10/26/2022 11:48	7.21	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	10/26/2022 11:48	106.43	mv
APCO-GSD-AP-MW-6	PH	pH	10/26/2022 11:48	5.97	SU
APCO-GSD-AP-MW-6	TEMP	Temperature	10/26/2022 11:48	19.59	C
APCO-GSD-AP-MW-6	TURB	Turbidity	10/26/2022 11:48	0.09	NTU
APCO-GSD-AP-MW-6	COND	Conductivity	10/26/2022 11:53	145.68	uS/cm
APCO-GSD-AP-MW-6	DO	DO	10/26/2022 11:53	0.12	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	10/26/2022 11:53	7.21	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	10/26/2022 11:53	109.23	mv
APCO-GSD-AP-MW-6	PH	pH	10/26/2022 11:53	5.98	SU
APCO-GSD-AP-MW-6	SULFIDE	Sulfide	10/26/2022 11:53	0	mg/L
APCO-GSD-AP-MW-6	TEMP	Temperature	10/26/2022 11:53	19.56	C
APCO-GSD-AP-MW-6	TURB	Turbidity	10/26/2022 11:53	0.09	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-7	COND	Conductivity	10/26/2022 12:31	211.47	uS/cm
APCO-GSD-AP-MW-7	DO	DO	10/26/2022 12:31	0.06	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	10/26/2022 12:31	13.19	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	10/26/2022 12:31	112.31	mv
APCO-GSD-AP-MW-7	PH	pH	10/26/2022 12:31	6.5	SU
APCO-GSD-AP-MW-7	TEMP	Temperature	10/26/2022 12:31	18.84	C
APCO-GSD-AP-MW-7	TURB	Turbidity	10/26/2022 12:31	0.32	NTU
APCO-GSD-AP-MW-7	COND	Conductivity	10/26/2022 12:36	208.62	uS/cm
APCO-GSD-AP-MW-7	DO	DO	10/26/2022 12:36	0.04	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	10/26/2022 12:36	13.19	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	10/26/2022 12:36	113.89	mv
APCO-GSD-AP-MW-7	PH	pH	10/26/2022 12:36	6.49	SU
APCO-GSD-AP-MW-7	TEMP	Temperature	10/26/2022 12:36	18.83	C
APCO-GSD-AP-MW-7	TURB	Turbidity	10/26/2022 12:36	0.31	NTU
APCO-GSD-AP-MW-7	COND	Conductivity	10/26/2022 12:41	206.26	uS/cm
APCO-GSD-AP-MW-7	DO	DO	10/26/2022 12:41	0.04	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	10/26/2022 12:41	13.19	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	10/26/2022 12:41	115.98	mv
APCO-GSD-AP-MW-7	PH	pH	10/26/2022 12:41	6.46	SU
APCO-GSD-AP-MW-7	TEMP	Temperature	10/26/2022 12:41	18.82	C
APCO-GSD-AP-MW-7	TURB	Turbidity	10/26/2022 12:41	0.15	NTU
APCO-GSD-AP-MW-7	COND	Conductivity	10/26/2022 12:46	204.38	uS/cm
APCO-GSD-AP-MW-7	DO	DO	10/26/2022 12:46	0.04	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	10/26/2022 12:46	13.19	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	10/26/2022 12:46	118.84	mv
APCO-GSD-AP-MW-7	PH	pH	10/26/2022 12:46	6.44	SU
APCO-GSD-AP-MW-7	SULFIDE	Sulfide	10/26/2022 12:46	0	mg/L
APCO-GSD-AP-MW-7	TEMP	Temperature	10/26/2022 12:46	18.76	C
APCO-GSD-AP-MW-7	TURB	Turbidity	10/26/2022 12:46	0.13	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-8	COND	Conductivity	10/26/2022 13:20	237.39	uS/cm
APCO-GSD-AP-MW-8	DO	DO	10/26/2022 13:20	0.12	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	10/26/2022 13:20	11.61	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	10/26/2022 13:20	44.46	mv
APCO-GSD-AP-MW-8	PH	pH	10/26/2022 13:20	6.39	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	10/26/2022 13:20	18.42	C
APCO-GSD-AP-MW-8	TURB	Turbidity	10/26/2022 13:20	28.1	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	10/26/2022 13:25	323.88	uS/cm
APCO-GSD-AP-MW-8	DO	DO	10/26/2022 13:25	0.1	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	10/26/2022 13:25	11.61	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	10/26/2022 13:25	16.91	mv
APCO-GSD-AP-MW-8	PH	pH	10/26/2022 13:25	6.57	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	10/26/2022 13:25	18.4	C
APCO-GSD-AP-MW-8	TURB	Turbidity	10/26/2022 13:25	11.8	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	10/26/2022 13:30	345.79	uS/cm
APCO-GSD-AP-MW-8	DO	DO	10/26/2022 13:30	0.09	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	10/26/2022 13:30	11.61	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	10/26/2022 13:30	-0.42	mv
APCO-GSD-AP-MW-8	PH	pH	10/26/2022 13:30	6.62	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	10/26/2022 13:30	18.38	C
APCO-GSD-AP-MW-8	TURB	Turbidity	10/26/2022 13:30	7.9	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	10/26/2022 13:35	359.32	uS/cm
APCO-GSD-AP-MW-8	DO	DO	10/26/2022 13:35	0.09	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	10/26/2022 13:35	11.61	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	10/26/2022 13:35	-13.44	mv
APCO-GSD-AP-MW-8	PH	pH	10/26/2022 13:35	6.65	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	10/26/2022 13:35	18.36	C
APCO-GSD-AP-MW-8	TURB	Turbidity	10/26/2022 13:35	5.9	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	10/26/2022 13:40	368.3	uS/cm
APCO-GSD-AP-MW-8	DO	DO	10/26/2022 13:40	0.08	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	10/26/2022 13:40	11.61	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	10/26/2022 13:40	-20.23	mv
APCO-GSD-AP-MW-8	PH	pH	10/26/2022 13:40	6.66	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	10/26/2022 13:40	18.31	C
APCO-GSD-AP-MW-8	TURB	Turbidity	10/26/2022 13:40	4.07	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	10/26/2022 13:45	374.4	uS/cm
APCO-GSD-AP-MW-8	DO	DO	10/26/2022 13:45	0.08	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	10/26/2022 13:45	11.61	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	10/26/2022 13:45	-26.02	mv
APCO-GSD-AP-MW-8	PH	pH	10/26/2022 13:45	6.68	SU
APCO-GSD-AP-MW-8	SULFIDE	Sulfide	10/26/2022 13:45	0	mg/L
APCO-GSD-AP-MW-8	TEMP	Temperature	10/26/2022 13:45	18.33	C
APCO-GSD-AP-MW-8	TURB	Turbidity	10/26/2022 13:45	3.37	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-9	COND	Conductivity	10/26/2022 14:16	283.6	uS/cm
APCO-GSD-AP-MW-9	DO	DO	10/26/2022 14:16	0.09	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	10/26/2022 14:16	12.74	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	10/26/2022 14:16	12.43	mv
APCO-GSD-AP-MW-9	PH	pH	10/26/2022 14:16	6.89	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	10/26/2022 14:16	18.45	C
APCO-GSD-AP-MW-9	TURB	Turbidity	10/26/2022 14:16	1.41	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	10/26/2022 14:21	296.6	uS/cm
APCO-GSD-AP-MW-9	DO	DO	10/26/2022 14:21	0.07	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	10/26/2022 14:21	12.74	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	10/26/2022 14:21	15.08	mv
APCO-GSD-AP-MW-9	PH	pH	10/26/2022 14:21	6.93	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	10/26/2022 14:21	18.47	C
APCO-GSD-AP-MW-9	TURB	Turbidity	10/26/2022 14:21	0.76	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	10/26/2022 14:26	308.39	uS/cm
APCO-GSD-AP-MW-9	DO	DO	10/26/2022 14:26	0.07	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	10/26/2022 14:26	12.74	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	10/26/2022 14:26	8.23	mv
APCO-GSD-AP-MW-9	PH	pH	10/26/2022 14:26	7.01	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	10/26/2022 14:26	18.51	C
APCO-GSD-AP-MW-9	TURB	Turbidity	10/26/2022 14:26	0.88	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	10/26/2022 14:31	312.67	uS/cm
APCO-GSD-AP-MW-9	DO	DO	10/26/2022 14:31	0.06	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	10/26/2022 14:31	12.74	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	10/26/2022 14:31	-4.01	mv
APCO-GSD-AP-MW-9	PH	pH	10/26/2022 14:31	7.05	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	10/26/2022 14:31	18.48	C
APCO-GSD-AP-MW-9	TURB	Turbidity	10/26/2022 14:31	0.77	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	10/26/2022 14:36	314.94	uS/cm
APCO-GSD-AP-MW-9	DO	DO	10/26/2022 14:36	0.06	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	10/26/2022 14:36	12.74	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	10/26/2022 14:36	-15.67	mv
APCO-GSD-AP-MW-9	PH	pH	10/26/2022 14:36	7.07	SU
APCO-GSD-AP-MW-9	SULFIDE	Sulfide	10/26/2022 14:36	0	mg/L
APCO-GSD-AP-MW-9	TEMP	Temperature	10/26/2022 14:36	18.45	C
APCO-GSD-AP-MW-9	TURB	Turbidity	10/26/2022 14:36	0.8	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-10	COND	Conductivity	10/26/2022 15:04	330.42	uS/cm
APCO-GSD-AP-MW-10	DO	DO	10/26/2022 15:04	0.12	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	10/26/2022 15:04	22.56	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	10/26/2022 15:04	-100.39	mv
APCO-GSD-AP-MW-10	PH	pH	10/26/2022 15:04	6.83	SU
APCO-GSD-AP-MW-10	TEMP	Temperature	10/26/2022 15:04	19.45	C
APCO-GSD-AP-MW-10	TURB	Turbidity	10/26/2022 15:04	7.83	NTU
APCO-GSD-AP-MW-10	COND	Conductivity	10/26/2022 15:09	330.2	uS/cm
APCO-GSD-AP-MW-10	DO	DO	10/26/2022 15:09	0.09	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	10/26/2022 15:09	22.58	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	10/26/2022 15:09	-108.89	mv
APCO-GSD-AP-MW-10	PH	pH	10/26/2022 15:09	6.83	SU
APCO-GSD-AP-MW-10	TEMP	Temperature	10/26/2022 15:09	19.4	C
APCO-GSD-AP-MW-10	TURB	Turbidity	10/26/2022 15:09	6.6	NTU
APCO-GSD-AP-MW-10	COND	Conductivity	10/26/2022 15:14	330.16	uS/cm
APCO-GSD-AP-MW-10	DO	DO	10/26/2022 15:14	0.08	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	10/26/2022 15:14	22.59	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	10/26/2022 15:14	-112.13	mv
APCO-GSD-AP-MW-10	PH	pH	10/26/2022 15:14	6.82	SU
APCO-GSD-AP-MW-10	TEMP	Temperature	10/26/2022 15:14	19.42	C
APCO-GSD-AP-MW-10	TURB	Turbidity	10/26/2022 15:14	4.39	NTU
APCO-GSD-AP-MW-10	COND	Conductivity	10/26/2022 15:19	330.76	uS/cm
APCO-GSD-AP-MW-10	DO	DO	10/26/2022 15:19	0.07	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	10/26/2022 15:19	22.62	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	10/26/2022 15:19	-115.3	mv
APCO-GSD-AP-MW-10	PH	pH	10/26/2022 15:19	6.84	SU
APCO-GSD-AP-MW-10	SULFIDE	Sulfide	10/26/2022 15:19	0	mg/L
APCO-GSD-AP-MW-10	TEMP	Temperature	10/26/2022 15:19	19.46	C
APCO-GSD-AP-MW-10	TURB	Turbidity	10/26/2022 15:19	3.59	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-1	COND	Conductivity	10/26/2022 8:31	117.71	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	10/26/2022 8:31	1.45	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	10/26/2022 8:31	13.22	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	10/26/2022 8:31	145.44	mv
APCO-GSD-AP-PZ-1	PH	pH	10/26/2022 8:31	6.37	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	10/26/2022 8:31	19.34	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	10/26/2022 8:31	0.43	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	10/26/2022 8:36	140.91	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	10/26/2022 8:36	1.52	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	10/26/2022 8:36	13.22	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	10/26/2022 8:36	139.55	mv
APCO-GSD-AP-PZ-1	PH	pH	10/26/2022 8:36	6.49	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	10/26/2022 8:36	19.27	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	10/26/2022 8:36	0.28	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	10/26/2022 8:41	155.61	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	10/26/2022 8:41	1.39	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	10/26/2022 8:41	13.22	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	10/26/2022 8:41	131.34	mv
APCO-GSD-AP-PZ-1	PH	pH	10/26/2022 8:41	6.6	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	10/26/2022 8:41	19.37	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	10/26/2022 8:41	0.25	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	10/26/2022 8:46	161.71	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	10/26/2022 8:46	1.34	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	10/26/2022 8:46	13.22	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	10/26/2022 8:46	127.1	mv
APCO-GSD-AP-PZ-1	PH	pH	10/26/2022 8:46	6.65	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	10/26/2022 8:46	19.37	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	10/26/2022 8:46	0.1	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	10/26/2022 8:51	162.64	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	10/26/2022 8:51	1.36	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	10/26/2022 8:51	13.22	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	10/26/2022 8:51	125.1	mv
APCO-GSD-AP-PZ-1	PH	pH	10/26/2022 8:51	6.66	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	10/26/2022 8:51	19.33	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	10/26/2022 8:51	0.22	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	10/26/2022 8:56	162.02	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	10/26/2022 8:56	1.38	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	10/26/2022 8:56	13.22	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	10/26/2022 8:56	124.79	mv
APCO-GSD-AP-PZ-1	PH	pH	10/26/2022 8:56	6.66	SU
APCO-GSD-AP-PZ-1	SULFIDE	Sulfide	10/26/2022 8:56	0	mg/L
APCO-GSD-AP-PZ-1	TEMP	Temperature	10/26/2022 8:56	19.28	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	10/26/2022 8:56	0.02	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-2	COND	Conductivity	10/26/2022 10:40	217.06	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	10/26/2022 10:40	0.22	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	10/26/2022 10:40	10.71	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	10/26/2022 10:40	34.05	mv
APCO-GSD-AP-PZ-2	PH	pH	10/26/2022 10:40	6.21	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	10/26/2022 10:40	20.46	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	10/26/2022 10:40	1.97	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	10/26/2022 10:45	213.06	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	10/26/2022 10:45	0.19	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	10/26/2022 10:45	10.9	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	10/26/2022 10:45	33.02	mv
APCO-GSD-AP-PZ-2	PH	pH	10/26/2022 10:45	6.16	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	10/26/2022 10:45	20.42	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	10/26/2022 10:45	1.17	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	10/26/2022 10:50	204.2	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	10/26/2022 10:50	0.21	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	10/26/2022 10:50	10.96	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	10/26/2022 10:50	35.87	mv
APCO-GSD-AP-PZ-2	PH	pH	10/26/2022 10:50	6.16	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	10/26/2022 10:50	20.45	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	10/26/2022 10:50	0.55	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	10/26/2022 10:55	204.73	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	10/26/2022 10:55	0.2	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	10/26/2022 10:55	11.06	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	10/26/2022 10:55	40.66	mv
APCO-GSD-AP-PZ-2	PH	pH	10/26/2022 10:55	6.16	SU
APCO-GSD-AP-PZ-2	SULFIDE	Sulfide	10/26/2022 10:55	0	mg/L
APCO-GSD-AP-PZ-2	TEMP	Temperature	10/26/2022 10:55	20.42	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	10/26/2022 10:55	0.37	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:23	279.85	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:23	0.96	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:23	22.06	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:23	192.29	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:23	7.96	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:23	19.58	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:23	2.1	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:28	279.46	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:28	0.78	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:28	22.31	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:28	187.24	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:28	7.96	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:28	19.7	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:28	1.71	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:33	279.01	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:33	0.72	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:33	22.7	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:33	182.45	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:33	7.96	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:33	19.83	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:33	1.64	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:38	278.33	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:38	0.71	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:38	23.09	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:38	176.28	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:38	7.96	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:38	19.93	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:38	1.34	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:43	278.18	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:43	0.67	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:43	23.31	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:43	168.88	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:43	7.96	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:43	19.98	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:43	1.59	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:48	276.55	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:48	0.65	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:48	23.52	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:48	163.58	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:48	7.96	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:48	20.01	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:48	1.25	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:53	276.2	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:53	0.63	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:53	23.73	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:53	156.19	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:53	7.97	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:53	20.09	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:53	0.86	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 9:58	275.58	uS/cm

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 9:58	0.62	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 9:58	23.91	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 9:58	149.94	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 9:58	7.97	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 9:58	20.16	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 9:58	0.84	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 10:03	274.97	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 10:03	0.62	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 10:03	23.08	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 10:03	141.58	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 10:03	7.97	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 10:03	20.32	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 10:03	0.96	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	10/25/2022 10:08	274.82	uS/cm
APCO-GSD-AP-MW-17	DO	DO	10/25/2022 10:08	0.63	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	10/25/2022 10:08	23.11	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	10/25/2022 10:08	131.72	mv
APCO-GSD-AP-MW-17	PH	pH	10/25/2022 10:08	7.97	SU
APCO-GSD-AP-MW-17	SULFIDE	Sulfide	10/25/2022 10:08	0	mg/L
APCO-GSD-AP-MW-17	TEMP	Temperature	10/25/2022 10:08	20.89	C
APCO-GSD-AP-MW-17	TURB	Turbidity	10/25/2022 10:08	0.84	NTU

Plant Gadsden Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-16	COND	Conductivity	10/25/2022 11:20	151.29	uS/cm
APCO-GSD-AP-MW-16	DO	DO	10/25/2022 11:20	4.16	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	10/25/2022 11:20	26.91	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	10/25/2022 11:20	271.73	mv
APCO-GSD-AP-MW-16	PH	pH	10/25/2022 11:20	4.2	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	10/25/2022 11:20	19.85	C
APCO-GSD-AP-MW-16	TURB	Turbidity	10/25/2022 11:20	99.4	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	10/25/2022 11:25	141.73	uS/cm
APCO-GSD-AP-MW-16	DO	DO	10/25/2022 11:25	4.2	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	10/25/2022 11:25	26.91	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	10/25/2022 11:25	273.39	mv
APCO-GSD-AP-MW-16	PH	pH	10/25/2022 11:25	4.34	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	10/25/2022 11:25	19.82	C
APCO-GSD-AP-MW-16	TURB	Turbidity	10/25/2022 11:25	56.2	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	10/25/2022 11:30	132.71	uS/cm
APCO-GSD-AP-MW-16	DO	DO	10/25/2022 11:30	4.24	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	10/25/2022 11:30	26.91	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	10/25/2022 11:30	272.69	mv
APCO-GSD-AP-MW-16	PH	pH	10/25/2022 11:30	4.46	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	10/25/2022 11:30	19.73	C
APCO-GSD-AP-MW-16	TURB	Turbidity	10/25/2022 11:30	25.9	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	10/25/2022 11:35	132.04	uS/cm
APCO-GSD-AP-MW-16	DO	DO	10/25/2022 11:35	4.27	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	10/25/2022 11:35	26.91	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	10/25/2022 11:35	272.63	mv
APCO-GSD-AP-MW-16	PH	pH	10/25/2022 11:35	4.51	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	10/25/2022 11:35	19.7	C
APCO-GSD-AP-MW-16	TURB	Turbidity	10/25/2022 11:35	8.75	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	10/25/2022 11:40	124.17	uS/cm
APCO-GSD-AP-MW-16	DO	DO	10/25/2022 11:40	4.3	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	10/25/2022 11:40	26.91	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	10/25/2022 11:40	271.59	mv
APCO-GSD-AP-MW-16	PH	pH	10/25/2022 11:40	4.59	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	10/25/2022 11:40	19.72	C
APCO-GSD-AP-MW-16	TURB	Turbidity	10/25/2022 11:40	4.2	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	10/25/2022 11:45	122.37	uS/cm
APCO-GSD-AP-MW-16	DO	DO	10/25/2022 11:45	4.31	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	10/25/2022 11:45	26.91	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	10/25/2022 11:45	271.31	mv
APCO-GSD-AP-MW-16	PH	pH	10/25/2022 11:45	4.63	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	10/25/2022 11:45	19.75	C
APCO-GSD-AP-MW-16	TURB	Turbidity	10/25/2022 11:45	3.02	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	10/25/2022 11:50	124.19	uS/cm
APCO-GSD-AP-MW-16	DO	DO	10/25/2022 11:50	4.26	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	10/25/2022 11:50	26.91	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	10/25/2022 11:50	271.3	mv
APCO-GSD-AP-MW-16	PH	pH	10/25/2022 11:50	4.64	SU
APCO-GSD-AP-MW-16	SULFIDE	Sulfide	10/25/2022 11:50	0	mg/L
APCO-GSD-AP-MW-16	TEMP	Temperature	10/25/2022 11:50	19.81	C
APCO-GSD-AP-MW-16	TURB	Turbidity	10/25/2022 11:50	1.43	NTU

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Plant Gadsden Ash Pond

2023 Compliance Event 1

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Rain was present when pumping and sampling wells MW-10 and MW-11.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Water Level Record/Well Inspection
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	06/05/2023	Weather	sunny 75
Location	Gadsden Ash Pond		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1006	10.42	✔	✔	✔	✔	✔	
PZ-1	0928	6.64	✔	✔	✔	✔	✔	
MW-2	0934	10.84	✔	✔	✔	✔	✔	
MW-2V	0936	9.94	✔	✔	✔	✔	✔	
MW-2VA	0938	9.58	✔	✔	✔	✔	✔	
MW-2VB	0941	7.21	✔	✔	✔	✔	✔	
MW-2VC	0940	7.26	✔	✔	✔	✔	✔	
PZ-2	0912	8.54	✔	✔	✔	✔	✔	
MW-3	1045	11.89	✔	✔	✔	✔	✔	DFG
MW-4	1051	5.80	✔	✔	✔	✔	✔	DFG
MW-4V	1049	5.66	✔	✔	✔	✔	✔	DFG
MW-5	0925	5.10	✔	✔	✔	✔	✔	
PZ-5	1106	8.96	✔	✔	✔	✔	✔	
MW-6	0910	5.21	✔	✔	✔	✔	✔	
PZ-6	1101	4.36	✔	✔	✔	✔	✔	
MW-7	1051	11.48	✔	✔	✔	✔	✔	Ants present in well
MW-8	1041	11.61	✔	✔	✔	✔	✔	
MW-9	1037	12.68	✔	✔	✔	✔	✔	
MW-10	1033	22.06	✔	✔	✔	✔	✔	
MW-11	1017	8.99	✔	✔	✔	✔	✔	
MW-12	1026	9.94	✔	✔	✔	✔	✔	
MW-13	NA	NA	✔	✔	✔	✔	✔	
MW-14	0815	21.09	✔	✔	✔	✔	✔	
MW-15	NA	NA	✔	✔	✔	✔	✔	
MW-16	0811	24.98	✔	✔	✔	✔	✔	
MW-17	0808	18.46	✔	✔	✔	✔	✔	
MW-18H	1010	9.02	✔	✔	✔	✔	✔	
MW-19H	0956	2.14	✔	✔	✔	✔	✔	
MW-20H	1053	1.87	✔	✔	✔	✔	✔	DFG
MW-21VB	0946	4.64	✔	✔	✔	✔	✔	
MW-21VC	0945	5.54	✔	✔	✔	✔	✔	
MW-22VB	0950	2.79	✔	✔	✔	✔	✔	
MW-23VB	1104	3.31	✔	✔	✔	✔	✔	

Water Level Record/Well Inspection
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	06/05/2023	Weather	sunny 75
Location	Gadsden Ash Pond		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1006	10.42	☐	☐	☐	☐	☐	
PZ-1	0928	6.64	☐	☐	☐	☐	☐	
MW-2	0934	10.84	☐	☐	☐	☐	☐	
MW-2V	0936	9.94	☐	☐	☐	☐	☐	
MW-2VA	0938	9.58	☐	☐	☐	☐	☐	
MW-2VB	0941	7.21	☐	☐	☐	☐	☐	
MW-2VC	0940	7.26	☐	☐	☐	☐	☐	
PZ-2	0912	8.54	☐	☐	☐	☐	☐	
MW-3	1045	11.89	☐	☐	☐	☐	☐	DFG
MW-4	1051	5.80	☐	☐	☐	☐	☐	DFG
MW-4V	1049	5.66	☐	☐	☐	☐	☐	DFG
MW-5	0925	5.10	☐	☐	☐	☐	☐	
PZ-5	1106	8.96	☐	☐	☐	☐	☐	
MW-6	0910	5.21	☐	☐	☐	☐	☐	
PZ-6	1101	4.36	☐	☐	☐	☐	☐	
MW-7	1051	11.48	☐	☐	☐	☐	☐	Ants present in well
MW-8	1041	11.61	☐	☐	☐	☐	☐	
MW-9	1037	12.68	☐	☐	☐	☐	☐	
MW-10	1033	22.06	☐	☐	☐	☐	☐	
MW-11	1017	8.99	☐	☐	☐	☐	☐	
MW-12	1026	9.94	☐	☐	☐	☐	☐	
MW-13	NA	NA	☐	☐	☐	☐	☐	
MW-14	0815	21.09	☐	☐	☐	☐	☐	
MW-15	NA	NA	☐	☐	☐	☐	☐	
MW-16	0811	24.98	☐	☐	☐	☐	☐	
MW-17	0808	18.46	☐	☐	☐	☐	☐	
MW-18H	1010	9.02	☐	☐	☐	☐	☐	
MW-19H	0956	2.14	☐	☐	☐	☐	☐	
MW-20H	1053	1.87	☐	☐	☐	☐	☐	DFG
MW-21VB	0946	4.64	☐	☐	☐	☐	☐	
MW-21VC	0945	5.54	☐	☐	☐	☐	☐	
MW-22VB	0950	2.79	☐	☐	☐	☐	☐	
MW-23VB	1104	3.31	☐	☐	☐	☐	☐	

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4	COND	Conductivity	6/6/2023 9:28	493	uS/cm
APCO-GSD-AP-MW-4	DO	DO	6/6/2023 9:28	0.05	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	6/6/2023 9:28	5.87	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	6/6/2023 9:28	-94.1	mv
APCO-GSD-AP-MW-4	PH	pH	6/6/2023 9:28	6.69	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	6/6/2023 9:28	18.69	C
APCO-GSD-AP-MW-4	TURB	Turbidity	6/6/2023 9:28	24.6	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	6/6/2023 9:33	494.12	uS/cm
APCO-GSD-AP-MW-4	DO	DO	6/6/2023 9:33	0.04	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	6/6/2023 9:33	5.87	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	6/6/2023 9:33	-96.69	mv
APCO-GSD-AP-MW-4	PH	pH	6/6/2023 9:33	6.72	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	6/6/2023 9:33	18.65	C
APCO-GSD-AP-MW-4	TURB	Turbidity	6/6/2023 9:33	17.8	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	6/6/2023 9:38	497.13	uS/cm
APCO-GSD-AP-MW-4	DO	DO	6/6/2023 9:38	0.04	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	6/6/2023 9:38	5.87	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	6/6/2023 9:38	-98.16	mv
APCO-GSD-AP-MW-4	PH	pH	6/6/2023 9:38	6.72	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	6/6/2023 9:38	18.72	C
APCO-GSD-AP-MW-4	TURB	Turbidity	6/6/2023 9:38	12.7	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	6/6/2023 9:43	495.43	uS/cm
APCO-GSD-AP-MW-4	DO	DO	6/6/2023 9:43	0.04	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	6/6/2023 9:43	5.87	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	6/6/2023 9:43	-100.36	mv
APCO-GSD-AP-MW-4	PH	pH	6/6/2023 9:43	6.73	SU
APCO-GSD-AP-MW-4	TEMP	Temperature	6/6/2023 9:43	18.81	C
APCO-GSD-AP-MW-4	TURB	Turbidity	6/6/2023 9:43	9.98	NTU
APCO-GSD-AP-MW-4	COND	Conductivity	6/6/2023 9:48	494.14	uS/cm
APCO-GSD-AP-MW-4	DO	DO	6/6/2023 9:48	0.04	mg/L
APCO-GSD-AP-MW-4	DTW	Depth to Water Detail	6/6/2023 9:48	5.87	ft
APCO-GSD-AP-MW-4	ORP	Oxidation Reduction Potention	6/6/2023 9:48	-101.59	mv
APCO-GSD-AP-MW-4	PH	pH	6/6/2023 9:48	6.74	SU
APCO-GSD-AP-MW-4	SULFIDE	Sulfide	6/6/2023 9:48	0	mg/L
APCO-GSD-AP-MW-4	TEMP	Temperature	6/6/2023 9:48	18.89	C
APCO-GSD-AP-MW-4	TURB	Turbidity	6/6/2023 9:48	7.79	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-1	COND	Conductivity	6/5/2023 14:57	889.72	uS/cm
APCO-GSD-AP-MW-1	DO	DO	6/5/2023 14:57	0.12	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	6/5/2023 14:57	11.44	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	6/5/2023 14:57	132.39	mv
APCO-GSD-AP-MW-1	PH	pH	6/5/2023 14:57	5.88	SU
APCO-GSD-AP-MW-1	TEMP	Temperature	6/5/2023 14:57	18.75	C
APCO-GSD-AP-MW-1	TURB	Turbidity	6/5/2023 14:57	3.66	NTU
APCO-GSD-AP-MW-1	COND	Conductivity	6/5/2023 15:02	900.19	uS/cm
APCO-GSD-AP-MW-1	DO	DO	6/5/2023 15:02	0.1	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	6/5/2023 15:02	11.44	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	6/5/2023 15:02	141.45	mv
APCO-GSD-AP-MW-1	PH	pH	6/5/2023 15:02	5.76	SU
APCO-GSD-AP-MW-1	TEMP	Temperature	6/5/2023 15:02	18.59	C
APCO-GSD-AP-MW-1	TURB	Turbidity	6/5/2023 15:02	3.78	NTU
APCO-GSD-AP-MW-1	COND	Conductivity	6/5/2023 15:07	903.64	uS/cm
APCO-GSD-AP-MW-1	DO	DO	6/5/2023 15:07	0.09	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	6/5/2023 15:07	11.44	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	6/5/2023 15:07	146.56	mv
APCO-GSD-AP-MW-1	PH	pH	6/5/2023 15:07	5.69	SU
APCO-GSD-AP-MW-1	TEMP	Temperature	6/5/2023 15:07	18.56	C
APCO-GSD-AP-MW-1	TURB	Turbidity	6/5/2023 15:07	3.17	NTU
APCO-GSD-AP-MW-1	COND	Conductivity	6/5/2023 15:12	904.18	uS/cm
APCO-GSD-AP-MW-1	DO	DO	6/5/2023 15:12	0.08	mg/L
APCO-GSD-AP-MW-1	DTW	Depth to Water Detail	6/5/2023 15:12	11.44	ft
APCO-GSD-AP-MW-1	ORP	Oxidation Reduction Potention	6/5/2023 15:12	147.78	mv
APCO-GSD-AP-MW-1	PH	pH	6/5/2023 15:12	5.68	SU
APCO-GSD-AP-MW-1	SULFIDE	Sulfide	6/5/2023 15:12	0	mg/L
APCO-GSD-AP-MW-1	TEMP	Temperature	6/5/2023 15:12	18.48	C
APCO-GSD-AP-MW-1	TURB	Turbidity	6/5/2023 15:12	3.11	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 8:39	338.48	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 8:39	0.13	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 8:39	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 8:39	-64.42	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 8:39	6.66	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 8:39	18.65	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 8:39	78.1	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 8:44	348.93	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 8:44	0.11	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 8:44	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 8:44	-61.51	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 8:44	6.63	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 8:44	18.68	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 8:44	42.9	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 8:49	353.32	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 8:49	0.09	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 8:49	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 8:49	-60.88	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 8:49	6.62	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 8:49	18.74	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 8:49	26.2	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 8:54	357.03	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 8:54	0	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 8:54	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 8:54	-60.39	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 8:54	6.65	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 8:54	18.83	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 8:54	19.8	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 8:59	361.14	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 8:59	0	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 8:59	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 8:59	-59.71	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 8:59	6.62	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 8:59	18.84	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 8:59	14.9	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 9:04	367.27	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 9:04	0.06	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 9:04	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 9:04	-58.99	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 9:04	6.62	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 9:04	18.86	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 9:04	12.1	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 9:09	372.86	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 9:09	0.08	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 9:09	10.87	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 9:09	-58.04	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 9:09	6.62	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 9:09	18.87	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 9:09	10.1	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 9:14	377.42	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 9:14	0	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 9:14	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 9:14	-56.92	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 9:14	6.63	SU
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 9:14	18.94	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 9:14	9.13	NTU
APCO-GSD-AP-MW-2	COND	Conductivity	6/6/2023 9:19	381.17	uS/cm
APCO-GSD-AP-MW-2	DO	DO	6/6/2023 9:19	0.05	mg/L
APCO-GSD-AP-MW-2	DTW	Depth to Water Detail	6/6/2023 9:19	10.87	ft
APCO-GSD-AP-MW-2	ORP	Oxidation Reduction Potention	6/6/2023 9:19	-56.01	mv
APCO-GSD-AP-MW-2	PH	pH	6/6/2023 9:19	6.63	SU
APCO-GSD-AP-MW-2	SULFIDE	Sulfide	6/6/2023 9:19	0	mg/L
APCO-GSD-AP-MW-2	TEMP	Temperature	6/6/2023 9:19	18.93	C
APCO-GSD-AP-MW-2	TURB	Turbidity	6/6/2023 9:19	6.88	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 7:41	530.16	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 7:41	0.13	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 7:41	15.72	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 7:41	-144.36	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 7:41	7.65	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 7:41	18.66	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 7:41	3.24	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 7:46	528.79	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 7:46	0.11	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 7:46	19.36	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 7:46	-150.56	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 7:46	7.64	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 7:46	18.62	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 7:46	2.66	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 7:51	528.32	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 7:51	0.11	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 7:51	23.12	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 7:51	-151.52	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 7:51	7.62	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 7:51	18.63	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 7:51	2.3	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 7:56	528.06	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 7:56	0.11	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 7:56	24.32	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 7:56	-151.8	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 7:56	7.61	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 7:56	18.61	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 7:56	2.25	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 8:01	527.71	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 8:01	0.1	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 8:01	27.68	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 8:01	-151.02	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 8:01	7.59	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 8:01	18.63	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 8:01	2.12	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 8:06	529.42	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 8:06	0.22	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 8:06	29.03	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 8:06	-148.85	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 8:06	7.59	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 8:06	19.63	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 8:06	2.24	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 8:11	528.08	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 8:11	0.32	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 8:11	29.19	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 8:11	-146.32	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 8:11	7.64	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 8:11	19.75	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 8:11	1.96	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 8:16	527.36	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 8:16	0.38	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 8:16	29.3	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 8:16	-150.13	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 8:16	7.76	SU
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 8:16	19.85	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 8:16	1.88	NTU
APCO-GSD-AP-MW-2VA	COND	Conductivity	6/7/2023 8:21	527.09	uS/cm
APCO-GSD-AP-MW-2VA	DO	DO	6/7/2023 8:21	0.39	mg/L
APCO-GSD-AP-MW-2VA	DTW	Depth to Water Detail	6/7/2023 8:21	29.42	ft
APCO-GSD-AP-MW-2VA	ORP	Oxidation Reduction Potention	6/7/2023 8:21	-150.92	mv
APCO-GSD-AP-MW-2VA	PH	pH	6/7/2023 8:21	7.81	SU
APCO-GSD-AP-MW-2VA	SULFIDE	Sulfide	6/7/2023 8:21	0	mg/L
APCO-GSD-AP-MW-2VA	TEMP	Temperature	6/7/2023 8:21	19.98	C
APCO-GSD-AP-MW-2VA	TURB	Turbidity	6/7/2023 8:21	2.02	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:18	1343.15	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:18	0.09	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:18	14.03	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:18	-198.21	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:18	8.1	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:18	18.84	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:18	19.1	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:23	1344.14	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:23	0.09	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:23	18.16	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:23	-205.83	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:23	8.08	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:23	18.83	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:23	3.79	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:28	1335.28	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:28	0.11	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:28	20.5	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:28	-207.76	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:28	8.06	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:28	18.82	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:28	3.46	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:33	1328.74	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:33	0.12	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:33	25.12	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:33	-207.85	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:33	8.05	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:33	18.79	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:33	3.11	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:38	1316.47	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:38	0.14	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:38	26.1	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:38	-207.58	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:38	8.04	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:38	19.67	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:38	3.23	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:43	1310.08	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:43	0.27	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:43	26	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:43	-201.3	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:43	8.03	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:43	21.44	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:43	2.95	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:48	1276.47	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:48	0.28	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:48	25.96	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:48	-198.11	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:48	8.07	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:48	21.64	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:48	2.9	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:53	1177.01	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:53	0.29	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:53	25.93	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:53	-193.32	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:53	8.15	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:53	21.64	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:53	2.88	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 9:58	1104.36	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 9:58	0.29	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 9:58	25.91	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 9:58	-189.37	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 9:58	8.2	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 9:58	21.43	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 9:58	2.65	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 10:03	1129.12	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 10:03	0.28	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 10:03	25.9	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 10:03	-186.97	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 10:03	8.23	SU
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 10:03	21.54	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 10:03	2.44	NTU
APCO-GSD-AP-MW-2VB	COND	Conductivity	6/7/2023 10:08	1107.7	uS/cm
APCO-GSD-AP-MW-2VB	DO	DO	6/7/2023 10:08	0.31	mg/L
APCO-GSD-AP-MW-2VB	DTW	Depth to Water Detail	6/7/2023 10:08	25.9	ft
APCO-GSD-AP-MW-2VB	ORP	Oxidation Reduction Potention	6/7/2023 10:08	-185.21	mv
APCO-GSD-AP-MW-2VB	PH	pH	6/7/2023 10:08	8.25	SU
APCO-GSD-AP-MW-2VB	SULFIDE	Sulfide	6/7/2023 10:08	0	mg/L
APCO-GSD-AP-MW-2VB	TEMP	Temperature	6/7/2023 10:08	21.67	C
APCO-GSD-AP-MW-2VB	TURB	Turbidity	6/7/2023 10:08	2.3	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-3	COND	Conductivity	6/5/2023 13:50	497.07	uS/cm
APCO-GSD-AP-MW-3	DO	DO	6/5/2023 13:50	0.11	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	6/5/2023 13:50	11.87	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	6/5/2023 13:50	162.74	mv
APCO-GSD-AP-MW-3	PH	pH	6/5/2023 13:50	5.85	SU
APCO-GSD-AP-MW-3	TEMP	Temperature	6/5/2023 13:50	20.42	C
APCO-GSD-AP-MW-3	TURB	Turbidity	6/5/2023 13:50	2.14	NTU
APCO-GSD-AP-MW-3	COND	Conductivity	6/5/2023 13:55	493.77	uS/cm
APCO-GSD-AP-MW-3	DO	DO	6/5/2023 13:55	0.09	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	6/5/2023 13:55	11.87	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	6/5/2023 13:55	172.37	mv
APCO-GSD-AP-MW-3	PH	pH	6/5/2023 13:55	5.76	SU
APCO-GSD-AP-MW-3	TEMP	Temperature	6/5/2023 13:55	20.94	C
APCO-GSD-AP-MW-3	TURB	Turbidity	6/5/2023 13:55	1.89	NTU
APCO-GSD-AP-MW-3	COND	Conductivity	6/5/2023 14:00	490.62	uS/cm
APCO-GSD-AP-MW-3	DO	DO	6/5/2023 14:00	0.08	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	6/5/2023 14:00	11.87	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	6/5/2023 14:00	176.6	mv
APCO-GSD-AP-MW-3	PH	pH	6/5/2023 14:00	5.69	SU
APCO-GSD-AP-MW-3	TEMP	Temperature	6/5/2023 14:00	21.41	C
APCO-GSD-AP-MW-3	TURB	Turbidity	6/5/2023 14:00	1.75	NTU
APCO-GSD-AP-MW-3	COND	Conductivity	6/5/2023 14:05	489.43	uS/cm
APCO-GSD-AP-MW-3	DO	DO	6/5/2023 14:05	0.08	mg/L
APCO-GSD-AP-MW-3	DTW	Depth to Water Detail	6/5/2023 14:05	11.87	ft
APCO-GSD-AP-MW-3	ORP	Oxidation Reduction Potention	6/5/2023 14:05	178.63	mv
APCO-GSD-AP-MW-3	PH	pH	6/5/2023 14:05	5.66	SU
APCO-GSD-AP-MW-3	SULFIDE	Sulfide	6/5/2023 14:05	0	mg/L
APCO-GSD-AP-MW-3	TEMP	Temperature	6/5/2023 14:05	21.16	C
APCO-GSD-AP-MW-3	TURB	Turbidity	6/5/2023 14:05	1.6	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4V	COND	Conductivity	6/5/2023 11:34	385.9	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	6/5/2023 11:34	0.1	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	6/5/2023 11:34	9.08	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	6/5/2023 11:34	-93.29	mv
APCO-GSD-AP-MW-4V	PH	pH	6/5/2023 11:34	7.62	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	6/5/2023 11:34	21.83	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	6/5/2023 11:34	4.87	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	6/5/2023 11:39	384.94	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	6/5/2023 11:39	0.13	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	6/5/2023 11:39	11	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	6/5/2023 11:39	-118.31	mv
APCO-GSD-AP-MW-4V	PH	pH	6/5/2023 11:39	7.63	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	6/5/2023 11:39	21.76	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	6/5/2023 11:39	4.62	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	6/5/2023 11:44	382.73	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	6/5/2023 11:44	0.13	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	6/5/2023 11:44	12.56	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	6/5/2023 11:44	-131.02	mv
APCO-GSD-AP-MW-4V	PH	pH	6/5/2023 11:44	7.61	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	6/5/2023 11:44	21.92	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	6/5/2023 11:44	4.48	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	6/5/2023 11:49	383.16	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	6/5/2023 11:49	0.15	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	6/5/2023 11:49	13.04	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	6/5/2023 11:49	-142.41	mv
APCO-GSD-AP-MW-4V	PH	pH	6/5/2023 11:49	7.62	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	6/5/2023 11:49	23	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	6/5/2023 11:49	4.22	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	6/5/2023 11:54	380.2	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	6/5/2023 11:54	0.15	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	6/5/2023 11:54	13.2	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	6/5/2023 11:54	-150.03	mv
APCO-GSD-AP-MW-4V	PH	pH	6/5/2023 11:54	7.67	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	6/5/2023 11:54	21.45	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	6/5/2023 11:54	3.98	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	6/5/2023 11:59	382.94	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	6/5/2023 11:59	0.2	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	6/5/2023 11:59	12.94	ft
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	6/5/2023 11:59	-154.56	mv
APCO-GSD-AP-MW-4V	PH	pH	6/5/2023 11:59	7.68	SU
APCO-GSD-AP-MW-4V	TEMP	Temperature	6/5/2023 11:59	23.77	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	6/5/2023 11:59	4.11	NTU
APCO-GSD-AP-MW-4V	COND	Conductivity	6/5/2023 12:04	383.04	uS/cm
APCO-GSD-AP-MW-4V	DO	DO	6/5/2023 12:04	0.2	mg/L
APCO-GSD-AP-MW-4V	DTW	Depth to Water Detail	6/5/2023 12:04	12.77	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4V	ORP	Oxidation Reduction Potention	6/5/2023 12:04	-160.31	mv
APCO-GSD-AP-MW-4V	PH	pH	6/5/2023 12:04	7.72	SU
APCO-GSD-AP-MW-4V	SULFIDE	Sulfide	6/5/2023 12:04	0	mg/L
APCO-GSD-AP-MW-4V	TEMP	Temperature	6/5/2023 12:04	24.19	C
APCO-GSD-AP-MW-4V	TURB	Turbidity	6/5/2023 12:04	4.23	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-11	COND	Conductivity	6/13/2023 10:01	539.33	uS/cm
APCO-GSD-AP-MW-11	DO	DO	6/13/2023 10:01	0.36	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	6/13/2023 10:01	9.18	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	6/13/2023 10:01	-75.88	mv
APCO-GSD-AP-MW-11	PH	pH	6/13/2023 10:01	6.42	SU
APCO-GSD-AP-MW-11	TEMP	Temperature	6/13/2023 10:01	19.42	C
APCO-GSD-AP-MW-11	TURB	Turbidity	6/13/2023 10:01	6.71	NTU
APCO-GSD-AP-MW-11	COND	Conductivity	6/13/2023 10:06	532.65	uS/cm
APCO-GSD-AP-MW-11	DO	DO	6/13/2023 10:06	0.26	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	6/13/2023 10:06	9.18	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	6/13/2023 10:06	-79.87	mv
APCO-GSD-AP-MW-11	PH	pH	6/13/2023 10:06	6.44	SU
APCO-GSD-AP-MW-11	TEMP	Temperature	6/13/2023 10:06	19.38	C
APCO-GSD-AP-MW-11	TURB	Turbidity	6/13/2023 10:06	5.66	NTU
APCO-GSD-AP-MW-11	COND	Conductivity	6/13/2023 10:11	531.24	uS/cm
APCO-GSD-AP-MW-11	DO	DO	6/13/2023 10:11	0.24	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	6/13/2023 10:11	9.18	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	6/13/2023 10:11	-81.3	mv
APCO-GSD-AP-MW-11	PH	pH	6/13/2023 10:11	6.4	SU
APCO-GSD-AP-MW-11	TEMP	Temperature	6/13/2023 10:11	19.35	C
APCO-GSD-AP-MW-11	TURB	Turbidity	6/13/2023 10:11	6.21	NTU
APCO-GSD-AP-MW-11	COND	Conductivity	6/13/2023 10:16	530.34	uS/cm
APCO-GSD-AP-MW-11	DO	DO	6/13/2023 10:16	0.35	mg/L
APCO-GSD-AP-MW-11	DTW	Depth to Water Detail	6/13/2023 10:16	9.18	ft
APCO-GSD-AP-MW-11	ORP	Oxidation Reduction Potention	6/13/2023 10:16	-79.09	mv
APCO-GSD-AP-MW-11	PH	pH	6/13/2023 10:16	6.4	SU
APCO-GSD-AP-MW-11	SULFIDE	Sulfide	6/13/2023 10:16	0	mg/L
APCO-GSD-AP-MW-11	TEMP	Temperature	6/13/2023 10:16	19.5	C
APCO-GSD-AP-MW-11	TURB	Turbidity	6/13/2023 10:16	6.43	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-12	COND	Conductivity	6/13/2023 8:37	262.32	uS/cm
APCO-GSD-AP-MW-12	DO	DO	6/13/2023 8:37	0.43	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	6/13/2023 8:37	10.73	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	6/13/2023 8:37	187.63	mv
APCO-GSD-AP-MW-12	PH	pH	6/13/2023 8:37	5.49	SU
APCO-GSD-AP-MW-12	TEMP	Temperature	6/13/2023 8:37	18.82	C
APCO-GSD-AP-MW-12	TURB	Turbidity	6/13/2023 8:37	3.24	NTU
APCO-GSD-AP-MW-12	COND	Conductivity	6/13/2023 8:42	476.7	uS/cm
APCO-GSD-AP-MW-12	DO	DO	6/13/2023 8:42	0.33	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	6/13/2023 8:42	10.73	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	6/13/2023 8:42	213.98	mv
APCO-GSD-AP-MW-12	PH	pH	6/13/2023 8:42	5.46	SU
APCO-GSD-AP-MW-12	TEMP	Temperature	6/13/2023 8:42	18.82	C
APCO-GSD-AP-MW-12	TURB	Turbidity	6/13/2023 8:42	2.71	NTU
APCO-GSD-AP-MW-12	COND	Conductivity	6/13/2023 8:47	503.07	uS/cm
APCO-GSD-AP-MW-12	DO	DO	6/13/2023 8:47	0.3	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	6/13/2023 8:47	10.73	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	6/13/2023 8:47	214.44	mv
APCO-GSD-AP-MW-12	PH	pH	6/13/2023 8:47	5.48	SU
APCO-GSD-AP-MW-12	TEMP	Temperature	6/13/2023 8:47	18.62	C
APCO-GSD-AP-MW-12	TURB	Turbidity	6/13/2023 8:47	2.55	NTU
APCO-GSD-AP-MW-12	COND	Conductivity	6/13/2023 8:52	513.15	uS/cm
APCO-GSD-AP-MW-12	DO	DO	6/13/2023 8:52	0.26	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	6/13/2023 8:52	10.73	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	6/13/2023 8:52	224.35	mv
APCO-GSD-AP-MW-12	PH	pH	6/13/2023 8:52	5.48	SU
APCO-GSD-AP-MW-12	TEMP	Temperature	6/13/2023 8:52	18.7	C
APCO-GSD-AP-MW-12	TURB	Turbidity	6/13/2023 8:52	2.1	NTU
APCO-GSD-AP-MW-12	COND	Conductivity	6/13/2023 8:57	515.36	uS/cm
APCO-GSD-AP-MW-12	DO	DO	6/13/2023 8:57	0.31	mg/L
APCO-GSD-AP-MW-12	DTW	Depth to Water Detail	6/13/2023 8:57	10.73	ft
APCO-GSD-AP-MW-12	ORP	Oxidation Reduction Potention	6/13/2023 8:57	240.66	mv
APCO-GSD-AP-MW-12	PH	pH	6/13/2023 8:57	5.48	SU
APCO-GSD-AP-MW-12	SULFIDE	Sulfide	6/13/2023 8:57	0	mg/L
APCO-GSD-AP-MW-12	TEMP	Temperature	6/13/2023 8:57	19.24	C
APCO-GSD-AP-MW-12	TURB	Turbidity	6/13/2023 8:57	2.14	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-20H	COND	Conductivity	6/5/2023 12:45	610.1	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	6/5/2023 12:45	0.11	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	6/5/2023 12:45	1.92	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	6/5/2023 12:45	33.4	mv
APCO-GSD-AP-MW-20H	PH	pH	6/5/2023 12:45	6.27	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	6/5/2023 12:45	19.83	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	6/5/2023 12:45	15.6	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	6/5/2023 12:50	607.54	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	6/5/2023 12:50	0.09	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	6/5/2023 12:50	1.92	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	6/5/2023 12:50	42.92	mv
APCO-GSD-AP-MW-20H	PH	pH	6/5/2023 12:50	6.2	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	6/5/2023 12:50	19.59	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	6/5/2023 12:50	7.84	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	6/5/2023 12:55	607.26	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	6/5/2023 12:55	0.09	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	6/5/2023 12:55	1.92	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	6/5/2023 12:55	47.31	mv
APCO-GSD-AP-MW-20H	PH	pH	6/5/2023 12:55	6.12	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	6/5/2023 12:55	19.45	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	6/5/2023 12:55	6.12	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	6/5/2023 13:00	606.81	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	6/5/2023 13:00	0.09	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	6/5/2023 13:00	1.92	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	6/5/2023 13:00	46.42	mv
APCO-GSD-AP-MW-20H	PH	pH	6/5/2023 13:00	6.12	SU
APCO-GSD-AP-MW-20H	TEMP	Temperature	6/5/2023 13:00	19.62	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	6/5/2023 13:00	5.65	NTU
APCO-GSD-AP-MW-20H	COND	Conductivity	6/5/2023 13:05	606.44	uS/cm
APCO-GSD-AP-MW-20H	DO	DO	6/5/2023 13:05	0.09	mg/L
APCO-GSD-AP-MW-20H	DTW	Depth to Water Detail	6/5/2023 13:05	1.92	ft
APCO-GSD-AP-MW-20H	ORP	Oxidation Reduction Potention	6/5/2023 13:05	45.6	mv
APCO-GSD-AP-MW-20H	PH	pH	6/5/2023 13:05	6.13	SU
APCO-GSD-AP-MW-20H	SULFIDE	Sulfide	6/5/2023 13:05	0	mg/L
APCO-GSD-AP-MW-20H	TEMP	Temperature	6/5/2023 13:05	19.43	C
APCO-GSD-AP-MW-20H	TURB	Turbidity	6/5/2023 13:05	5.68	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-21VC	COND	Conductivity	6/6/2023 12:00	1633.79	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	6/6/2023 12:00	0.08	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	6/6/2023 12:00	9.95	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	6/6/2023 12:00	-186.29	mv
APCO-GSD-AP-MW-21VC	PH	pH	6/6/2023 12:00	8.33	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	6/6/2023 12:00	19.71	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	6/6/2023 12:00	7.88	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	6/6/2023 12:05	1637.01	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	6/6/2023 12:05	0.06	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	6/6/2023 12:05	11.32	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	6/6/2023 12:05	-189.65	mv
APCO-GSD-AP-MW-21VC	PH	pH	6/6/2023 12:05	8.36	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	6/6/2023 12:05	19.71	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	6/6/2023 12:05	3.28	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	6/6/2023 12:10	1637.48	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	6/6/2023 12:10		mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	6/6/2023 12:10	12.18	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	6/6/2023 12:10	-192.74	mv
APCO-GSD-AP-MW-21VC	PH	pH	6/6/2023 12:10	8.4	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	6/6/2023 12:10	19.61	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	6/6/2023 12:10	2.89	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	6/6/2023 12:15	1629.03	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	6/6/2023 12:15	0.05	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	6/6/2023 12:15	12.92	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	6/6/2023 12:15	-193.4	mv
APCO-GSD-AP-MW-21VC	PH	pH	6/6/2023 12:15	8.41	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	6/6/2023 12:15	19.52	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	6/6/2023 12:15	1.9	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	6/6/2023 12:20	1631.03	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	6/6/2023 12:20	0.07	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	6/6/2023 12:20	12.75	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	6/6/2023 12:20	-191.74	mv
APCO-GSD-AP-MW-21VC	PH	pH	6/6/2023 12:20	8.4	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	6/6/2023 12:20	20.72	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	6/6/2023 12:20	1.92	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	6/6/2023 12:25	1633.21	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	6/6/2023 12:25	0.07	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	6/6/2023 12:25	12.72	ft
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	6/6/2023 12:25	-192.02	mv
APCO-GSD-AP-MW-21VC	PH	pH	6/6/2023 12:25	8.42	SU
APCO-GSD-AP-MW-21VC	TEMP	Temperature	6/6/2023 12:25	20.43	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	6/6/2023 12:25	1.88	NTU
APCO-GSD-AP-MW-21VC	COND	Conductivity	6/6/2023 12:30	1631.58	uS/cm
APCO-GSD-AP-MW-21VC	DO	DO	6/6/2023 12:30	0.07	mg/L
APCO-GSD-AP-MW-21VC	DTW	Depth to Water Detail	6/6/2023 12:30	12.69	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-21VC	ORP	Oxidation Reduction Potention	6/6/2023 12:30	-191.6	mv
APCO-GSD-AP-MW-21VC	PH	pH	6/6/2023 12:30	8.41	SU
APCO-GSD-AP-MW-21VC	SULFIDE	Sulfide	6/6/2023 12:30	0	mg/L
APCO-GSD-AP-MW-21VC	TEMP	Temperature	6/6/2023 12:30	20.25	C
APCO-GSD-AP-MW-21VC	TURB	Turbidity	6/6/2023 12:30	1.67	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 11:36	358.39	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 11:36	0.47	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 11:36	4.38	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 11:36	-111.41	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 11:36	6.68	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 11:36	21.41	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 11:36	1.97	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 11:41	361.73	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 11:41	0.4	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 11:41	4.61	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 11:41	-135.99	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 11:41	6.82	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 11:41	20.7	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 11:41	1.78	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 11:46	367.5	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 11:46	0.34	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 11:46	4.84	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 11:46	-138.37	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 11:46	6.88	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 11:46	20.74	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 11:46	1.26	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 11:51	369.67	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 11:51	0.31	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 11:51	4.96	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 11:51	-139.75	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 11:51	7.02	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 11:51	20.84	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 11:51	1.3	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 11:56	371.73	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 11:56	0.27	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 11:56	5.09	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 11:56	-141.42	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 11:56	7.18	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 11:56	21.05	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 11:56	1.21	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 12:01	373.98	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 12:01	0.27	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 12:01	5.2	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 12:01	-142.84	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 12:01	7.28	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 12:01	21.15	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 12:01	1.66	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 12:06	374.24	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 12:06	0.25	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 12:06	5.22	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 12:06	-144.13	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 12:06	7.34	SU
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 12:06	21.05	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 12:06	1.28	NTU
APCO-GSD-AP-MW-22VB	COND	Conductivity	6/7/2023 12:11	372.45	uS/cm
APCO-GSD-AP-MW-22VB	DO	DO	6/7/2023 12:11	0.24	mg/L
APCO-GSD-AP-MW-22VB	DTW	Depth to Water Detail	6/7/2023 12:11	5.22	ft
APCO-GSD-AP-MW-22VB	ORP	Oxidation Reduction Potention	6/7/2023 12:11	-144.24	mv
APCO-GSD-AP-MW-22VB	PH	pH	6/7/2023 12:11	7.41	SU
APCO-GSD-AP-MW-22VB	SULFIDE	Sulfide	6/7/2023 12:11	0	mg/L
APCO-GSD-AP-MW-22VB	TEMP	Temperature	6/7/2023 12:11	20.89	C
APCO-GSD-AP-MW-22VB	TURB	Turbidity	6/7/2023 12:11	1.2	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-6	COND	Conductivity	6/5/2023 12:41	141.63	uS/cm
APCO-GSD-AP-MW-6	DO	DO	6/5/2023 12:41	0.17	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	6/5/2023 12:41	5.36	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	6/5/2023 12:41	157.65	mv
APCO-GSD-AP-MW-6	PH	pH	6/5/2023 12:41	5.63	SU
APCO-GSD-AP-MW-6	TEMP	Temperature	6/5/2023 12:41	17.83	C
APCO-GSD-AP-MW-6	TURB	Turbidity	6/5/2023 12:41	1.24	NTU
APCO-GSD-AP-MW-6	COND	Conductivity	6/5/2023 12:46	141.36	uS/cm
APCO-GSD-AP-MW-6	DO	DO	6/5/2023 12:46	0.16	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	6/5/2023 12:46	5.36	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	6/5/2023 12:46	162.57	mv
APCO-GSD-AP-MW-6	PH	pH	6/5/2023 12:46	5.67	SU
APCO-GSD-AP-MW-6	TEMP	Temperature	6/5/2023 12:46	17.86	C
APCO-GSD-AP-MW-6	TURB	Turbidity	6/5/2023 12:46	0.99	NTU
APCO-GSD-AP-MW-6	COND	Conductivity	6/5/2023 12:51	141.32	uS/cm
APCO-GSD-AP-MW-6	DO	DO	6/5/2023 12:51	0.16	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	6/5/2023 12:51	5.36	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	6/5/2023 12:51	165.62	mv
APCO-GSD-AP-MW-6	PH	pH	6/5/2023 12:51	5.71	SU
APCO-GSD-AP-MW-6	TEMP	Temperature	6/5/2023 12:51	17.86	C
APCO-GSD-AP-MW-6	TURB	Turbidity	6/5/2023 12:51	1.03	NTU
APCO-GSD-AP-MW-6	COND	Conductivity	6/5/2023 12:56	141.08	uS/cm
APCO-GSD-AP-MW-6	DO	DO	6/5/2023 12:56	0.15	mg/L
APCO-GSD-AP-MW-6	DTW	Depth to Water Detail	6/5/2023 12:56	5.36	ft
APCO-GSD-AP-MW-6	ORP	Oxidation Reduction Potention	6/5/2023 12:56	167.98	mv
APCO-GSD-AP-MW-6	PH	pH	6/5/2023 12:56	5.68	SU
APCO-GSD-AP-MW-6	SULFIDE	Sulfide	6/5/2023 12:56	0	mg/L
APCO-GSD-AP-MW-6	TEMP	Temperature	6/5/2023 12:56	17.93	C
APCO-GSD-AP-MW-6	TURB	Turbidity	6/5/2023 12:56	1.06	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-9	COND	Conductivity	6/12/2023 13:40	218.26	uS/cm
APCO-GSD-AP-MW-9	DO	DO	6/12/2023 13:40	0.3	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	6/12/2023 13:40	12.83	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	6/12/2023 13:40	112.19	mv
APCO-GSD-AP-MW-9	PH	pH	6/12/2023 13:40	6.4	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	6/12/2023 13:40	18.52	C
APCO-GSD-AP-MW-9	TURB	Turbidity	6/12/2023 13:40	4.64	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	6/12/2023 13:45	249.13	uS/cm
APCO-GSD-AP-MW-9	DO	DO	6/12/2023 13:45	0.19	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	6/12/2023 13:45	12.83	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	6/12/2023 13:45	92.36	mv
APCO-GSD-AP-MW-9	PH	pH	6/12/2023 13:45	6.57	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	6/12/2023 13:45	18.55	C
APCO-GSD-AP-MW-9	TURB	Turbidity	6/12/2023 13:45	4.27	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	6/12/2023 13:50	267.35	uS/cm
APCO-GSD-AP-MW-9	DO	DO	6/12/2023 13:50	0.16	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	6/12/2023 13:50	12.83	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	6/12/2023 13:50	65.98	mv
APCO-GSD-AP-MW-9	PH	pH	6/12/2023 13:50	6.68	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	6/12/2023 13:50	18.57	C
APCO-GSD-AP-MW-9	TURB	Turbidity	6/12/2023 13:50	2.53	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	6/12/2023 13:55	277.89	uS/cm
APCO-GSD-AP-MW-9	DO	DO	6/12/2023 13:55	0.15	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	6/12/2023 13:55	12.83	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	6/12/2023 13:55	46.46	mv
APCO-GSD-AP-MW-9	PH	pH	6/12/2023 13:55	6.75	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	6/12/2023 13:55	18.58	C
APCO-GSD-AP-MW-9	TURB	Turbidity	6/12/2023 13:55	2.17	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	6/12/2023 14:00	284.38	uS/cm
APCO-GSD-AP-MW-9	DO	DO	6/12/2023 14:00	0.13	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	6/12/2023 14:00	12.83	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	6/12/2023 14:00	34.6	mv
APCO-GSD-AP-MW-9	PH	pH	6/12/2023 14:00	6.76	SU
APCO-GSD-AP-MW-9	TEMP	Temperature	6/12/2023 14:00	18.59	C
APCO-GSD-AP-MW-9	TURB	Turbidity	6/12/2023 14:00	1.85	NTU
APCO-GSD-AP-MW-9	COND	Conductivity	6/12/2023 14:05	289.52	uS/cm
APCO-GSD-AP-MW-9	DO	DO	6/12/2023 14:05	0.13	mg/L
APCO-GSD-AP-MW-9	DTW	Depth to Water Detail	6/12/2023 14:05	12.83	ft
APCO-GSD-AP-MW-9	ORP	Oxidation Reduction Potention	6/12/2023 14:05	24.55	mv
APCO-GSD-AP-MW-9	PH	pH	6/12/2023 14:05	6.81	SU
APCO-GSD-AP-MW-9	SULFIDE	Sulfide	6/12/2023 14:05	0	mg/L
APCO-GSD-AP-MW-9	TEMP	Temperature	6/12/2023 14:05	18.6	C
APCO-GSD-AP-MW-9	TURB	Turbidity	6/12/2023 14:05	2.28	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-8	COND	Conductivity	6/7/2023 13:26	312.51	uS/cm
APCO-GSD-AP-MW-8	DO	DO	6/7/2023 13:26	0.27	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	6/7/2023 13:26	11.5	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	6/7/2023 13:26	25.05	mv
APCO-GSD-AP-MW-8	PH	pH	6/7/2023 13:26	6.25	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	6/7/2023 13:26	17.97	C
APCO-GSD-AP-MW-8	TURB	Turbidity	6/7/2023 13:26	7.25	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	6/7/2023 13:31	320.29	uS/cm
APCO-GSD-AP-MW-8	DO	DO	6/7/2023 13:31	0.24	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	6/7/2023 13:31	11.52	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	6/7/2023 13:31	14.52	mv
APCO-GSD-AP-MW-8	PH	pH	6/7/2023 13:31	6.3	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	6/7/2023 13:31	18.01	C
APCO-GSD-AP-MW-8	TURB	Turbidity	6/7/2023 13:31	5.53	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	6/7/2023 13:36	328.14	uS/cm
APCO-GSD-AP-MW-8	DO	DO	6/7/2023 13:36	0.22	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	6/7/2023 13:36	11.52	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	6/7/2023 13:36	8.07	mv
APCO-GSD-AP-MW-8	PH	pH	6/7/2023 13:36	6.34	SU
APCO-GSD-AP-MW-8	TEMP	Temperature	6/7/2023 13:36	18	C
APCO-GSD-AP-MW-8	TURB	Turbidity	6/7/2023 13:36	5.43	NTU
APCO-GSD-AP-MW-8	COND	Conductivity	6/7/2023 13:41	333.7	uS/cm
APCO-GSD-AP-MW-8	DO	DO	6/7/2023 13:41	0.21	mg/L
APCO-GSD-AP-MW-8	DTW	Depth to Water Detail	6/7/2023 13:41	11.52	ft
APCO-GSD-AP-MW-8	ORP	Oxidation Reduction Potention	6/7/2023 13:41	2.43	mv
APCO-GSD-AP-MW-8	PH	pH	6/7/2023 13:41	6.37	SU
APCO-GSD-AP-MW-8	SULFIDE	Sulfide	6/7/2023 13:41	0	mg/L
APCO-GSD-AP-MW-8	TEMP	Temperature	6/7/2023 13:41	18.04	C
APCO-GSD-AP-MW-8	TURB	Turbidity	6/7/2023 13:41	3.43	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-7	COND	Conductivity	6/13/2023 8:34	105.35	uS/cm
APCO-GSD-AP-MW-7	DO	DO	6/13/2023 8:34	0.66	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	6/13/2023 8:34	11.78	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	6/13/2023 8:34	63.42	mv
APCO-GSD-AP-MW-7	PH	pH	6/13/2023 8:34	5.82	SU
APCO-GSD-AP-MW-7	TEMP	Temperature	6/13/2023 8:34	18.28	C
APCO-GSD-AP-MW-7	TURB	Turbidity	6/13/2023 8:34	2.17	NTU
APCO-GSD-AP-MW-7	COND	Conductivity	6/13/2023 8:39	108.14	uS/cm
APCO-GSD-AP-MW-7	DO	DO	6/13/2023 8:39	0.63	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	6/13/2023 8:39	11.78	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	6/13/2023 8:39	63.78	mv
APCO-GSD-AP-MW-7	PH	pH	6/13/2023 8:39	5.93	SU
APCO-GSD-AP-MW-7	TEMP	Temperature	6/13/2023 8:39	18.2	C
APCO-GSD-AP-MW-7	TURB	Turbidity	6/13/2023 8:39	1.89	NTU
APCO-GSD-AP-MW-7	COND	Conductivity	6/13/2023 8:44	109.98	uS/cm
APCO-GSD-AP-MW-7	DO	DO	6/13/2023 8:44	0.57	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	6/13/2023 8:44	11.78	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	6/13/2023 8:44	73.6	mv
APCO-GSD-AP-MW-7	PH	pH	6/13/2023 8:44	5.96	SU
APCO-GSD-AP-MW-7	TEMP	Temperature	6/13/2023 8:44	18.18	C
APCO-GSD-AP-MW-7	TURB	Turbidity	6/13/2023 8:44	1.78	NTU
APCO-GSD-AP-MW-7	COND	Conductivity	6/13/2023 8:49	111.76	uS/cm
APCO-GSD-AP-MW-7	DO	DO	6/13/2023 8:49	0.61	mg/L
APCO-GSD-AP-MW-7	DTW	Depth to Water Detail	6/13/2023 8:49	11.78	ft
APCO-GSD-AP-MW-7	ORP	Oxidation Reduction Potention	6/13/2023 8:49	83.53	mv
APCO-GSD-AP-MW-7	PH	pH	6/13/2023 8:49	5.98	SU
APCO-GSD-AP-MW-7	SULFIDE	Sulfide	6/13/2023 8:49	0	mg/L
APCO-GSD-AP-MW-7	TEMP	Temperature	6/13/2023 8:49	18.2	C
APCO-GSD-AP-MW-7	TURB	Turbidity	6/13/2023 8:49	1.86	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-19H	COND	Conductivity	6/12/2023 10:42	249.26	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	6/12/2023 10:42	0.11	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	6/12/2023 10:42	3.19	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	6/12/2023 10:42	142.87	mv
APCO-GSD-AP-MW-19H	PH	pH	6/12/2023 10:42	5.64	SU
APCO-GSD-AP-MW-19H	TEMP	Temperature	6/12/2023 10:42	17.19	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	6/12/2023 10:42	8.76	NTU
APCO-GSD-AP-MW-19H	COND	Conductivity	6/12/2023 10:47	249.6	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	6/12/2023 10:47	0.12	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	6/12/2023 10:47	3.19	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	6/12/2023 10:47	141.62	mv
APCO-GSD-AP-MW-19H	PH	pH	6/12/2023 10:47	5.69	SU
APCO-GSD-AP-MW-19H	TEMP	Temperature	6/12/2023 10:47	17.11	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	6/12/2023 10:47	6.2	NTU
APCO-GSD-AP-MW-19H	COND	Conductivity	6/12/2023 10:52	251.32	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	6/12/2023 10:52	0.13	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	6/12/2023 10:52	3.19	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	6/12/2023 10:52	140.97	mv
APCO-GSD-AP-MW-19H	PH	pH	6/12/2023 10:52	5.75	SU
APCO-GSD-AP-MW-19H	TEMP	Temperature	6/12/2023 10:52	17.07	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	6/12/2023 10:52	5.19	NTU
APCO-GSD-AP-MW-19H	COND	Conductivity	6/12/2023 10:57	252.96	uS/cm
APCO-GSD-AP-MW-19H	DO	DO	6/12/2023 10:57	0.13	mg/L
APCO-GSD-AP-MW-19H	DTW	Depth to Water Detail	6/12/2023 10:57	3.19	ft
APCO-GSD-AP-MW-19H	ORP	Oxidation Reduction Potention	6/12/2023 10:57	139.67	mv
APCO-GSD-AP-MW-19H	PH	pH	6/12/2023 10:57	5.81	SU
APCO-GSD-AP-MW-19H	SULFIDE	Sulfide	6/12/2023 10:57	0	mg/L
APCO-GSD-AP-MW-19H	TEMP	Temperature	6/12/2023 10:57	17.19	C
APCO-GSD-AP-MW-19H	TURB	Turbidity	6/12/2023 10:57	4.69	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-18H	COND	Conductivity	6/12/2023 11:53	130.22	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	6/12/2023 11:53	7.83	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	6/12/2023 11:53	10.05	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	6/12/2023 11:53	199.79	mv
APCO-GSD-AP-MW-18H	PH	pH	6/12/2023 11:53	4.46	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	6/12/2023 11:53	16.58	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	6/12/2023 11:53	2.79	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	6/12/2023 11:58	132.84	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	6/12/2023 11:58	7.8	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	6/12/2023 11:58	10.05	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	6/12/2023 11:58	223.67	mv
APCO-GSD-AP-MW-18H	PH	pH	6/12/2023 11:58	4.48	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	6/12/2023 11:58	16.36	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	6/12/2023 11:58	1.09	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	6/12/2023 12:03	133.24	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	6/12/2023 12:03	7.8	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	6/12/2023 12:03	10.05	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	6/12/2023 12:03	240.66	mv
APCO-GSD-AP-MW-18H	PH	pH	6/12/2023 12:03	4.5	SU
APCO-GSD-AP-MW-18H	TEMP	Temperature	6/12/2023 12:03	16.34	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	6/12/2023 12:03	1.6	NTU
APCO-GSD-AP-MW-18H	COND	Conductivity	6/12/2023 12:08	133.28	uS/cm
APCO-GSD-AP-MW-18H	DO	DO	6/12/2023 12:08	7.8	mg/L
APCO-GSD-AP-MW-18H	DTW	Depth to Water Detail	6/12/2023 12:08	10.05	ft
APCO-GSD-AP-MW-18H	ORP	Oxidation Reduction Potention	6/12/2023 12:08	253.02	mv
APCO-GSD-AP-MW-18H	PH	pH	6/12/2023 12:08	4.52	SU
APCO-GSD-AP-MW-18H	SULFIDE	Sulfide	6/12/2023 12:08	0	mg/L
APCO-GSD-AP-MW-18H	TEMP	Temperature	6/12/2023 12:08	16.31	C
APCO-GSD-AP-MW-18H	TURB	Turbidity	6/12/2023 12:08	1.41	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 11:49	195	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 11:49	0.66	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 11:49	22.52	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 11:49	160.06	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 11:49	7.34	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 11:49	22.8	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 11:49	1.28	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 11:54	144.06	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 11:54	0.65	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 11:54	22.76	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 11:54	155.05	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 11:54	7.41	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 11:54	22.76	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 11:54	1.35	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 11:59	137.12	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 11:59	0.63	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 11:59	22.92	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 11:59	150.15	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 11:59	7.46	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 11:59	23.12	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 11:59	1.34	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 12:04	143.03	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 12:04	0.63	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 12:04	23.03	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 12:04	143.01	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 12:04	7.52	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 12:04	23	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 12:04	1.18	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 12:09	145.46	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 12:09	0.64	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 12:09	23.17	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 12:09	136.13	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 12:09	7.56	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 12:09	23.21	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 12:09	1.1	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 12:14	236.05	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 12:14	0.63	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 12:14	23.26	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 12:14	127.9	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 12:14	7.63	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 12:14	22.31	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 12:14	1.55	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 12:19	237.68	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 12:19	0.62	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 12:19	23.38	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 12:19	120.53	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 12:19	7.68	SU
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 12:19	22.44	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 12:19	1.12	NTU
APCO-GSD-AP-MW-17	COND	Conductivity	6/6/2023 12:24	237.58	uS/cm
APCO-GSD-AP-MW-17	DO	DO	6/6/2023 12:24	0.66	mg/L
APCO-GSD-AP-MW-17	DTW	Depth to Water Detail	6/6/2023 12:24	23.44	ft
APCO-GSD-AP-MW-17	ORP	Oxidation Reduction Potention	6/6/2023 12:24	112.34	mv
APCO-GSD-AP-MW-17	PH	pH	6/6/2023 12:24	7.8	SU
APCO-GSD-AP-MW-17	SULFIDE	Sulfide	6/6/2023 12:24	0	mg/L
APCO-GSD-AP-MW-17	TEMP	Temperature	6/6/2023 12:24	22.61	C
APCO-GSD-AP-MW-17	TURB	Turbidity	6/6/2023 12:24	1.11	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-16	COND	Conductivity	6/6/2023 13:41	328.12	uS/cm
APCO-GSD-AP-MW-16	DO	DO	6/6/2023 13:41	4.73	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	6/6/2023 13:41	25.11	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	6/6/2023 13:41	467.81	mv
APCO-GSD-AP-MW-16	PH	pH	6/6/2023 13:41	3.57	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	6/6/2023 13:41	19.58	C
APCO-GSD-AP-MW-16	TURB	Turbidity	6/6/2023 13:41	19.2	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	6/6/2023 13:46	319	uS/cm
APCO-GSD-AP-MW-16	DO	DO	6/6/2023 13:46	4.73	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	6/6/2023 13:46	25.19	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	6/6/2023 13:46	493.95	mv
APCO-GSD-AP-MW-16	PH	pH	6/6/2023 13:46	3.6	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	6/6/2023 13:46	19.56	C
APCO-GSD-AP-MW-16	TURB	Turbidity	6/6/2023 13:46	8.45	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	6/6/2023 13:51	312.68	uS/cm
APCO-GSD-AP-MW-16	DO	DO	6/6/2023 13:51	4.67	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	6/6/2023 13:51	25.19	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	6/6/2023 13:51	510.04	mv
APCO-GSD-AP-MW-16	PH	pH	6/6/2023 13:51	3.63	SU
APCO-GSD-AP-MW-16	TEMP	Temperature	6/6/2023 13:51	19.58	C
APCO-GSD-AP-MW-16	TURB	Turbidity	6/6/2023 13:51	3.95	NTU
APCO-GSD-AP-MW-16	COND	Conductivity	6/6/2023 13:56	303.83	uS/cm
APCO-GSD-AP-MW-16	DO	DO	6/6/2023 13:56	4.7	mg/L
APCO-GSD-AP-MW-16	DTW	Depth to Water Detail	6/6/2023 13:56	25.19	ft
APCO-GSD-AP-MW-16	ORP	Oxidation Reduction Potention	6/6/2023 13:56	520.35	mv
APCO-GSD-AP-MW-16	PH	pH	6/6/2023 13:56	3.65	SU
APCO-GSD-AP-MW-16	SULFIDE	Sulfide	6/6/2023 13:56	0	mg/L
APCO-GSD-AP-MW-16	TEMP	Temperature	6/6/2023 13:56	19.43	C
APCO-GSD-AP-MW-16	TURB	Turbidity	6/6/2023 13:56	3.17	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-14	COND	Conductivity	6/6/2023 8:25	308.56	uS/cm
APCO-GSD-AP-MW-14	DO	DO	6/6/2023 8:25	4.41	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	6/6/2023 8:25	21.49	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	6/6/2023 8:25	349.04	mv
APCO-GSD-AP-MW-14	PH	pH	6/6/2023 8:25	3.73	SU
APCO-GSD-AP-MW-14	TEMP	Temperature	6/6/2023 8:25	18.04	C
APCO-GSD-AP-MW-14	TURB	Turbidity	6/6/2023 8:25	3.56	NTU
APCO-GSD-AP-MW-14	COND	Conductivity	6/6/2023 8:30	305.41	uS/cm
APCO-GSD-AP-MW-14	DO	DO	6/6/2023 8:30	4.41	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	6/6/2023 8:30	21.61	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	6/6/2023 8:30	423.67	mv
APCO-GSD-AP-MW-14	PH	pH	6/6/2023 8:30	3.77	SU
APCO-GSD-AP-MW-14	TEMP	Temperature	6/6/2023 8:30	18	C
APCO-GSD-AP-MW-14	TURB	Turbidity	6/6/2023 8:30	2.77	NTU
APCO-GSD-AP-MW-14	COND	Conductivity	6/6/2023 8:35	302.96	uS/cm
APCO-GSD-AP-MW-14	DO	DO	6/6/2023 8:35	4.4	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	6/6/2023 8:35	21.61	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	6/6/2023 8:35	448.77	mv
APCO-GSD-AP-MW-14	PH	pH	6/6/2023 8:35	3.8	SU
APCO-GSD-AP-MW-14	TEMP	Temperature	6/6/2023 8:35	17.98	C
APCO-GSD-AP-MW-14	TURB	Turbidity	6/6/2023 8:35	2.73	NTU
APCO-GSD-AP-MW-14	COND	Conductivity	6/6/2023 8:40	300.65	uS/cm
APCO-GSD-AP-MW-14	DO	DO	6/6/2023 8:40	4.39	mg/L
APCO-GSD-AP-MW-14	DTW	Depth to Water Detail	6/6/2023 8:40	21.61	ft
APCO-GSD-AP-MW-14	ORP	Oxidation Reduction Potention	6/6/2023 8:40	458.01	mv
APCO-GSD-AP-MW-14	PH	pH	6/6/2023 8:40	3.82	SU
APCO-GSD-AP-MW-14	SULFIDE	Sulfide	6/6/2023 8:40	0	mg/L
APCO-GSD-AP-MW-14	TEMP	Temperature	6/6/2023 8:40	18.05	C
APCO-GSD-AP-MW-14	TURB	Turbidity	6/6/2023 8:40	2.69	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-10	COND	Conductivity	6/13/2023 9:32	333.46	uS/cm
APCO-GSD-AP-MW-10	DO	DO	6/13/2023 9:32	0.23	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	6/13/2023 9:32	22.42	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	6/13/2023 9:32	-75.76	mv
APCO-GSD-AP-MW-10	PH	pH	6/13/2023 9:32	6.37	SU
APCO-GSD-AP-MW-10	TEMP	Temperature	6/13/2023 9:32	19.63	C
APCO-GSD-AP-MW-10	TURB	Turbidity	6/13/2023 9:32	32.9	NTU
APCO-GSD-AP-MW-10	COND	Conductivity	6/13/2023 9:37	333.37	uS/cm
APCO-GSD-AP-MW-10	DO	DO	6/13/2023 9:37	0.21	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	6/13/2023 9:37	22.42	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	6/13/2023 9:37	-86.57	mv
APCO-GSD-AP-MW-10	PH	pH	6/13/2023 9:37	6.43	SU
APCO-GSD-AP-MW-10	TEMP	Temperature	6/13/2023 9:37	19.66	C
APCO-GSD-AP-MW-10	TURB	Turbidity	6/13/2023 9:37	21.2	NTU
APCO-GSD-AP-MW-10	COND	Conductivity	6/13/2023 9:42	333.3	uS/cm
APCO-GSD-AP-MW-10	DO	DO	6/13/2023 9:42	0.2	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	6/13/2023 9:42	22.42	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	6/13/2023 9:42	-92.74	mv
APCO-GSD-AP-MW-10	PH	pH	6/13/2023 9:42	6.49	SU
APCO-GSD-AP-MW-10	TEMP	Temperature	6/13/2023 9:42	19.64	C
APCO-GSD-AP-MW-10	TURB	Turbidity	6/13/2023 9:42	13.7	NTU
APCO-GSD-AP-MW-10	COND	Conductivity	6/13/2023 9:47	333.39	uS/cm
APCO-GSD-AP-MW-10	DO	DO	6/13/2023 9:47	0.19	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	6/13/2023 9:47	22.42	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	6/13/2023 9:47	-96.69	mv
APCO-GSD-AP-MW-10	PH	pH	6/13/2023 9:47	6.53	SU
APCO-GSD-AP-MW-10	TEMP	Temperature	6/13/2023 9:47	19.64	C
APCO-GSD-AP-MW-10	TURB	Turbidity	6/13/2023 9:47	8.05	NTU
APCO-GSD-AP-MW-10	COND	Conductivity	6/13/2023 9:52	333.8	uS/cm
APCO-GSD-AP-MW-10	DO	DO	6/13/2023 9:52	0.19	mg/L
APCO-GSD-AP-MW-10	DTW	Depth to Water Detail	6/13/2023 9:52	22.42	ft
APCO-GSD-AP-MW-10	ORP	Oxidation Reduction Potention	6/13/2023 9:52	-98.63	mv
APCO-GSD-AP-MW-10	PH	pH	6/13/2023 9:52	6.55	SU
APCO-GSD-AP-MW-10	SULFIDE	Sulfide	6/13/2023 9:52	0	mg/L
APCO-GSD-AP-MW-10	TEMP	Temperature	6/13/2023 9:52	19.59	C
APCO-GSD-AP-MW-10	TURB	Turbidity	6/13/2023 9:52	7.15	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 13:51	64.79	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 13:51	0.23	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 13:51	9.65	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 13:51	260.99	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 13:51	4.53	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 13:51	18.76	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 13:51	1.78	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 13:56	77.31	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 13:56	0.22	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 13:56	10.02	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 13:56	261.74	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 13:56	4.68	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 13:56	18.59	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 13:56	1.82	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 14:01	93	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 14:01	0.21	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 14:01	10.36	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 14:01	247.35	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 14:01	4.85	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 14:01	18.79	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 14:01	1.24	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 14:06	104.27	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 14:06	0.2	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 14:06	10.49	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 14:06	236.71	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 14:06	4.98	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 14:06	18.8	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 14:06	1.45	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 14:11	107.58	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 14:11	0.2	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 14:11	10.55	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 14:11	233.18	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 14:11	5.03	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 14:11	18.76	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 14:11	1.43	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 14:16	114.24	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 14:16	0.2	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 14:16	10.61	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 14:16	226.13	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 14:16	5.1	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 14:16	18.66	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 14:16	1.35	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 14:21	115.01	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 14:21	0.2	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 14:21	10.66	ft

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 14:21	221.57	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 14:21	5.15	SU
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 14:21	18.69	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 14:21	1.38	NTU
APCO-GSD-AP-PZ-2	COND	Conductivity	6/5/2023 14:26	116.96	uS/cm
APCO-GSD-AP-PZ-2	DO	DO	6/5/2023 14:26	0.2	mg/L
APCO-GSD-AP-PZ-2	DTW	Depth to Water Detail	6/5/2023 14:26	10.68	ft
APCO-GSD-AP-PZ-2	ORP	Oxidation Reduction Potention	6/5/2023 14:26	218.9	mv
APCO-GSD-AP-PZ-2	PH	pH	6/5/2023 14:26	5.2	SU
APCO-GSD-AP-PZ-2	SULFIDE	Sulfide	6/5/2023 14:26	0	mg/L
APCO-GSD-AP-PZ-2	TEMP	Temperature	6/5/2023 14:26	18.73	C
APCO-GSD-AP-PZ-2	TURB	Turbidity	6/5/2023 14:26	1.36	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-5	COND	Conductivity	6/13/2023 12:17	44.3	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	6/13/2023 12:17	4.14	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	6/13/2023 12:17	10.21	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	6/13/2023 12:17	226.34	mv
APCO-GSD-AP-PZ-5	PH	pH	6/13/2023 12:17	4.85	SU
APCO-GSD-AP-PZ-5	TEMP	Temperature	6/13/2023 12:17	16.79	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	6/13/2023 12:17	6.69	NTU
APCO-GSD-AP-PZ-5	COND	Conductivity	6/13/2023 12:22	44.16	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	6/13/2023 12:22	4.17	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	6/13/2023 12:22	10.21	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	6/13/2023 12:22	236.16	mv
APCO-GSD-AP-PZ-5	PH	pH	6/13/2023 12:22	4.96	SU
APCO-GSD-AP-PZ-5	TEMP	Temperature	6/13/2023 12:22	16.64	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	6/13/2023 12:22	4.76	NTU
APCO-GSD-AP-PZ-5	COND	Conductivity	6/13/2023 12:27	44.22	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	6/13/2023 12:27	4.17	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	6/13/2023 12:27	10.21	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	6/13/2023 12:27	242.67	mv
APCO-GSD-AP-PZ-5	PH	pH	6/13/2023 12:27	5.03	SU
APCO-GSD-AP-PZ-5	TEMP	Temperature	6/13/2023 12:27	16.68	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	6/13/2023 12:27	4.6	NTU
APCO-GSD-AP-PZ-5	COND	Conductivity	6/13/2023 12:32	44.18	uS/cm
APCO-GSD-AP-PZ-5	DO	DO	6/13/2023 12:32	4.17	mg/L
APCO-GSD-AP-PZ-5	DTW	Depth to Water Detail	6/13/2023 12:32	10.21	ft
APCO-GSD-AP-PZ-5	ORP	Oxidation Reduction Potention	6/13/2023 12:32	245.75	mv
APCO-GSD-AP-PZ-5	PH	pH	6/13/2023 12:32	5.1	SU
APCO-GSD-AP-PZ-5	SULFIDE	Sulfide	6/13/2023 12:32	0	mg/L
APCO-GSD-AP-PZ-5	TEMP	Temperature	6/13/2023 12:32	16.7	C
APCO-GSD-AP-PZ-5	TURB	Turbidity	6/13/2023 12:32	4.31	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-6	COND	Conductivity	6/13/2023 10:46	44.74	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	6/13/2023 10:46	5.64	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	6/13/2023 10:46	5.43	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	6/13/2023 10:46	145.14	mv
APCO-GSD-AP-PZ-6	PH	pH	6/13/2023 10:46	5.22	SU
APCO-GSD-AP-PZ-6	TEMP	Temperature	6/13/2023 10:46	17.43	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	6/13/2023 10:46	6.29	NTU
APCO-GSD-AP-PZ-6	COND	Conductivity	6/13/2023 10:51	44.58	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	6/13/2023 10:51	5.65	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	6/13/2023 10:51	5.43	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	6/13/2023 10:51	176.57	mv
APCO-GSD-AP-PZ-6	PH	pH	6/13/2023 10:51	5.26	SU
APCO-GSD-AP-PZ-6	TEMP	Temperature	6/13/2023 10:51	17.44	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	6/13/2023 10:51	6.38	NTU
APCO-GSD-AP-PZ-6	COND	Conductivity	6/13/2023 10:56	44.52	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	6/13/2023 10:56	5.67	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	6/13/2023 10:56	5.43	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	6/13/2023 10:56	194.53	mv
APCO-GSD-AP-PZ-6	PH	pH	6/13/2023 10:56	5.31	SU
APCO-GSD-AP-PZ-6	TEMP	Temperature	6/13/2023 10:56	17.43	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	6/13/2023 10:56	4.37	NTU
APCO-GSD-AP-PZ-6	COND	Conductivity	6/13/2023 11:01	44.47	uS/cm
APCO-GSD-AP-PZ-6	DO	DO	6/13/2023 11:01	5.68	mg/L
APCO-GSD-AP-PZ-6	DTW	Depth to Water Detail	6/13/2023 11:01	5.43	ft
APCO-GSD-AP-PZ-6	ORP	Oxidation Reduction Potention	6/13/2023 11:01	215.9	mv
APCO-GSD-AP-PZ-6	PH	pH	6/13/2023 11:01	5.15	SU
APCO-GSD-AP-PZ-6	SULFIDE	Sulfide	6/13/2023 11:01	0	mg/L
APCO-GSD-AP-PZ-6	TEMP	Temperature	6/13/2023 11:01	17.42	C
APCO-GSD-AP-PZ-6	TURB	Turbidity	6/13/2023 11:01	3.92	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-1	COND	Conductivity	6/7/2023 10:28	165	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	6/7/2023 10:28	1.1	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	6/7/2023 10:28	7.03	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	6/7/2023 10:28	163.76	mv
APCO-GSD-AP-PZ-1	PH	pH	6/7/2023 10:28	5.71	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	6/7/2023 10:28	18.79	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	6/7/2023 10:28	0.83	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	6/7/2023 10:33	169.44	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	6/7/2023 10:33	1.06	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	6/7/2023 10:33	7.03	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	6/7/2023 10:33	165.31	mv
APCO-GSD-AP-PZ-1	PH	pH	6/7/2023 10:33	5.77	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	6/7/2023 10:33	18.64	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	6/7/2023 10:33	0.83	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	6/7/2023 10:38	170.27	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	6/7/2023 10:38	1.1	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	6/7/2023 10:38	7.03	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	6/7/2023 10:38	164.32	mv
APCO-GSD-AP-PZ-1	PH	pH	6/7/2023 10:38	5.85	SU
APCO-GSD-AP-PZ-1	TEMP	Temperature	6/7/2023 10:38	18.75	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	6/7/2023 10:38	1.08	NTU
APCO-GSD-AP-PZ-1	COND	Conductivity	6/7/2023 10:43	164.51	uS/cm
APCO-GSD-AP-PZ-1	DO	DO	6/7/2023 10:43	1.22	mg/L
APCO-GSD-AP-PZ-1	DTW	Depth to Water Detail	6/7/2023 10:43	7.03	ft
APCO-GSD-AP-PZ-1	ORP	Oxidation Reduction Potention	6/7/2023 10:43	163.57	mv
APCO-GSD-AP-PZ-1	PH	pH	6/7/2023 10:43	5.9	SU
APCO-GSD-AP-PZ-1	SULFIDE	Sulfide	6/7/2023 10:43	0	mg/L
APCO-GSD-AP-PZ-1	TEMP	Temperature	6/7/2023 10:43	18.7	C
APCO-GSD-AP-PZ-1	TURB	Turbidity	6/7/2023 10:43	1.04	NTU

Field Parameters Summary
Plant Gadsden Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-5	COND	Conductivity	6/7/2023 9:36	305.56	uS/cm
APCO-GSD-AP-MW-5	DO	DO	6/7/2023 9:36	0.26	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	6/7/2023 9:36	5.24	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	6/7/2023 9:36	108.44	mv
APCO-GSD-AP-MW-5	PH	pH	6/7/2023 9:36	6.24	SU
APCO-GSD-AP-MW-5	TEMP	Temperature	6/7/2023 9:36	18.72	C
APCO-GSD-AP-MW-5	TURB	Turbidity	6/7/2023 9:36	3.25	NTU
APCO-GSD-AP-MW-5	COND	Conductivity	6/7/2023 9:41	305.19	uS/cm
APCO-GSD-AP-MW-5	DO	DO	6/7/2023 9:41	0.2	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	6/7/2023 9:41	5.24	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	6/7/2023 9:41	109.81	mv
APCO-GSD-AP-MW-5	PH	pH	6/7/2023 9:41	6.24	SU
APCO-GSD-AP-MW-5	TEMP	Temperature	6/7/2023 9:41	18.73	C
APCO-GSD-AP-MW-5	TURB	Turbidity	6/7/2023 9:41	2.22	NTU
APCO-GSD-AP-MW-5	COND	Conductivity	6/7/2023 9:46	306.4	uS/cm
APCO-GSD-AP-MW-5	DO	DO	6/7/2023 9:46	0.18	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	6/7/2023 9:46	5.24	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	6/7/2023 9:46	107.91	mv
APCO-GSD-AP-MW-5	PH	pH	6/7/2023 9:46	6.25	SU
APCO-GSD-AP-MW-5	TEMP	Temperature	6/7/2023 9:46	18.76	C
APCO-GSD-AP-MW-5	TURB	Turbidity	6/7/2023 9:46	2.19	NTU
APCO-GSD-AP-MW-5	COND	Conductivity	6/7/2023 9:51	307.47	uS/cm
APCO-GSD-AP-MW-5	DO	DO	6/7/2023 9:51	0.17	mg/L
APCO-GSD-AP-MW-5	DTW	Depth to Water Detail	6/7/2023 9:51	5.24	ft
APCO-GSD-AP-MW-5	ORP	Oxidation Reduction Potention	6/7/2023 9:51	108.59	mv
APCO-GSD-AP-MW-5	PH	pH	6/7/2023 9:51	6.25	SU
APCO-GSD-AP-MW-5	SULFIDE	Sulfide	6/7/2023 9:51	0	mg/L
APCO-GSD-AP-MW-5	TEMP	Temperature	6/7/2023 9:51	18.78	C
APCO-GSD-AP-MW-5	TURB	Turbidity	6/7/2023 9:51	1.98	NTU

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGADAP_1414

Project/Site : Gadsden Ash Pond
Gadsden, AL 35903

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

July 13, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between June 08, 2023 and June 14, 2023. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2024

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

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.07.13 09:55:15 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-07-13 14:51-05:00

REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted. This document shall not be reproduced, except in full, without written consent from Alabama Power's General Test Laboratory.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICP

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10621	757559	WMWGADAP_1414
BD10622	757559	WMWGADAP_1414
BD10623	757559	WMWGADAP_1414
BD10624	757559	WMWGADAP_1414
BD10625	757559	WMWGADAP_1414
BD10626	757559	WMWGADAP_1414
BD10627	757559	WMWGADAP_1414
BD10628	757559	WMWGADAP_1414
BD10629	757559	WMWGADAP_1414
BD10630	757559	WMWGADAP_1414
BD10631	757560	WMWGADAP_1414
BD10632	757560	WMWGADAP_1414
BD10633	757560	WMWGADAP_1414
BD10634	757560	WMWGADAP_1414
BD10635	757560	WMWGADAP_1414
BD10636	757560	WMWGADAP_1414
BD10637	757560	WMWGADAP_1414
BD10638	757560	WMWGADAP_1414
BD10639	757560	WMWGADAP_1414
BD10640	757560	WMWGADAP_1414
BD10641	757691	WMWGADAP_1414
BD10969	758337	WMWGADAP_1414
BD10970	758337	WMWGADAP_1414
BD10971	758337	WMWGADAP_1414
BD10972	758337	WMWGADAP_1414
BD10973	758337	WMWGADAP_1414
BD10974	758337	WMWGADAP_1414
BD10975	758337	WMWGADAP_1414
BD10976	758337	WMWGADAP_1414
BD10977	758337	WMWGADAP_1414
BD10978	758337	WMWGADAP_1414
BD10979	758338	WMWGADAP_1414
BD10980	758338	WMWGADAP_1414

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
  - BD10630 Sodium MS/MSD spike levels were <30% of the sample concentrations.
  - BD10641 Calcium & Iron MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD10622	Iron	101.5
BD10623	Iron	101.5

BD10624	Sodium	10.15
BD10625	Calcium	10.15
BD10626	Calcium	10.15
BD10627	Calcium	10.15
BD10628	Calcium	10.15
BD10629	Calcium, Iron	10.15
BD10630	Sodium	101.5
BD10631	Sodium	10.15
BD10632	Sodium	10.15
BD10633	Sodium	10.15
BD10639	Calcium	10.15
BD10641	Calcium, Iron	10.15
BD10970	Calcium	5.075
BD10972	Calcium, Iron	5.075
BD10979	Iron	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICP

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10622	757493	WMWGADAP_1414
BD10623	757493	WMWGADAP_1414
BD10624	757493	WMWGADAP_1414
BD10625	757493	WMWGADAP_1414
BD10626	757493	WMWGADAP_1414
BD10627	757493	WMWGADAP_1414
BD10628	757493	WMWGADAP_1414
BD10629	757493	WMWGADAP_1414
BD10630	757493	WMWGADAP_1414
BD10631	757493	WMWGADAP_1414
BD10632	757494	WMWGADAP_1414
BD10633	757494	WMWGADAP_1414
BD10634	757494	WMWGADAP_1414
BD10635	757494	WMWGADAP_1414
BD10636	757494	WMWGADAP_1414
BD10637	757494	WMWGADAP_1414
BD10638	757494	WMWGADAP_1414
BD10639	757494	WMWGADAP_1414
BD10640	757494	WMWGADAP_1414
BD10641	757494	WMWGADAP_1414
BD10970	758341	WMWGADAP_1414
BD10972	758341	WMWGADAP_1414
BD10973	758341	WMWGADAP_1414
BD10974	758341	WMWGADAP_1414
BD10975	758341	WMWGADAP_1414
BD10976	758341	WMWGADAP_1414
BD10978	758341	WMWGADAP_1414
BD10979	758341	WMWGADAP_1414
BD10980	758341	WMWGADAP_1414
BD10981	758341	WMWGADAP_1414

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.

6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD10631 Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BD10641 Calcium & Iron MS/MSD spike levels were <30% of the sample concentrations.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD10622	Iron	101.5
BD10623	Iron	101.5
BD10624	Sodium	10.15
BD10625	Calcium	10.15

BD10626	Calcium	10.15
BD10627	Calcium	10.15
BD10628	Calcium	10.15
BD10629	Calcium, Iron	10.15
BD10630	Sodium	10.15
BD10631	Sodium	10.15
BD10632	Sodium	10.15
BD10633	Sodium	10.15
BD10639	Calcium	10.15
BD10641	Calcium, Iron	10.15
BD10970	Calcium	5.075
BD10972	Calcium, Iron	5.075
BD10979	Iron	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICPMS

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10621	758196	WMWGADAP_1414
BD10622	758196	WMWGADAP_1414
BD10623	758196	WMWGADAP_1414
BD10624	758196	WMWGADAP_1414
BD10625	758196	WMWGADAP_1414
BD10626	758196	WMWGADAP_1414
BD10627	758196	WMWGADAP_1414
BD10628	758196	WMWGADAP_1414
BD10629	758196	WMWGADAP_1414
BD10630	758196	WMWGADAP_1414
BD10631	758197	WMWGADAP_1414
BD10632	758197	WMWGADAP_1414
BD10633	758197	WMWGADAP_1414
BD10634	758197	WMWGADAP_1414
BD10635	758197	WMWGADAP_1414
BD10636	758197	WMWGADAP_1414
BD10637	758197	WMWGADAP_1414
BD10638	758197	WMWGADAP_1414
BD10639	758197	WMWGADAP_1414
BD10640	758197	WMWGADAP_1414
BD10641	758198	WMWGADAP_1414
BD10969	758225	WMWGADAP_1414
BD10970	758225	WMWGADAP_1414
BD10971	758225	WMWGADAP_1414
BD10972	758225	WMWGADAP_1414
BD10973	758225	WMWGADAP_1414
BD10974	758225	WMWGADAP_1414
BD10975	758225	WMWGADAP_1414
BD10976	758225	WMWGADAP_1414
BD10977	758225	WMWGADAP_1414
BD10978	758225	WMWGADAP_1414
BD10979	758226	WMWGADAP_1414
BD10980	758226	WMWGADAP_1414

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD10622	Manganese	5.075
BD10623	Manganese	5.075
BD10625	Manganese	92.365
BD10626	Manganese	92.365

BD10627	Manganese	92.365
BD10628	Manganese	5.075
BD10629	Manganese	10.15
BD10636	Aluminum	92.365
BD10638	Aluminum	92.365
BD10641	Manganese	5.075
BD10970	Manganese	5.075
BD10972	Manganese	5.075
BD10976	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10622	758128	WMWGADAP_1414
BD10623	758128	WMWGADAP_1414
BD10624	758128	WMWGADAP_1414
BD10625	758128	WMWGADAP_1414
BD10626	758128	WMWGADAP_1414
BD10627	758128	WMWGADAP_1414
BD10628	758128	WMWGADAP_1414
BD10629	758128	WMWGADAP_1414
BD10630	758128	WMWGADAP_1414
BD10631	758128	WMWGADAP_1414
BD10632	758129	WMWGADAP_1414
BD10633	758129	WMWGADAP_1414
BD10634	758129	WMWGADAP_1414
BD10635	758129	WMWGADAP_1414
BD10636	758129	WMWGADAP_1414
BD10637	758129	WMWGADAP_1414
BD10638	758129	WMWGADAP_1414
BD10639	758129	WMWGADAP_1414
BD10640	758129	WMWGADAP_1414
BD10641	758129	WMWGADAP_1414
BD10970	758114	WMWGADAP_1414
BD10972	758114	WMWGADAP_1414
BD10973	758114	WMWGADAP_1414
BD10974	758114	WMWGADAP_1414
BD10975	758114	WMWGADAP_1414
BD10976	758114	WMWGADAP_1414
BD10978	758114	WMWGADAP_1414
BD10979	758114	WMWGADAP_1414
BD10980	758114	WMWGADAP_1414
BD10981	758114	WMWGADAP_1414

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.

6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD10622	Manganese	5.075
BD10623	Manganese	5.075
BD10625	Manganese	92.365
BD10626	Manganese	92.365
BD10627	Manganese	92.365
BD10628	Manganese	5.075
BD10629	Manganese	10.15

BD10636	Aluminum	92.365
BD10638	Aluminum	92.365
BD10641	Manganese	5.075
BD10970	Manganese	5.075
BD10972	Manganese	5.075
BD10976	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Mercury

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10621	757582	WMWGADAP_1414
BD10622	757582	WMWGADAP_1414
BD10623	757582	WMWGADAP_1414
BD10624	757582	WMWGADAP_1414
BD10625	757582	WMWGADAP_1414
BD10626	757582	WMWGADAP_1414
BD10627	757582	WMWGADAP_1414
BD10628	757582	WMWGADAP_1414
BD10629	757582	WMWGADAP_1414
BD10630	757582	WMWGADAP_1414
BD10631	757583	WMWGADAP_1414
BD10632	757583	WMWGADAP_1414
BD10633	757583	WMWGADAP_1414
BD10634	757583	WMWGADAP_1414
BD10635	757583	WMWGADAP_1414
BD10636	757583	WMWGADAP_1414
BD10637	757583	WMWGADAP_1414
BD10638	757583	WMWGADAP_1414
BD10639	757583	WMWGADAP_1414
BD10640	757583	WMWGADAP_1414
BD10641	757584	WMWGADAP_1414
BD10969	758051	WMWGADAP_1414
BD10970	758051	WMWGADAP_1414
BD10971	758051	WMWGADAP_1414
BD10972	758051	WMWGADAP_1414
BD10973	758051	WMWGADAP_1414
BD10974	758051	WMWGADAP_1414
BD10975	758051	WMWGADAP_1414
BD10976	758051	WMWGADAP_1414
BD10977	758051	WMWGADAP_1414
BD10978	758051	WMWGADAP_1414
BD10979	758052	WMWGADAP_1414
BD10980	758052	WMWGADAP_1414

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Dissolved Solids

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10621	757436	WMWGADAP_1414
BD10622	757436	WMWGADAP_1414
BD10623	757436	WMWGADAP_1414
BD10624	757437	WMWGADAP_1414
BD10625	757437	WMWGADAP_1414
BD10626	757437	WMWGADAP_1414
BD10627	757437	WMWGADAP_1414
BD10628	757437	WMWGADAP_1414
BD10629	757437	WMWGADAP_1414
BD10630	757437	WMWGADAP_1414
BD10631	757437	WMWGADAP_1414
BD10632	757437	WMWGADAP_1414
BD10633	757437	WMWGADAP_1414
BD10634	757587	WMWGADAP_1414
BD10635	757587	WMWGADAP_1414
BD10636	757587	WMWGADAP_1414
BD10637	757587	WMWGADAP_1414
BD10638	757587	WMWGADAP_1414
BD10639	757587	WMWGADAP_1414
BD10640	757587	WMWGADAP_1414
BD10641	757587	WMWGADAP_1414
BD10969	757890	WMWGADAP_1414
BD10970	757890	WMWGADAP_1414
BD10971	757890	WMWGADAP_1414
BD10972	757890	WMWGADAP_1414
BD10973	757890	WMWGADAP_1414
BD10974	757890	WMWGADAP_1414
BD10975	757891	WMWGADAP_1414
BD10976	757891	WMWGADAP_1414
BD10977	757891	WMWGADAP_1414
BD10978	757891	WMWGADAP_1414
BD10979	757891	WMWGADAP_1414
BD10980	757891	WMWGADAP_1414

BD10981 757891 WMWGADAP_1414

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BD10621
    - BD10969
    - BD10971
    - BD10977

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Alkalinity

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10622	758290, 758291, 758292	WMWGADAP_1414
BD10623	758290, 758291, 758292	WMWGADAP_1414
BD10624	757861, 757862, 757863	WMWGADAP_1414
BD10625	757861, 757862, 757863	WMWGADAP_1414
BD10626	757861, 757862, 757863	WMWGADAP_1414
BD10627	757861, 757862, 757863	WMWGADAP_1414
BD10628	757861, 757862, 757863	WMWGADAP_1414
BD10629	758290, 758291, 758292	WMWGADAP_1414
BD10630	758290, 758291, 758292	WMWGADAP_1414
BD10631	758374, 758375, 758376	WMWGADAP_1414
BD10632	758374, 758375, 758376	WMWGADAP_1414
BD10633	758374, 758375, 758376	WMWGADAP_1414
BD10634	757861, 757862, 757863	WMWGADAP_1414
BD10635	757861, 757862, 757863	WMWGADAP_1414
BD10636	758291, 758292	WMWGADAP_1414
BD10637	758290, 758291, 758292	WMWGADAP_1414
BD10638	758290, 758291, 758292	WMWGADAP_1414
BD10639	758374, 758375, 758376	WMWGADAP_1414
BD10640	758374, 758375, 758376	WMWGADAP_1414
BD10641	758374, 758375, 758376	WMWGADAP_1414
BD10970	758590, 758591, 758592	WMWGADAP_1414
BD10972	758590, 758591, 758592	WMWGADAP_1414
BD10973	758590, 758591, 758592	WMWGADAP_1414
BD10974	758590, 758591, 758592	WMWGADAP_1414
BD10975	758590, 758591, 758592	WMWGADAP_1414
BD10976	758590, 758591, 758592	WMWGADAP_1414
BD10978	758590, 758591, 758592	WMWGADAP_1414
BD10979	758590, 758591, 758592	WMWGADAP_1414
BD10980	758590, 758591, 758592	WMWGADAP_1414
BD10981	758590, 758591, 758592	WMWGADAP_1414

4. All of the above samples were prepared and analyzed by Standard Method 2320B, except for the following:
   - BD10636 Alkalinity could not be performed, pH below titration end point of 4.5 SU.

5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD10628
    - BD10630
    - BD10632

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Anions

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10621	757656, 757608, 757462	WMWGADAP_1414
BD10622	757656, 757608, 757462	WMWGADAP_1414
BD10623	757656, 757608, 757462	WMWGADAP_1414
BD10624	757656, 757608, 757462	WMWGADAP_1414
BD10625	757656, 757608, 757462	WMWGADAP_1414
BD10626	757656, 757608, 757462	WMWGADAP_1414
BD10627	757656, 757608, 757462	WMWGADAP_1414
BD10628	757656, 757608, 757462	WMWGADAP_1414
BD10629	757656, 757608, 757462	WMWGADAP_1414
BD10630	757656, 757608, 757462	WMWGADAP_1414
BD10631	757657, 757609, 757463	WMWGADAP_1414
BD10632	757657, 757609, 757463	WMWGADAP_1414
BD10633	757657, 757609, 757463	WMWGADAP_1414
BD10634	757657, 757609, 757463	WMWGADAP_1414
BD10635	757657, 757609, 757463	WMWGADAP_1414
BD10636	757657, 757609, 757463	WMWGADAP_1414
BD10637	757657, 757609, 757463	WMWGADAP_1414
BD10638	757657, 757609, 757463	WMWGADAP_1414
BD10639	757657, 757609, 757463	WMWGADAP_1414
BD10640	757657, 757609, 757463	WMWGADAP_1414
BD10641	757658, 757610, 757464	WMWGADAP_1414
BD10969	758061, 758288, 758593	WMWGADAP_1414
BD10970	758061, 758288, 758593	WMWGADAP_1414
BD10971	758061, 758288, 758593	WMWGADAP_1414
BD10972	758061, 758288, 758593	WMWGADAP_1414
BD10973	758061, 758288, 758593	WMWGADAP_1414
BD10974	758061, 758288, 758593	WMWGADAP_1414
BD10975	758061, 758288, 758593	WMWGADAP_1414
BD10976	758061, 758288, 758593	WMWGADAP_1414
BD10977	758061, 758288, 758593	WMWGADAP_1414
BD10978	758061, 758288, 758593	WMWGADAP_1414

BD10979	758062, 758289, 758594	WMWGADAP_1414
BD10980	758062, 758289, 758594	WMWGADAP_1414
BD10981	758062, 758289, 758594	WMWGADAP_1414

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD10622	Sulfate	5
BD10623	Sulfate	5
BD10625	Sulfate	16
BD10626	Sulfate	16
BD10627	Sulfate	16
BD10628	Sulfate	32

BD10629	Sulfate	4
BD10630	Chloride, Fluoride	25, 4
BD10632	Chloride, Fluoride	5, 2
BD10636	Sulfate	8
BD10638	Sulfate	8
BD10970	Sulfate	10
BD10972	Sulfate	8
BD10973	Sulfate	2

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Nitrate-Nitrite

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10621	757809	WMWGADAP_1414
BD10622	757809	WMWGADAP_1414
BD10623	757809	WMWGADAP_1414
BD10624	757809	WMWGADAP_1414
BD10625	757809	WMWGADAP_1414
BD10626	757809	WMWGADAP_1414
BD10627	757809	WMWGADAP_1414
BD10628	757809	WMWGADAP_1414
BD10629	757809	WMWGADAP_1414
BD10630	757809	WMWGADAP_1414
BD10631	757810	WMWGADAP_1414
BD10632	757810	WMWGADAP_1414
BD10633	757810	WMWGADAP_1414
BD10634	757810	WMWGADAP_1414
BD10635	757810	WMWGADAP_1414
BD10636	757810	WMWGADAP_1414
BD10637	757810	WMWGADAP_1414
BD10638	757810	WMWGADAP_1414
BD10639	757810	WMWGADAP_1414
BD10640	757810	WMWGADAP_1414
BD10641	757811	WMWGADAP_1414
BD10969	757812	WMWGADAP_1414
BD10970	757812	WMWGADAP_1414
BD10971	757812	WMWGADAP_1414
BD10972	757812	WMWGADAP_1414
BD10973	757812	WMWGADAP_1414
BD10974	757812	WMWGADAP_1414
BD10975	757812	WMWGADAP_1414
BD10976	757812	WMWGADAP_1414
BD10977	757812	WMWGADAP_1414
BD10978	757812	WMWGADAP_1414

BD10979	757813	WMWGADAP_1414
BD10980	757813	WMWGADAP_1414
BD10981	757813	WMWGADAP_1414

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Gadsden Ash Pond

WMWGADAP_1414

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD10621	757439	WMWGADAP_1414
BD10622	757439	WMWGADAP_1414
BD10623	757439	WMWGADAP_1414
BD10624	757439	WMWGADAP_1414
BD10625	757439	WMWGADAP_1414
BD10626	757439	WMWGADAP_1414
BD10627	757439	WMWGADAP_1414
BD10628	757439	WMWGADAP_1414
BD10629	757439	WMWGADAP_1414
BD10630	757439	WMWGADAP_1414
BD10631	757440	WMWGADAP_1414
BD10632	757440	WMWGADAP_1414
BD10633	757440	WMWGADAP_1414
BD10634	757440	WMWGADAP_1414
BD10635	757440	WMWGADAP_1414
BD10636	757440	WMWGADAP_1414
BD10637	757440	WMWGADAP_1414
BD10638	757440	WMWGADAP_1414
BD10639	757440	WMWGADAP_1414
BD10640	757440	WMWGADAP_1414
BD10641	757441	WMWGADAP_1414
BD10969	757845	WMWGADAP_1414
BD10970	757845	WMWGADAP_1414
BD10971	757845	WMWGADAP_1414
BD10972	757845	WMWGADAP_1414
BD10973	757845	WMWGADAP_1414
BD10974	757845	WMWGADAP_1414
BD10975	757845	WMWGADAP_1414
BD10976	757845	WMWGADAP_1414
BD10977	757845	WMWGADAP_1414
BD10978	757845	WMWGADAP_1414
BD10979	757846	WMWGADAP_1414
BD10980	757846	WMWGADAP_1414

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-3

Location Code: WMWGADAPFB
Collected: 6/6/23 09:45
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10621

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 11:43		1	Not Detected	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	6/9/23 11:50	6/13/23 11:43		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 12:51		1.015	0.000272	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 12:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:08	6/14/23 10:08		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-3

Location Code: WMWGADAPFB
Collected: 6/6/23 09:45
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10621

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 10:50	6/13/23 10:50		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/12/23 12:35	6/12/23 12:35		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/9/23 11:40	6/9/23 11:40		1	0.0654	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/8/23 13:49	6/8/23 13:49		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 6/6/23 09:45
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BD10621

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 6/6/23 09:45
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BD10621

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 6/6/23 09:45
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BD10621

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10623	Solids, Dissolved	mg/L	1.00	25.0			277	51.0	40.0 to 60.0			0.362	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 6/6/23 09:50
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10622

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 11:46		1.015	0.415	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 11:46		1.015	39.8	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 14:01		101.5	53.8	mg/L	0.8120	4.06	
* Lithium, Total	6/9/23 11:50	6/13/23 11:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 11:46		1.015	13.0	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 11:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 11:46		1	9.33	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 11:46		1.015	4.36	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 11:46		1.015	14.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 10:43		1.015	0.419	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 10:43		1.015	38.3	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 13:50		101.5	51.5	mg/L	0.8120	4.06	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 10:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 10:43		1.015	12.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 10:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 10:43		1	9.14	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 10:43		1.015	4.27	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 10:43		1.015	14.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 12:54		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 12:54		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/9/23 11:50	6/9/23 12:54		1.015	0.0128	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 12:54		1.015	0.254	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 12:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 12:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 12:54		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 12:54		1.015	0.0297	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 12:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:06		5.075	2.81	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 6/6/23 09:50
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10622

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 12:54		1.015	2.73	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 12:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 12:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	0.0120	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	0.248	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	0.000205	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	0.0294	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 09:40		5.075	2.52	mg/L	0.000761	0.005075	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	2.71	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:10	6/14/23 10:10		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/15/23 13:06	6/15/23 14:31		1	99.9	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	263	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	99.9	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 11:03	6/13/23 11:03		1	1.69	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 6/6/23 09:50
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10622

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 12:36	6/12/23 12:36		1	6.68	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 11:41	6/9/23 11:41		1	0.225	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:03	6/8/23 14:03		5	88.7	mg/L	3.0	10	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	6/6/23 09:48	6/6/23 09:48			494.14	uS/cm			FA
pH	6/6/23 09:48	6/6/23 09:48			6.74	SU			FA
Temperature	6/6/23 09:48	6/6/23 09:48			18.89	C			FA
Turbidity	6/6/23 09:48	6/6/23 09:48			7.79	NTU			FA
Sulfide	6/6/23 09:48	6/6/23 09:48			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:50
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BD10622

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:50
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BD10622

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:50
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BD10622

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10637	Alkalinity	mg CaCO3/L					100	51.2	45.0 to 55.0			0.995	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10623	Solids, Dissolved	mg/L	1.00	25.0			277	51.0	40.0 to 60.0			0.362	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4 Dup

Location Code: WMWGADAP
Collected: 6/6/23 09:50
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10623

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 11:49		1.015	0.419	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 11:49		1.015	38.8	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 14:04		101.5	54.6	mg/L	0.8120	4.06	
* Lithium, Total	6/9/23 11:50	6/13/23 11:49		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 11:49		1.015	12.9	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 11:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 11:49		1	9.33	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 11:49		1.015	4.36	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 11:49		1.015	14.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 10:46		1.015	0.412	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 10:46		1.015	38.4	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 13:53		101.5	52.0	mg/L	0.8120	4.06	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 10:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 10:46		1.015	12.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 10:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 10:46		1	9.12	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 10:46		1.015	4.26	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 10:46		1.015	14.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/9/23 11:50	6/9/23 12:58		1.015	0.0125	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 12:58		1.015	0.255	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	6/9/23 11:50	6/9/23 12:58		1.015	0.0299	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:10		5.075	2.84	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4 Dup

Location Code: WMWGADAP
Collected: 6/6/23 09:50
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10623

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 12:58		1.015	2.63	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 12:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	0.0120	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	0.254	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	0.000205	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	0.0298	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 09:43		5.075	2.66	mg/L	0.000761	0.005075	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	2.74	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 15:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:12	6/14/23 10:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/15/23 13:06	6/15/23 14:31		1	95.2	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	276	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	95.1	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 11:21	6/13/23 11:21		1	1.65	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4 Dup

Location Code: WMWGADAP
Collected: 6/6/23 09:50
Customer ID:
Submittal Date: 6/8/23 09:57

Laboratory ID Number: BD10623

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 12:37	6/12/23 12:37		1	6.76	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 11:42	6/9/23 11:42		1	0.198	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:05	6/8/23 14:05		5	86.7	mg/L	3.0	10	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	6/6/23 09:48	6/6/23 09:48			494.14	uS/cm			FA
pH	6/6/23 09:48	6/6/23 09:48			6.74	SU			FA
Temperature	6/6/23 09:48	6/6/23 09:48			18.89	C			FA
Turbidity	6/6/23 09:48	6/6/23 09:48			7.79	NTU			FA
Sulfide	6/6/23 09:48	6/6/23 09:48			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:50
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond - MW-4 Dup

Laboratory ID Number: BD10623

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:50
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond - MW-4 Dup

Laboratory ID Number: BD10623

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:50
Customer ID:
Delivery Date: 6/8/23 09:57

Description: Gadsden Ash Pond - MW-4 Dup

Laboratory ID Number: BD10623

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10637	Alkalinity	mg CaCO3/L					100	51.2	45.0 to 55.0			0.995	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10623	Solids, Dissolved	mg/L	1.00	25.0			277	51.0	40.0 to 60.0			0.362	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 6/5/23 12:07
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10624

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 11:52		1.015	0.0624	mg/L	0.030000	0.1015	J
* Calcium, Total	6/9/23 11:50	6/13/23 11:52		1.015	23.0	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 11:52		1.015	0.514	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 11:52		1.015	0.0189	mg/L	0.007105	0.01999956	J
* Magnesium, Total	6/9/23 11:50	6/13/23 11:52		1.015	5.52	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 11:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 11:52		1	19.3	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 11:52		1.015	9.00	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 14:07		10.15	66.1	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 10:49		1.015	0.0624	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/8/23 14:11	6/9/23 10:49		1.015	22.6	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 10:49		1.015	0.403	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 10:49		1.015	0.0185	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 10:49		1.015	5.24	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 10:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 10:49		1	19.0	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 10:49		1.015	8.87	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 13:57		10.15	64.4	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:02		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 13:02		1.015	0.0675	mg/L	0.009135	0.05075	
* Arsenic, Total	6/9/23 11:50	6/9/23 13:02		1.015	0.000411	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 13:02		1.015	0.521	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:02		1.015	0.000367	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:02		1.015	0.0000697	mg/L	0.000068	0.000203	J
* Lead, Total	6/9/23 11:50	6/9/23 13:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 13:02		1.015	0.0489	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 6/5/23 12:07
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10624

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:02		1.015	0.865	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	0.000369	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	0.508	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	0.0470	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	0.855	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:14	6/14/23 10:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/13/23 12:07	6/13/23 14:25		1	197	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	227	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	194	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	2.83	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 11:36	6/13/23 11:36		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 6/5/23 12:07
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10624

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/12/23 12:39	6/12/23 12:39		1	5.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/9/23 11:43	6/9/23 11:43		1	0.206	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/8/23 13:53	6/8/23 13:53		1	3.68	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	6/5/23 12:04	6/5/23 12:04			383.04	uS/cm			FA
pH	6/5/23 12:04	6/5/23 12:04			7.72	SU			FA
Temperature	6/5/23 12:04	6/5/23 12:04			24.19	C			FA
Turbidity	6/5/23 12:04	6/5/23 12:04			4.23	NTU			FA
Sulfide	6/5/23 12:04	6/5/23 12:04			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 12:07
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BD10624

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 12:07
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BD10624

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/5/23 12:07
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BD10624

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10628	Alkalinity	mg CaCO3/L					63.5	50.2	45.0 to 55.0			0.315	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 6/5/23 13:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10625

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 11:55		1.015	0.771	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 14:11		10.15	70.5	mg/L	0.70035	4.06	
* Iron, Total	6/9/23 11:50	6/13/23 11:55		1.015	2.31	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 11:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 11:55		1.015	20.8	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 11:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 11:55		1	8.07	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 11:55		1.015	3.77	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 11:55		1.015	15.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 10:52		1.015	0.770	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 14:00		10.15	67.1	mg/L	0.70035	4.06	
* Iron, Dissolved	6/8/23 14:11	6/9/23 10:52		1.015	1.64	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 10:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 10:52		1.015	19.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 10:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 10:52		1	7.85	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 10:52		1.015	3.67	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 10:52		1.015	15.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:05		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:05		1.015	0.00144	mg/L	0.000112	0.000203	
* Aluminum, Total	6/9/23 11:50	6/9/23 13:05		1.015	0.0121	mg/L	0.009135	0.05075	J
* Barium, Total	6/9/23 11:50	6/9/23 13:05		1.015	0.0865	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:05		1.015	0.000265	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:05		1.015	0.00890	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 13:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:14		92.365	29.4	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 6/5/23 13:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10625

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:05		1.015	2.95	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:05		1.015	0.000125	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	0.000840	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	0.0812	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	0.000221	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	0.00859	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 09:47		92.365	30.8	mg/L	0.013855	0.092365	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	2.95	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 15:57		1.015	0.000117	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:16	6/14/23 10:16		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/13/23 12:07	6/13/23 14:25		1	138	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	408	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	138	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 11:50	6/13/23 11:50		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 6/5/23 13:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10625

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/12/23 12:40	6/12/23 12:40		1	5.58	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/9/23 11:44	6/9/23 11:44		1	0.112	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/8/23 14:06	6/8/23 14:06		16	172	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	6/5/23 13:05	6/5/23 13:05			606.44	uS/cm			FA
pH	6/5/23 13:05	6/5/23 13:05			6.13	SU			FA
Temperature	6/5/23 13:05	6/5/23 13:05			19.43	C			FA
Turbidity	6/5/23 13:05	6/5/23 13:05			5.68	NTU			FA
Sulfide	6/5/23 13:05	6/5/23 13:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 13:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BD10625

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 13:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BD10625

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/5/23 13:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BD10625

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10628	Alkalinity	mg CaCO3/L					63.5	50.2	45.0 to 55.0			0.315	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 6/5/23 14:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10626

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 11:58		1.015	0.858	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 14:14		10.15	55.4	mg/L	0.70035	4.06	
* Iron, Total	6/9/23 11:50	6/13/23 11:58		1.015	0.126	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 11:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 11:58		1.015	16.2	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 11:58		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 11:58		1	9.80	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 11:58		1.015	4.58	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 11:58		1.015	10.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 10:55		1.015	0.860	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 14:03		10.15	54.0	mg/L	0.70035	4.06	
* Iron, Dissolved	6/8/23 14:11	6/9/23 10:55		1.015	0.125	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 10:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 10:55		1.015	15.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 10:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 10:55		1	9.74	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 10:55		1.015	4.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 10:55		1.015	9.79	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:09		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:09		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	6/9/23 11:50	6/9/23 13:09		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/9/23 11:50	6/9/23 13:09		1.015	0.0288	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:09		1.015	0.000350	mg/L	0.000068	0.000203	
* Chromium, Total	6/9/23 11:50	6/9/23 13:09		1.015	0.000263	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:09		1.015	0.0118	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 13:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:17		92.365	20.6	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 6/5/23 14:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10626

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:09		1.015	2.80	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:09		1.015	0.000104	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	0.0285	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	0.000340	mg/L	0.000068	0.000203	
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	0.000221	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	0.0117	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 09:50		92.365	21.0	mg/L	0.013855	0.092365	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	2.87	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:01		1.015	0.0000894	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:17	6/14/23 10:17		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/13/23 12:07	6/13/23 14:25		1	61.8	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	334	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	61.8	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 12:05	6/13/23 12:05		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 6/5/23 14:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10626

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 12:41	6/12/23 12:41		1	4.57	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 11:46	6/9/23 11:46		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:07	6/8/23 14:07		16	171	mg/L	9.6	32	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	6/5/23 14:05	6/5/23 14:05			489.43	uS/cm			FA
pH	6/5/23 14:05	6/5/23 14:05			5.66	SU			FA
Temperature	6/5/23 14:05	6/5/23 14:05			21.16	C			FA
Turbidity	6/5/23 14:05	6/5/23 14:05			1.6	NTU			FA
Sulfide	6/5/23 14:05	6/5/23 14:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BD10626

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BD10626

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BD10626

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10628	Alkalinity	mg CaCO3/L					63.5	50.2	45.0 to 55.0			0.315	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3 Dup

Location Code: WMWGADAP
Collected: 6/5/23 14:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10627

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:02		1.015	0.858	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 14:17		10.15	54.3	mg/L	0.70035	4.06	
* Iron, Total	6/9/23 11:50	6/13/23 12:02		1.015	0.126	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:02		1.015	16.2	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:02		1	9.87	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:02		1.015	4.61	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:02		1.015	10.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 10:58		1.015	0.859	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 14:06		10.15	54.8	mg/L	0.70035	4.06	
* Iron, Dissolved	6/8/23 14:11	6/9/23 10:58		1.015	0.122	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 10:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 10:58		1.015	15.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 10:58		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 10:58		1	9.69	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 10:58		1.015	4.53	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 10:58		1.015	9.97	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:12		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 13:12		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:12		1.015	0.000119	mg/L	0.000112	0.000203	J
* Barium, Total	6/9/23 11:50	6/9/23 13:12		1.015	0.0291	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:12		1.015	0.000364	mg/L	0.000068	0.000203	
* Chromium, Total	6/9/23 11:50	6/9/23 13:12		1.015	0.000326	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:12		1.015	0.0118	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 13:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:21		92.365	20.9	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3 Dup

Location Code: WMWGADAP
Collected: 6/5/23 14:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10627

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:12		1.015	2.84	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:12		1.015	0.000102	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	0.000116	mg/L	0.000112	0.000203	J
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	0.0279	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	0.000317	mg/L	0.000068	0.000203	
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	0.0112	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 09:54		92.365	19.9	mg/L	0.013855	0.092365	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	2.80	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:04		1.015	0.0000971	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:19	6/14/23 10:19		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/13/23 12:07	6/13/23 14:25		1	64.6	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	330	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	64.6	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 12:19	6/13/23 12:19		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3 Dup

Location Code: WMWGADAP
Collected: 6/5/23 14:08
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10627

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 12:42	6/12/23 12:42		1	4.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 11:47	6/9/23 11:47		1	0.0635	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:08	6/8/23 14:08		16	170	mg/L	9.6	32	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	6/5/23 14:05	6/5/23 14:05			489.43	uS/cm			FA
pH	6/5/23 14:05	6/5/23 14:05			5.66	SU			FA
Temperature	6/5/23 14:05	6/5/23 14:05			21.16	C			FA
Turbidity	6/5/23 14:05	6/5/23 14:05			1.6	NTU			FA
Sulfide	6/5/23 14:05	6/5/23 14:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-3 Dup

Laboratory ID Number: BD10627

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-3 Dup

Laboratory ID Number: BD10627

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:08
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-3 Dup

Laboratory ID Number: BD10627

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10628	Alkalinity	mg CaCO3/L					63.5	50.2	45.0 to 55.0			0.315	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 6/5/23 15:15
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10628

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	6/9/23 11:50	6/13/23 12:05		1.015	0.880	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 14:20		10.15	166	mg/L	0.70035	4.06	
* Iron, Total	6/9/23 11:50	6/13/23 12:05		1.015	0.659	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:05		1.015	31.1	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:05		1	9.84	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:05		1.015	4.60	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:05		1.015	15.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:01		1.015	0.878	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 14:09		10.15	141	mg/L	0.70035	4.06	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:01		1.015	0.595	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:01		1.015	29.7	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:01		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:01		1	9.50	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:01		1.015	4.44	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:01		1.015	14.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/9/23 11:50	6/9/23 13:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:16		1.015	0.00181	mg/L	0.000112	0.000203	
* Aluminum, Total	6/9/23 11:50	6/9/23 13:16		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/9/23 11:50	6/9/23 13:16		1.015	0.0272	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:16		1.015	0.000275	mg/L	0.000068	0.000203	
* Chromium, Total	6/9/23 11:50	6/9/23 13:16		1.015	0.000271	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:16		1.015	0.0118	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 13:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:24		5.075	2.10	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 6/5/23 15:15
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10628

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:16		1.015	7.39	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:16		1.015	0.000101	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	0.00162	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	0.0260	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	0.000203	mg/L	0.000068	0.000203	
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	0.0109	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 09:57		5.075	2.05	mg/L	0.000761	0.005075	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	7.30	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:08		1.015	0.0000966	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:21	6/14/23 10:21		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/13/23 12:07	6/13/23 14:25		1	63.3	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	710	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	63.3	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 12:33	6/13/23 12:33		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 6/5/23 15:15
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10628

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 12:43	6/12/23 12:43		1	6.12	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 11:48	6/9/23 11:48		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:10	6/8/23 14:10		32	406	mg/L	19.2	64	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	6/5/23 15:12	6/5/23 15:12			904.18	uS/cm			FA
pH	6/5/23 15:12	6/5/23 15:12			5.68	SU			FA
Temperature	6/5/23 15:12	6/5/23 15:12			18.48	C			FA
Turbidity	6/5/23 15:12	6/5/23 15:12			3.11	NTU			FA
Sulfide	6/5/23 15:12	6/5/23 15:12			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 15:15
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BD10628

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 15:15
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BD10628

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/5/23 15:15
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BD10628

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10628	Alkalinity	mg CaCO3/L					63.5	50.2	45.0 to 55.0			0.315	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 6/6/23 09:22
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10629

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:08		1.015	0.367	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 14:23		10.15	60.7	mg/L	0.70035	4.06	
* Iron, Total	6/9/23 11:50	6/13/23 14:23		10.15	16.7	mg/L	0.08120	0.406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:08		1.015	0.0258	mg/L	0.007105	0.01999956	
* Magnesium, Total	6/9/23 11:50	6/13/23 12:08		1.015	6.85	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:08		1.015	0.0203	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:08		1	10.3	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:08		1.015	4.83	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:08		1.015	3.26	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:05		1.015	0.377	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 14:12		10.15	49.8	mg/L	0.70035	4.06	
* Iron, Dissolved	6/8/23 14:11	6/9/23 14:12		10.15	12.9	mg/L	0.08120	0.406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:05		1.015	0.0249	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:05		1.015	6.85	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:05		1.015	0.0196	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:05		1	10.1	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:05		1.015	4.72	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:05		1.015	3.29	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:19		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:19		1.015	0.652	mg/L	0.000112	0.000203	
* Aluminum, Total	6/9/23 11:50	6/9/23 13:19		1.015	0.0565	mg/L	0.009135	0.05075	
* Barium, Total	6/9/23 11:50	6/9/23 13:19		1.015	0.115	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:19		1.015	0.000313	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:19		1.015	0.0400	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 13:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:28		10.15	9.33	mg/L	0.001522	0.01015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 6/6/23 09:22
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10629

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:19		1.015	7.98	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:19		1.015	0.000425	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	0.531	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	0.110	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	0.0376	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 10:01		10.15	8.84	mg/L	0.001522	0.01015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	7.95	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:11		1.015	0.000416	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:23	6/14/23 10:23		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/15/23 13:06	6/15/23 14:31		1	121	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	246	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	121	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 12:50	6/13/23 12:50		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 6/6/23 09:22
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10629

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 12:45	6/12/23 12:45		1	2.02	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 11:49	6/9/23 11:49		1	0.204	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:11	6/8/23 14:11		4	73.9	mg/L	2.4	8	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	6/6/23 09:19	6/6/23 09:19			381.17	uS/cm			FA
pH	6/6/23 09:19	6/6/23 09:19			6.63	SU			FA
Temperature	6/6/23 09:19	6/6/23 09:19			18.93	C			FA
Turbidity	6/6/23 09:19	6/6/23 09:19			6.88	NTU			FA
Sulfide	6/6/23 09:19	6/6/23 09:19			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:22
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BD10629

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:22
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BD10629

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/6/23 09:22
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BD10629

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10637	Alkalinity	mg CaCO3/L					100	51.2	45.0 to 55.0			0.995	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 6/6/23 12:33
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10630

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:11		1.015	0.569	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 12:11		1.015	3.22	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:11		1.015	0.0524	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:11		1.015	0.205	mg/L	0.007105	0.01999956	
* Magnesium, Total	6/9/23 11:50	6/13/23 12:11		1.015	1.10	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:11		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:11		1	8.35	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:11		1.015	3.90	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 14:26		101.5	391	mg/L	4.060	40.6	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:08		1.015	0.570	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:08		1.015	3.06	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:08		1.015	0.0434	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:08		1.015	0.196	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:08		1.015	1.03	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:08		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:08		1	8.17	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:08		1.015	3.82	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 14:16		10.15	390	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:23		1.015	0.000917	mg/L	0.000112	0.000203	
* Aluminum, Total	6/9/23 11:50	6/9/23 13:23		1.015	0.0117	mg/L	0.009135	0.05075	J
* Barium, Total	6/9/23 11:50	6/9/23 13:23		1.015	0.433	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:23		1.015	0.000256	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/9/23 11:50	6/9/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 13:23		1.015	0.00708	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 6/6/23 12:33
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10630

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:23		1.015	1.11	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	0.00147	mg/L	0.000710	0.001015	
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	0.00143	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	0.426	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	0.00695	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	1.06	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 18:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:25	6/14/23 10:25		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/15/23 13:06	6/15/23 14:31		1	564	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	948	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	547	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	17.0	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 13:03	6/13/23 13:03		1	1.75	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 6/6/23 12:33
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10630

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/12/23 13:00	6/12/23 13:00		25	163	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/9/23 12:42	6/9/23 12:42		4	7.65	mg/L	0.24	0.5	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/8/23 14:00	6/8/23 14:00		1	18.7	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	6/6/23 12:30	6/6/23 12:30			1631.58	uS/cm			FA
pH	6/6/23 12:30	6/6/23 12:30			8.41	SU			FA
Temperature	6/6/23 12:30	6/6/23 12:30			20.25	C			FA
Turbidity	6/6/23 12:30	6/6/23 12:30			1.67	NTU			FA
Sulfide	6/6/23 12:30	6/6/23 12:30			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 12:33
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BD10630

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10630	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.115	0.114	0.106	0.0850 to 0.115	103	70.0 to 130	0.873	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10630	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.102	0.102	0.0921	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10630	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10630	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.544	0.540	0.102	0.0850 to 0.115	111	70.0 to 130	0.738	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10630	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.105	0.109	0.110	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10630	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.59	1.58	1.02	0.850 to 1.15	102	70.0 to 130	0.631	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10630	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.0946	0.0966	0.0977	0.0850 to 0.115	94.6	70.0 to 130	2.09	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10630	Calcium, Total	mg/L	0.00629	0.152	5.00	8.03	7.88	5.13	4.25 to 5.75	96.2	70.0 to 130	1.89	20.0
BD10630	Chloride	mg/L	0.0342	1.00	250	425	415	10.2	9.00 to 11.0	105	80.0 to 120	2.38	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.100	0.0994	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.602	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10630	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD10630	Fluoride	mg/L	0.0323	0.125	10.0	18.8	17.3	2.68	2.25 to 2.75	112	80.0 to 120	8.31	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10630	Iron, Total	mg/L	0.000609	0.0176	0.2	0.249	0.250	0.205	0.170 to 0.230	98.3	70.0 to 130	0.401	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 12:33
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BD10630

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10630	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10630	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.412	0.426	0.205	0.170 to 0.230	104	70.0 to 130	3.34	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10630	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	6.01	6.13	5.14	4.25 to 5.75	98.2	70.0 to 130	1.98	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10630	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.109	0.107	0.101	0.0850 to 0.115	102	70.0 to 130	1.85	20.0
BD10630	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00375	0.00379	0.00388	0.00340 to 0.00460	93.8	70.0 to 130	1.06	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10630	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10630	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.7	10.7	8.50 to 11.5	104	70.0 to 130	1.72	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10630	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10630	Silicon, Total	mg/L	-0.000055	0.0440	1.00	4.88	4.93	1.04	0.850 to 1.15	98.0	70.0 to 130	1.02	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10630	Sodium, Total	mg/L	-0.000566	0.0880	5.00	399	388	5.07	4.25 to 5.75	160	70.0 to 130	2.80	20.0
BD10630	Sulfate	mg/L	0.186	2.0	20.0	38.5	38.5	19.6	18.0 to 22.0	99.0	80.0 to 120	0.00	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10630	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.104	0.109	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD10630	Total Organic Carbon	mg/L	0.142	1.00	10.0	11.5	11.6	24.8		97.5	80.0 to 120	0.866	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/6/23 12:33
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BD10630

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10637	Alkalinity	mg CaCO3/L					100	51.2	45.0 to 55.0			0.995	10.0
BD10630	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	2.08	-0.021	1.91	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 6/7/23 08:24
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10631

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:27		1.015	0.576	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 12:27		1.015	5.05	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:27		1.015	0.147	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:27		1.015	0.0668	mg/L	0.007105	0.01999956	
* Magnesium, Total	6/9/23 11:50	6/13/23 12:27		1.015	1.35	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:27		1	9.18	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:27		1.015	4.29	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 14:42		10.15	146	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:11		1.015	0.579	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:11		1.015	5.19	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:11		1.015	0.132	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:11		1.015	0.0638	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:11		1.015	1.36	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:11		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:11		1	8.97	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:11		1.015	4.19	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 14:19		10.15	138	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:45		1.015	0.00165	mg/L	0.000112	0.000203	
* Aluminum, Total	6/9/23 11:50	6/9/23 13:45		1.015	0.0202	mg/L	0.009135	0.05075	J
* Barium, Total	6/9/23 11:50	6/9/23 13:45		1.015	0.154	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:45		1.015	0.000262	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/9/23 11:50	6/9/23 13:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 13:45		1.015	0.0163	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 6/7/23 08:24
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10631

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:45		1.015	0.709	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	0.00166	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	0.157	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	0.0169	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	0.710	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:34	6/14/23 10:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/19/23 10:50	6/19/23 13:08		1	280	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	324	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	274	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	6.31	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 14:15	6/13/23 14:15		1	1.01	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 6/7/23 08:24
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10631

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:12	6/12/23 13:12		1	6.98	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 12:54	6/9/23 12:54		1	2.51	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:22	6/8/23 14:22		1	2.39	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	6/7/23 08:21	6/7/23 08:21			527.09	uS/cm			FA
pH	6/7/23 08:21	6/7/23 08:21			7.81	SU			FA
Temperature	6/7/23 08:21	6/7/23 08:21			19.98	C			FA
Turbidity	6/7/23 08:21	6/7/23 08:21			2.02	NTU			FA
Sulfide	6/7/23 08:21	6/7/23 08:21			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 08:24
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BD10631

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.107	0.108	0.101	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10631	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.100	0.100	0.0886	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10631	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.101	0.101	0.0967	0.0850 to 0.115	99.3	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10631	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.251	0.256	0.0982	0.0850 to 0.115	94.0	70.0 to 130	1.97	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10631	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.100	0.105	0.0995	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10631	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.61	1.63	1.02	0.850 to 1.15	103	70.0 to 130	1.23	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10631	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10631	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	10.3	9.97	4.83	4.25 to 5.75	102	70.0 to 130	3.26	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10631	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10631	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.100	0.0991	0.100	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10631	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	0.330	0.329	0.209	0.170 to 0.230	99.0	70.0 to 130	0.303	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 08:24
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BD10631

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10631	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10631	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.263	0.264	0.200	0.170 to 0.230	99.6	70.0 to 130	0.380	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10631	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	6.22	6.18	4.90	4.25 to 5.75	97.2	70.0 to 130	0.645	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10631	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	0.115	0.114	0.0988	0.0850 to 0.115	98.1	70.0 to 130	0.873	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10631	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.201	0.203	0.198	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10631	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.1	11.0	10.6	8.50 to 11.5	104	70.0 to 130	0.905	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10631	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.105	0.105	0.101	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10631	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	5.23	5.23	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10631	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	131	132	4.86	4.25 to 5.75	-140	70.0 to 130	0.760	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10631	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/7/23 08:24
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BD10631

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10640	Alkalinity	mg CaCO3/L					65.1	50.5	45.0 to 55.0			1.98	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 6/7/23 10:11
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10632

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:30		1.015	0.651	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 12:30		1.015	6.41	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:30		1.015	0.0623	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:30		1.015	0.125	mg/L	0.007105	0.01999956	
* Magnesium, Total	6/9/23 11:50	6/13/23 12:30		1.015	2.33	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:30		1	9.89	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:30		1.015	4.62	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 14:45		10.15	322	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:27		1.015	0.650	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:27		1.015	5.58	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:27		1.015	0.0316	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:27		1.015	0.118	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:27		1.015	2.01	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:27		1	9.54	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:27		1.015	4.46	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 14:34		10.15	250	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:48		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 13:48		1.015	0.0455	mg/L	0.009135	0.05075	J
* Arsenic, Total	6/9/23 11:50	6/9/23 13:48		1.015	0.000600	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 13:48		1.015	0.385	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:48		1.015	0.000284	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/9/23 11:50	6/9/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 13:48		1.015	0.0249	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 6/7/23 10:11
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10632

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:48		1.015	1.65	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	0.0122	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	0.000454	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	0.352	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	0.0212	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	1.44	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	0.00219	mg/L	0.000508	0.001015	
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:36	6/14/23 10:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/19/23 10:50	6/19/23 13:08		1	433	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	658	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	421	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	11.7	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 14:28	6/13/23 14:28		1	5.80	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 6/7/23 10:11
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10632

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:26	6/12/23 13:26		5	65.3	mg/L	2.50	5	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 13:10	6/9/23 13:10		2	5.43	mg/L	0.12	0.25	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:23	6/8/23 14:23		1	33.6	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	6/7/23 10:08	6/7/23 10:08			1107.70	uS/cm			FA
pH	6/7/23 10:08	6/7/23 10:08			8.25	SU			FA
Temperature	6/7/23 10:08	6/7/23 10:08			21.67	C			FA
Turbidity	6/7/23 10:08	6/7/23 10:08			2.3	NTU			FA
Sulfide	6/7/23 10:08	6/7/23 10:08			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 10:11
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BD10632

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 10:11
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BD10632

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/7/23 10:11
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BD10632

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10640	Alkalinity	mg CaCO3/L					65.1	50.5	45.0 to 55.0			1.98	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 6/7/23 12:14
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10633

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:33		1.015	0.361	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 12:33		1.015	10.0	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:33		1.015	0.105	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:33		1.015	0.0517	mg/L	0.007105	0.01999956	
* Magnesium, Total	6/9/23 11:50	6/13/23 12:33		1.015	2.30	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:33		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:33		1	10.3	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:33		1.015	4.79	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 14:48		10.15	95.2	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:30		1.015	0.367	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:30		1.015	9.70	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:30		1.015	0.0367	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:30		1.015	0.0499	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:30		1.015	2.15	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:30		1	9.95	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:30		1.015	4.65	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 14:38		10.15	86.8	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:52		1.015	0.00215	mg/L	0.000112	0.000203	
* Aluminum, Total	6/9/23 11:50	6/9/23 13:52		1.015	0.0642	mg/L	0.009135	0.05075	
* Barium, Total	6/9/23 11:50	6/9/23 13:52		1.015	0.253	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:52		1.015	0.000364	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/9/23 11:50	6/9/23 13:52		1.015	0.000312	mg/L	0.000068	0.000203	
* Manganese, Total	6/9/23 11:50	6/9/23 13:52		1.015	0.0159	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 6/7/23 12:14
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10633

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:52		1.015	0.584	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	0.00939	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	0.00186	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	0.251	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	0.0119	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	0.549	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:38	6/14/23 10:38		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/19/23 10:50	6/19/23 13:08		1	200	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/8/23 11:20	6/9/23 13:15		1	235	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	194	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	6.03	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 14:46	6/13/23 14:46		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 6/7/23 12:14
Customer ID:
Submittal Date: 6/8/23 09:58

Laboratory ID Number: BD10633

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:14	6/12/23 13:14		1	2.05	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 12:57	6/9/23 12:57		1	1.12	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:24	6/8/23 14:24		1	6.49	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	6/7/23 12:11	6/7/23 12:11			372.45	uS/cm			FA
pH	6/7/23 12:11	6/7/23 12:11			7.41	SU			FA
Temperature	6/7/23 12:11	6/7/23 12:11			20.89	C			FA
Turbidity	6/7/23 12:11	6/7/23 12:11			1.2	NTU			FA
Sulfide	6/7/23 12:11	6/7/23 12:11			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 12:14
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BD10633

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 12:14
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BD10633

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/7/23 12:14
Customer ID:
Delivery Date: 6/8/23 09:58

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BD10633

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10640	Alkalinity	mg CaCO3/L					65.1	50.5	45.0 to 55.0			1.98	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10633	Solids, Dissolved	mg/L	1.00	25.0			231	51.0	40.0 to 60.0			1.72	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 6/5/23 13:00
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10634

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:36		1.015	0.0776	mg/L	0.030000	0.1015	J
* Calcium, Total	6/9/23 11:50	6/13/23 12:36		1.015	10.6	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:36		1.015	0.0413	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:36		1.015	3.43	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:36		1	12.3	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:36		1.015	5.74	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:36		1.015	13.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	0.0778	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	10.4	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	0.0360	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	3.24	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:33		1	12.0	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	5.62	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:33		1.015	12.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	6/9/23 11:50	6/9/23 13:55		1.015	0.0809	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:55		1.015	0.000252	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:55		1.015	0.00113	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 13:55		1.015	0.296	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 6/5/23 13:00
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10634

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:55		1.015	1.06	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	0.0774	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	0.00108	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	0.284	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	1.07	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:40	6/14/23 10:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/13/23 12:07	6/13/23 14:25		1	42.9	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	94.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	42.9	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 15:00	6/13/23 15:00		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 6/5/23 13:00
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10634

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:16	6/12/23 13:16		1	10.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 12:58	6/9/23 12:58		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:26	6/8/23 14:26		1	15.1	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	6/5/23 12:56	6/5/23 12:56			141.08	uS/cm			FA
pH	6/5/23 12:56	6/5/23 12:56			5.68	SU			FA
Temperature	6/5/23 12:56	6/5/23 12:56			17.93	C			FA
Turbidity	6/5/23 12:56	6/5/23 12:56			1.06	NTU			FA
Sulfide	6/5/23 12:56	6/5/23 12:56			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 13:00
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BD10634

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 13:00
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BD10634

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/5/23 13:00
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BD10634

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10628	Alkalinity	mg CaCO3/L					63.5	50.2	45.0 to 55.0			0.315	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 6/5/23 14:30
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10635

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/9/23 11:50	6/13/23 12:39		1.015	13.4	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:39		1.015	0.0223	mg/L	0.008120	0.0406	J
* Lithium, Total	6/9/23 11:50	6/13/23 12:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:39		1.015	3.50	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:39		1	16.6	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:39		1.015	7.74	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:39		1.015	6.22	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	12.9	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	0.0152	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	3.28	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:36		1	16.4	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	7.68	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:36		1.015	6.10	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 13:59		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 13:59		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	6/9/23 11:50	6/9/23 13:59		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/9/23 11:50	6/9/23 13:59		1.015	0.0862	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 13:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 13:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 13:59		1.015	0.000290	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 13:59		1.015	0.00444	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 13:59		1.015	0.000394	mg/L	0.000068	0.000203	
* Manganese, Total	6/9/23 11:50	6/9/23 13:59		1.015	0.207	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 6/5/23 14:30
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10635

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 13:59		1.015	0.491	mg/L	0.169505	0.5075	J
* Selenium, Total	6/9/23 11:50	6/9/23 13:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 13:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	0.0887	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	0.000222	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	0.00454	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	0.000394	mg/L	0.000068	0.000203	
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	0.212	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	0.522	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:41	6/14/23 10:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/13/23 12:07	6/13/23 14:25		1	52.6	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	84.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	52.6	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/13/23 12:07	6/13/23 14:25		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 15:14	6/13/23 15:14		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 6/5/23 14:30
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10635

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:17	6/12/23 13:17		1	5.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 12:59	6/9/23 12:59		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:27	6/8/23 14:27		1	1.31	mg/L	0.6	2	J
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	6/5/23 14:26	6/5/23 14:26			116.96	uS/cm			FA
pH	6/5/23 14:26	6/5/23 14:26			5.20	SU			FA
Temperature	6/5/23 14:26	6/5/23 14:26			18.73	C			FA
Turbidity	6/5/23 14:26	6/5/23 14:26			1.36	NTU			FA
Sulfide	6/5/23 14:26	6/5/23 14:26			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:30
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BD10635

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:30
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BD10635

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/5/23 14:30
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BD10635

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10628	Alkalinity	mg CaCO3/L					63.5	50.2	45.0 to 55.0			0.315	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 6/6/23 08:43
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10636

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/9/23 11:50	6/13/23 12:43		1.015	14.9	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:43		1.015	0.0163	mg/L	0.008120	0.0406	J
* Lithium, Total	6/9/23 11:50	6/13/23 12:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:43		1.015	6.51	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:43		1	9.20	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:43		1.015	4.30	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:43		1.015	2.78	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	14.7	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	6.20	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:39		1	8.95	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	4.18	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:39		1.015	2.65	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 14:02		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 15:31		92.365	14.1	mg/L	0.831285	4.61825	
* Arsenic, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.00160	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.0423	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.00139	mg/L	0.000406	0.001015	
* Cadmium, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.000620	mg/L	0.000068	0.000203	
* Chromium, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.000838	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.0432	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.00202	mg/L	0.000068	0.000203	
* Manganese, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.571	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 6/6/23 08:43
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10636

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.398	mg/L	0.169505	0.5075	J
* Selenium, Total	6/9/23 11:50	6/9/23 14:02		1.015	0.00220	mg/L	0.000508	0.001015	
* Thallium, Total	6/9/23 11:50	6/9/23 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/9/23 10:04		92.365	13.1	mg/L	0.831285	4.61825	
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.00165	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.0402	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.00128	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.000607	mg/L	0.000068	0.000203	
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.000708	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.0411	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.00208	mg/L	0.000068	0.000203	
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.552	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.396	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	0.00231	mg/L	0.000508	0.001015	
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:43	6/14/23 10:43		1	0.482	mg/L as N	0.20	0.3	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	214	mg/L		25	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 15:31	6/13/23 15:31		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/12/23 13:18	6/12/23 13:18		1	3.20	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/9/23 13:00	6/9/23 13:00		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/8/23 14:36	6/8/23 14:36		8	116	mg/L	4.8	16	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 6/6/23 08:43
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10636

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/6/23 08:40	6/6/23 08:40			300.65	uS/cm			FA
pH	6/6/23 08:40	6/6/23 08:40			3.82	SU			FA
Temperature	6/6/23 08:40	6/6/23 08:40			18.05	C			FA
Turbidity	6/6/23 08:40	6/6/23 08:40			2.69	NTU			FA
Sulfide	6/6/23 08:40	6/6/23 08:40			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 08:43
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BD10636

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 08:43
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BD10636

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/6/23 08:43
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BD10636

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 6/6/23 12:28
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10637

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:46		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/9/23 11:50	6/13/23 12:46		1.015	23.0	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:46		1.015	0.0290	mg/L	0.008120	0.0406	J
* Lithium, Total	6/9/23 11:50	6/13/23 12:46		1.015	0.0101	mg/L	0.007105	0.01999956	J
* Magnesium, Total	6/9/23 11:50	6/13/23 12:46		1.015	4.40	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:46		1	15.2	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:46		1.015	7.12	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:46		1.015	25.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	18.2	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	0.00867	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	0.0105	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	3.86	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:43		1	14.8	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	6.91	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:43		1.015	25.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 14:06		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 14:06		1.015	0.0257	mg/L	0.009135	0.05075	J
* Arsenic, Total	6/9/23 11:50	6/9/23 14:06		1.015	0.000296	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 14:06		1.015	0.278	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 14:06		1.015	0.000473	mg/L	0.000406	0.001015	J
* Cadmium, Total	6/9/23 11:50	6/9/23 14:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 14:06		1.015	0.000529	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 14:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/9/23 11:50	6/9/23 14:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 14:06		1.015	0.00698	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 6/6/23 12:28
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10637

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 14:06		1.015	1.32	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 14:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 14:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	0.000244	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	0.245	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	0.000484	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	0.00351	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	1.54	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 16:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:45	6/14/23 10:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/15/23 13:06	6/15/23 14:31		1	101	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	138	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	97.9	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	2.91	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 15:46	6/13/23 15:46		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 6/6/23 12:28
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10637

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:19	6/12/23 13:19		1	2.93	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 13:02	6/9/23 13:02		1	0.113	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:29	6/8/23 14:29		1	12.4	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	6/6/23 12:24	6/6/23 12:24			237.58	uS/cm			FA
pH	6/6/23 12:24	6/6/23 12:24			7.80	SU			FA
Temperature	6/6/23 12:24	6/6/23 12:24			22.61	C			FA
Turbidity	6/6/23 12:24	6/6/23 12:24			1.11	NTU			FA
Sulfide	6/6/23 12:24	6/6/23 12:24			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

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Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 12:28
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BD10637

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 12:28
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BD10637

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/6/23 12:28
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BD10637

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10637	Alkalinity	mg CaCO3/L					100	51.2	45.0 to 55.0			0.995	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 6/6/23 14:00
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10638

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:49		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/9/23 11:50	6/13/23 12:49		1.015	17.2	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:49		1.015	0.0123	mg/L	0.008120	0.0406	J
* Lithium, Total	6/9/23 11:50	6/13/23 12:49		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:49		1.015	7.01	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:49		1	9.12	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:49		1.015	4.26	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:49		1.015	3.22	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	16.3	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	6.66	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:46		1	8.90	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	4.16	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:46		1.015	3.10	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 14:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 15:35		92.365	13.2	mg/L	0.831285	4.61825	
* Arsenic, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.00327	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.0315	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.000707	mg/L	0.000406	0.001015	J
* Cadmium, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.000937	mg/L	0.000068	0.000203	
* Chromium, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.000530	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.0511	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.00152	mg/L	0.000068	0.000203	
* Manganese, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.531	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 6/6/23 14:00
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10638

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.364	mg/L	0.169505	0.5075	J
* Selenium, Total	6/9/23 11:50	6/9/23 14:10		1.015	0.00301	mg/L	0.000508	0.001015	
* Thallium, Total	6/9/23 11:50	6/9/23 14:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/9/23 10:08		92.365	13.4	mg/L	0.831285	4.61825	
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.00303	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.0308	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.000517	mg/L	0.000406	0.001015	J
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.000927	mg/L	0.000068	0.000203	
* Chromium, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.000432	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.0485	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.00153	mg/L	0.000068	0.000203	
* Manganese, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.507	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.365	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	0.00324	mg/L	0.000508	0.001015	
* Thallium, Dissolved	6/8/23 14:11	6/8/23 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:47	6/14/23 10:47		1	0.772	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/15/23 13:06	6/15/23 14:31		1	Not Detected	mg CaCO3/L		0.1	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	220	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	Not Detected	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/15/23 13:06	6/15/23 14:31		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 16:03	6/13/23 16:03		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 6/6/23 14:00
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10638

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:20	6/12/23 13:20		1	3.31	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 13:03	6/9/23 13:03		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:38	6/8/23 14:38		8	121	mg/L	4.8	16	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	6/6/23 13:56	6/6/23 13:56			303.83	uS/cm			FA
pH	6/6/23 13:56	6/6/23 13:56			3.65	SU			FA
Temperature	6/6/23 13:56	6/6/23 13:56			19.43	C			FA
Turbidity	6/6/23 13:56	6/6/23 13:56			3.17	NTU			FA
Sulfide	6/6/23 13:56	6/6/23 13:56			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 14:00
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BD10638

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/6/23 14:00
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BD10638

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/6/23 14:00
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BD10638

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10637	Alkalinity	mg CaCO3/L					100	51.2	45.0 to 55.0			0.995	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 6/7/23 09:55
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10639

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	6/9/23 11:50	6/13/23 12:52		1.015	0.234	mg/L	0.030000	0.1015	
* Calcium, Total	6/9/23 11:50	6/13/23 14:52		10.15	46.5	mg/L	0.70035	4.06	
* Iron, Total	6/9/23 11:50	6/13/23 12:52		1.015	0.124	mg/L	0.008120	0.0406	
* Lithium, Total	6/9/23 11:50	6/13/23 12:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:52		1.015	9.07	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:52		1	14.6	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:52		1.015	6.80	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:52		1.015	14.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:49		1.015	0.236	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/8/23 14:11	6/9/23 14:41		10.15	38.4	mg/L	0.70035	4.06	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:49		1.015	0.0521	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:49		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:49		1.015	8.63	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:49		1	14.2	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:49		1.015	6.64	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:49		1.015	14.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/9/23 11:50	6/9/23 14:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 14:13		1.015	0.0356	mg/L	0.009135	0.05075	J
* Arsenic, Total	6/9/23 11:50	6/9/23 14:13		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	6/9/23 11:50	6/9/23 14:13		1.015	0.226	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 14:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 14:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 14:13		1.015	0.000272	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 14:13		1.015	0.000715	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 14:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 14:13		1.015	0.140	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 6/7/23 09:55
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10639

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 14:13		1.015	0.775	mg/L	0.169505	0.5075	
* Selenium, Total	6/9/23 11:50	6/9/23 14:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 14:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	0.214	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	0.000682	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	0.133	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	0.723	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:49	6/14/23 10:49		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/19/23 10:50	6/19/23 13:08		1	135	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	202	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	135	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 16:17	6/13/23 16:17		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 6/7/23 09:55
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10639

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/12/23 13:22	6/12/23 13:22		1	6.81	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/9/23 13:04	6/9/23 13:04		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/8/23 14:32	6/8/23 14:32		1	27.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/7/23 09:51	6/7/23 09:51			307.47	uS/cm			FA
pH	6/7/23 09:51	6/7/23 09:51			6.25	SU			FA
Temperature	6/7/23 09:51	6/7/23 09:51			18.78	C			FA
Turbidity	6/7/23 09:51	6/7/23 09:51			1.98	NTU			FA
Sulfide	6/7/23 09:51	6/7/23 09:51			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 09:55
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BD10639

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 09:55
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BD10639

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/7/23 09:55
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BD10639

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10640	Alkalinity	mg CaCO3/L					65.1	50.5	45.0 to 55.0			1.98	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 6/7/23 10:45
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10640

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	6/9/23 11:50	6/13/23 12:55		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/9/23 11:50	6/13/23 12:55		1.015	20.9	mg/L	0.070035	0.406	
* Iron, Total	6/9/23 11:50	6/13/23 12:55		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/9/23 11:50	6/13/23 12:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 12:55		1.015	3.06	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 12:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 12:55		1	16.3	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 12:55		1.015	7.61	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 12:55		1.015	3.77	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	20.0	mg/L	0.070035	0.406	
* Iron, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	2.83	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:52		1	16.2	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	7.57	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:52		1.015	3.62	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/9/23 11:50	6/9/23 14:17		1.015	0.0635	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 14:17		1.015	0.000330	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 14:17		1.015	0.00405	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 6/7/23 10:45
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10640

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 14:17		1.015	0.442	mg/L	0.169505	0.5075	J
* Selenium, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	0.0599	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	0.00355	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	0.440	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 19:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:51	6/14/23 10:51		1	0.560	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/19/23 10:50	6/19/23 13:08		1	66.4	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	96.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	65.9	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 16:32	6/13/23 16:32		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 6/7/23 10:45
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10640

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:23	6/12/23 13:23		1	3.37	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 13:05	6/9/23 13:05		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:33	6/8/23 14:33		1	2.38	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	6/7/23 10:43	6/7/23 10:43			164.51	uS/cm			FA
pH	6/7/23 10:43	6/7/23 10:43			5.90	SU			FA
Temperature	6/7/23 10:43	6/7/23 10:43			18.70	C			FA
Turbidity	6/7/23 10:43	6/7/23 10:43			1.04	NTU			FA
Sulfide	6/7/23 10:43	6/7/23 10:43			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 10:45
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BD10640

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Aluminum, Total	mg/L	0.00122	0.0198	0.100	0.114	0.109	0.106	0.0850 to 0.115	114	70.0 to 130	4.48	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10640	Antimony, Total	mg/L	0.000427	0.00100	0.100	0.0984	0.0956	0.0921	0.0850 to 0.115	98.4	70.0 to 130	2.89	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10640	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.106	0.102	0.102	0.0850 to 0.115	106	70.0 to 130	3.85	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10640	Barium, Total	mg/L	0.0000232	0.00100	0.100	0.171	0.165	0.102	0.0850 to 0.115	108	70.0 to 130	3.57	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10640	Beryllium, Total	mg/L	0.0000355	0.000880	0.100	0.0902	0.106	0.110	0.0850 to 0.115	90.2	70.0 to 130	16.1	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10640	Boron, Total	mg/L	-0.000179	0.0650	1.00	1.03	1.03	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10640	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.102	0.0960	0.0977	0.0850 to 0.115	102	70.0 to 130	6.06	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10640	Calcium, Total	mg/L	0.00629	0.152	5.00	25.6	26.3	5.13	4.25 to 5.75	94.0	70.0 to 130	2.70	20.0
BD10640	Chloride	mg/L	0.0605	1.00	10.0	13.8	13.8	10.2	9.00 to 11.0	104	80.0 to 120	0.00	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10640	Chromium, Total	mg/L	-0.0000151	0.000440	0.100	0.106	0.101	0.100	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10640	Cobalt, Total	mg/L	-0.0000082	0.000147	0.100	0.109	0.103	0.103	0.0850 to 0.115	109	70.0 to 130	5.66	20.0
BD10640	Fluoride	mg/L	0.000259	0.125	2.50	2.45	2.43	2.50	2.25 to 2.75	98.0	80.0 to 120	0.820	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10640	Iron, Total	mg/L	0.000609	0.0176	0.2	0.203	0.206	0.205	0.170 to 0.230	102	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 10:45
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BD10640

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Lead, Total	mg/L	0.0000082	0.000147	0.100	0.107	0.102	0.105	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10640	Lithium, Total	mg/L	0.000165	0.0154	0.200	0.211	0.209	0.205	0.170 to 0.230	106	70.0 to 130	0.952	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10640	Magnesium, Total	mg/L	-0.00005	0.0462	5.00	8.12	8.10	5.14	4.25 to 5.75	101	70.0 to 130	0.247	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10640	Manganese, Total	mg/L	-0.0000784	0.00033	0.100	0.112	0.108	0.101	0.0850 to 0.115	108	70.0 to 130	3.64	20.0
BD10640	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00391	0.00393	0.00388	0.00340 to 0.00460	97.8	70.0 to 130	0.510	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10640	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10640	Potassium, Total	mg/L	0.00762	0.367	10.0	11.5	11.2	10.7	8.50 to 11.5	111	70.0 to 130	2.64	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10640	Selenium, Total	mg/L	0.0000565	0.00100	0.100	0.106	0.103	0.104	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10640	Silicon, Total	mg/L	-0.000055	0.0440	1.00	8.71	8.70	1.04	0.850 to 1.15	110	70.0 to 130	0.115	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10640	Sodium, Total	mg/L	-0.000566	0.0880	5.00	8.76	8.68	5.07	4.25 to 5.75	99.8	70.0 to 130	0.917	20.0
BD10640	Sulfate	mg/L	0.930	2.0	20.0	22.6	21.9	20.9	18.0 to 22.0	101	80.0 to 120	3.15	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10640	Thallium, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.105	0.109	0.0850 to 0.115	110	70.0 to 130	4.65	20.0
BD10640	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.55	10.1	23.1		95.5	80.0 to 120	5.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/7/23 10:45
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BD10640

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10640	Alkalinity	mg CaCO3/L					65.1	50.5	45.0 to 55.0			1.98	10.0
BD10640	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.62	0.559	1.85	1.80 to 2.20	103	90.0 to 110	0.179	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 6/7/23 13:45
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10641

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	6/9/23 11:50	6/13/23 13:17		1.015	0.0355	mg/L	0.030000	0.1015	J
* Calcium, Total	6/9/23 11:50	6/13/23 14:55		10.15	56.3	mg/L	0.70035	4.06	RA
* Iron, Total	6/9/23 11:50	6/13/23 14:55		10.15	4.82	mg/L	0.08120	0.406	RA
* Lithium, Total	6/9/23 11:50	6/13/23 13:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/9/23 11:50	6/13/23 13:17		1.015	7.15	mg/L	0.021315	0.406	
* Molybdenum, Total	6/9/23 11:50	6/13/23 13:17		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/9/23 11:50	6/13/23 13:17		1	22.7	mg/L			
* Silicon, Total	6/9/23 11:50	6/13/23 13:17		1.015	10.6	mg/L	0.02030	0.25375	
* Sodium, Total	6/9/23 11:50	6/13/23 13:17		1.015	9.86	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	6/8/23 14:11	6/9/23 11:55		1.015	0.0365	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/8/23 14:11	6/9/23 14:44		10.15	51.4	mg/L	0.70035	4.06	RA
* Iron, Dissolved	6/8/23 14:11	6/9/23 14:44		10.15	4.30	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	6/8/23 14:11	6/9/23 11:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/8/23 14:11	6/9/23 11:55		1.015	6.90	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/8/23 14:11	6/9/23 11:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/8/23 14:11	6/9/23 11:55		1	22.3	mg/L			
* Silicon, Dissolved	6/8/23 14:11	6/9/23 11:55		1.015	10.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/8/23 14:11	6/9/23 11:55		1.015	9.71	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/9/23 11:50	6/9/23 14:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/9/23 11:50	6/9/23 14:45		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/9/23 11:50	6/9/23 14:45		1.015	0.00301	mg/L	0.000112	0.000203	
* Barium, Total	6/9/23 11:50	6/9/23 14:45		1.015	0.303	mg/L	0.000508	0.001015	
* Beryllium, Total	6/9/23 11:50	6/9/23 14:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/9/23 11:50	6/9/23 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/9/23 11:50	6/9/23 14:45		1.015	0.000245	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/9/23 11:50	6/9/23 14:45		1.015	0.00299	mg/L	0.000068	0.000203	
* Lead, Total	6/9/23 11:50	6/9/23 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/9/23 11:50	6/9/23 15:39		5.075	1.61	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 6/7/23 13:45
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10641

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/9/23 11:50	6/9/23 14:45		1.015	0.498	mg/L	0.169505	0.5075	J
* Selenium, Total	6/9/23 11:50	6/9/23 14:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/9/23 11:50	6/9/23 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	0.00287	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	0.289	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	0.00278	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/8/23 14:11	6/9/23 10:12		5.075	1.57	mg/L	0.000761	0.005075	
* Potassium, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	0.465	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/8/23 14:11	6/8/23 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/9/23 14:08	6/9/23 20:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 10:56	6/14/23 10:56		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/19/23 10:50	6/19/23 13:08		1	171	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/9/23 10:25	6/12/23 13:20		1	226	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	171	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/19/23 10:50	6/19/23 13:08		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/13/23 17:43	6/13/23 17:43		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 6/7/23 13:45
Customer ID:
Submittal Date: 6/8/23 09:59

Laboratory ID Number: BD10641

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/12/23 13:39	6/12/23 13:39		1	5.02	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/9/23 13:42	6/9/23 13:42		1	0.128	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/8/23 14:48	6/8/23 14:48		1	12.5	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	6/7/23 13:41	6/7/23 13:41			333.70	uS/cm			FA
pH	6/7/23 13:41	6/7/23 13:41			6.37	SU			FA
Temperature	6/7/23 13:41	6/7/23 13:41			18.04	C			FA
Turbidity	6/7/23 13:41	6/7/23 13:41			3.43	NTU			FA
Sulfide	6/7/23 13:41	6/7/23 13:41			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 13:45
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BD10641

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Aluminum, Dissolved	mg/L	0.0000632	0.0198	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10641	Aluminum, Total	mg/L	0.0109	0.0198	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD10641	Antimony, Dissolved	mg/L	0.000353	0.00100	0.100	0.0931	0.0951	0.0886	0.0850 to 0.115	93.1	70.0 to 130	2.13	20.0
BD10641	Antimony, Total	mg/L	0.000352	0.00100	0.100	0.101	0.102	0.0945	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD10641	Arsenic, Dissolved	mg/L	-0.0000034	0.000200	0.100	0.103	0.103	0.0967	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10641	Arsenic, Total	mg/L	0.0000201	0.000200	0.100	0.107	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD10641	Barium, Dissolved	mg/L	0.0000205	0.00100	0.100	0.392	0.399	0.0982	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD10641	Barium, Total	mg/L	0.000122	0.00100	0.100	0.405	0.408	0.102	0.0850 to 0.115	102	70.0 to 130	0.738	20.0
BD10641	Beryllium, Dissolved	mg/L	-0.0000450	0.000880	0.100	0.103	0.0980	0.0995	0.0850 to 0.115	103	70.0 to 130	4.98	20.0
BD10641	Beryllium, Total	mg/L	0.0000598	0.000880	0.100	0.111	0.107	0.103	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD10641	Boron, Dissolved	mg/L	-0.000189	0.0650	1.00	1.09	1.08	1.02	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD10641	Boron, Total	mg/L	-0.000099	0.0650	1.00	1.07	1.06	1.01	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD10641	Cadmium, Dissolved	mg/L	-0.0000060	0.000147	0.100	0.100	0.103	0.101	0.0850 to 0.115	100	70.0 to 130	2.96	20.0
BD10641	Cadmium, Total	mg/L	0.0000028	0.000147	0.100	0.0992	0.0988	0.100	0.0850 to 0.115	99.2	70.0 to 130	0.404	20.0
BD10641	Calcium, Dissolved	mg/L	-0.0180	0.152	5.00	54.2	56.7	4.83	4.25 to 5.75	56.0	70.0 to 130	4.51	20.0
BD10641	Calcium, Total	mg/L	-0.00146	0.152	5.00	58.0	58.4	4.87	4.25 to 5.75	34.0	70.0 to 130	0.687	20.0
BD10641	Chloride	mg/L	0.0373	1.00	10.0	15.3	15.4	10.2	9.00 to 11.0	103	80.0 to 120	0.651	20.0
BD10641	Chromium, Dissolved	mg/L	-0.0000649	0.000440	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10641	Chromium, Total	mg/L	-0.000013	0.000440	0.100	0.0984	0.0975	0.0989	0.0850 to 0.115	98.2	70.0 to 130	0.919	20.0
BD10641	Cobalt, Dissolved	mg/L	-0.0000116	0.000147	0.100	0.101	0.102	0.100	0.0850 to 0.115	98.2	70.0 to 130	0.985	20.0
BD10641	Cobalt, Total	mg/L	0.0000075	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD10641	Fluoride	mg/L	0.0222	0.125	2.50	2.62	2.57	2.50	2.25 to 2.75	99.7	80.0 to 120	1.93	20.0
BD10641	Iron, Dissolved	mg/L	-0.00164	0.0176	0.2	4.32	4.46	0.209	0.170 to 0.230	10.0	70.0 to 130	3.19	20.0
BD10641	Iron, Total	mg/L	0.000841	0.0176	0.2	4.84	4.90	0.203	0.170 to 0.230	10.0	70.0 to 130	1.23	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/7/23 13:45
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BD10641

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10641	Lead, Dissolved	mg/L	-0.0000043	0.000147	0.100	0.103	0.105	0.102	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10641	Lead, Total	mg/L	0.000012	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD10641	Lithium, Dissolved	mg/L	0.000494	0.0154	0.200	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD10641	Lithium, Total	mg/L	-0.000424	0.0154	0.200	0.210	0.209	0.210	0.170 to 0.230	105	70.0 to 130	0.477	20.0
BD10641	Magnesium, Dissolved	mg/L	0.00878	0.0462	5.00	11.7	11.7	4.90	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BD10641	Magnesium, Total	mg/L	-0.00219	0.0462	5.00	12.2	12.0	5.05	4.25 to 5.75	101	70.0 to 130	1.65	20.0
BD10641	Manganese, Dissolved	mg/L	-0.0000084	0.00033	0.100	1.64	1.66	0.0988	0.0850 to 0.115	70.0	70.0 to 130	1.21	20.0
BD10641	Manganese, Total	mg/L	0.000301	0.00033	0.100	1.72	1.73	0.102	0.0850 to 0.115	110	70.0 to 130	0.580	20.0
BD10641	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00394	0.00393	0.0039	0.00340 to 0.00460	98.5	70.0 to 130	0.254	20.0
BD10641	Molybdenum, Dissolved	mg/L	0.000362	0.0100	0.2	0.200	0.199	0.198	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD10641	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.202	0.201	0.200	0.170 to 0.230	101	70.0 to 130	0.496	20.0
BD10641	Potassium, Dissolved	mg/L	0.0110	0.367	10.0	11.0	11.2	10.6	8.50 to 11.5	105	70.0 to 130	1.80	20.0
BD10641	Potassium, Total	mg/L	0.00860	0.367	10.0	11.0	10.9	10.5	8.50 to 11.5	105	70.0 to 130	0.913	20.0
BD10641	Selenium, Dissolved	mg/L	0.0000486	0.00100	0.100	0.102	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD10641	Selenium, Total	mg/L	0.0000161	0.00100	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10641	Silicon, Dissolved	mg/L	0.0002	0.0440	1.00	11.5	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.873	20.0
BD10641	Silicon, Total	mg/L	-0.00048	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD10641	Sodium, Dissolved	mg/L	-0.00522	0.0880	5.00	14.7	14.5	4.86	4.25 to 5.75	99.8	70.0 to 130	1.37	20.0
BD10641	Sodium, Total	mg/L	0.00212	0.0880	5.00	14.8	14.9	5.06	4.25 to 5.75	98.8	70.0 to 130	0.673	20.0
BD10641	Sulfate	mg/L	0.283	2.0	20.0	31.3	31.2	19.7	18.0 to 22.0	94.0	80.0 to 120	0.320	20.0
BD10641	Thallium, Dissolved	mg/L	-0.0000045	0.000147	0.100	0.103	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10641	Thallium, Total	mg/L	0.0000005	0.000147	0.100	0.107	0.105	0.107	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD10641	Total Organic Carbon	mg/L	0.142	1.00	10.0	10.4	10.4	23.9		104	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/7/23 13:45
Customer ID:
Delivery Date: 6/8/23 09:59

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BD10641

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10640	Alkalinity	mg CaCO3/L					65.1	50.5	45.0 to 55.0			1.98	10.0
BD10641	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.98	0.001	1.89	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD10641	Solids, Dissolved	mg/L	2.00	25.0			223	58.0	40.0 to 60.0			1.34	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-2

Location Code: WMWGADAPFB
Collected: 6/13/23 08:25
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10969

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***				***Preparation Method: EPA 1638***				
* Boron, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 10:59		1	Not Detected	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	6/15/23 12:33	6/22/23 10:59		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 10:28		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 19:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:12	6/14/23 12:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-2

Location Code: WMWGADAPFB
Collected: 6/13/23 08:25
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10969

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 15:53	6/15/23 15:53		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:01	6/16/23 10:01		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:08	6/19/23 13:08		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:18	6/23/23 14:18		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 6/13/23 08:25
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BD10969

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 6/13/23 08:25
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BD10969

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 6/13/23 08:25
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BD10969

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10973	Solids, Dissolved	mg/L	1.00	25.0			162	48.0	40.0 to 60.0			0.00	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 6/13/23 09:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10970

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***					***Preparation Method: EPA 1638***			
* Boron, Total	6/15/23 12:33	6/22/23 11:02		1.015	0.0902	mg/L	0.030000	0.1015	J
* Calcium, Total	6/15/23 12:33	6/22/23 12:41		5.075	53.2	mg/L	0.350175	2.03	
* Iron, Total	6/15/23 12:33	6/22/23 11:02		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/15/23 12:33	6/22/23 11:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:02		1.015	25.9	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:02		1	17.5	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:02		1.015	8.20	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:02		1.015	16.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:08		1.015	0.0916	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/15/23 09:00	6/22/23 12:05		5.075	54.9	mg/L	0.350175	2.03	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:08		1.015	26.1	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:08		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:08		1	17.9	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:08		1.015	8.38	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:08		1.015	16.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/15/23 12:33	6/16/23 10:32		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/15/23 12:33	6/16/23 10:32		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/15/23 12:33	6/16/23 10:32		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	6/15/23 12:33	6/16/23 10:32		1.015	0.0356	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 10:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:32		1.015	0.000334	mg/L	0.000068	0.000203	
* Chromium, Total	6/15/23 12:33	6/16/23 10:32		1.015	0.000484	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:32		1.015	0.00580	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 11:39		5.075	2.04	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 6/13/23 09:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10970

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 10:32		1.015	0.850	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 10:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	0.0363	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	0.000341	mg/L	0.000068	0.000203	
* Chromium, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	0.000302	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	0.00559	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/16/23 09:45		5.075	1.91	mg/L	0.000761	0.005075	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	0.871	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 19:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:14	6/14/23 12:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	33.5	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	370	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	33.5	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 16:05	6/15/23 16:05		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 6/13/23 09:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10970

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:02	6/16/23 10:02		1	5.18	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:09	6/19/23 13:09		1	0.0795	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:33	6/23/23 14:33		10	212	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	6/13/23 08:57	6/13/23 08:57			515.36	uS/cm			FA
pH	6/13/23 08:57	6/13/23 08:57			5.48	SU			FA
Temperature	6/13/23 08:57	6/13/23 08:57			19.24	C			FA
Turbidity	6/13/23 08:57	6/13/23 08:57			2.14	NTU			FA
Sulfide	6/13/23 08:57	6/13/23 08:57			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 09:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BD10970

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 09:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BD10970

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/13/23 09:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BD10970

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10973	Solids, Dissolved	mg/L	1.00	25.0			162	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-1

Location Code: WMWGADAPEB
Collected: 6/13/23 09:25
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10971

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***				***Preparation Method: EPA 1638***				
* Boron, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:05		1	Not Detected	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	6/15/23 12:33	6/22/23 11:05		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 10:35		1.015	0.000313	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 10:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 19:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:16	6/14/23 12:16		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-1

Location Code: WMWGADAPEB
Collected: 6/13/23 09:25
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10971

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	6/15/23 16:19	6/15/23 16:19		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	6/16/23 10:03	6/16/23 10:03		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	6/19/23 13:11	6/19/23 13:11		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/23/23 14:21	6/23/23 14:21		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 6/13/23 09:25
Customer ID:
Delivery Date: 6/14/23 09:16

Description:Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BD10971

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 6/13/23 09:25
Customer ID:
Delivery Date: 6/14/23 09:16

Description:Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BD10971

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPEB
Sample Date: 6/13/23 09:25
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BD10971

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10973	Solids, Dissolved	mg/L	1.00	25.0			162	48.0	40.0 to 60.0			0.00	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 6/13/23 10:19
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10972

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***				***Preparation Method: EPA 1638***				
* Boron, Total	6/15/23 12:33	6/22/23 11:09		1.015	0.143	mg/L	0.030000	0.1015	
* Calcium, Total	6/15/23 12:33	6/22/23 12:44		5.075	94.5	mg/L	0.350175	2.03	
* Iron, Total	6/15/23 12:33	6/22/23 12:44		5.075	15.9	mg/L	0.040600	0.203	
* Lithium, Total	6/15/23 12:33	6/22/23 11:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:09		1.015	12.7	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:09		1	25.7	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:09		1.015	12.0	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:09		1.015	13.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:12		1.015	0.148	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/15/23 09:00	6/22/23 12:09		5.075	77.4	mg/L	0.350175	2.03	
* Iron, Dissolved	6/15/23 09:00	6/22/23 12:09		5.075	13.1	mg/L	0.040600	0.203	
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:12		1.015	13.0	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:12		1	25.5	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:12		1.015	11.9	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:12		1.015	13.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/15/23 12:33	6/16/23 10:39		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/15/23 12:33	6/16/23 10:39		1.015	0.00283	mg/L	0.000112	0.000203	
* Aluminum, Total	6/15/23 12:33	6/16/23 10:39		1.015	0.0491	mg/L	0.009135	0.05075	J
* Barium, Total	6/15/23 12:33	6/16/23 10:39		1.015	0.126	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 10:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 10:39		1.015	0.000426	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:39		1.015	0.000517	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 10:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 11:43		5.075	1.45	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 6/13/23 10:19
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10972

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 10:39		1.015	1.29	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 10:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 10:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	0.00257	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	0.127	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	0.000270	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	0.000418	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/16/23 09:49		5.075	1.43	mg/L	0.000761	0.005075	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	1.31	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 19:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:17	6/14/23 12:17		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	128	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	374	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	128	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 16:31	6/15/23 16:31		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 6/13/23 10:19
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10972

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:04	6/16/23 10:04		1	5.51	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:12	6/19/23 13:12		1	0.105	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:34	6/23/23 14:34		8	150	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	6/13/23 10:16	6/13/23 10:16			530.34	uS/cm			FA
pH	6/13/23 10:16	6/13/23 10:16			6.40	SU			FA
Temperature	6/13/23 10:16	6/13/23 10:16			19.50	C			FA
Turbidity	6/13/23 10:16	6/13/23 10:16			6.43	NTU			FA
Sulfide	6/13/23 10:16	6/13/23 10:16			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 10:19
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BD10972

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 10:19
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BD10972

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/13/23 10:19
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BD10972

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10973	Solids, Dissolved	mg/L	1.00	25.0			162	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 6/12/23 11:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10973

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***					***Preparation Method: EPA 1638***			
* Boron, Total	6/15/23 12:33	6/22/23 11:12		1.015	0.340	mg/L	0.030000	0.1015	
* Calcium, Total	6/15/23 12:33	6/22/23 11:12		1.015	28.0	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 11:12		1.015	0.362	mg/L	0.008120	0.0406	
* Lithium, Total	6/15/23 12:33	6/22/23 11:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:12		1.015	6.77	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:12		1	14.5	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:12		1.015	6.78	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:12		1.015	12.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	0.338	mg/L	0.030000	0.1015	
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	29.3	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	0.128	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	6.74	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:15		1	14.6	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	6.80	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:15		1.015	12.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/15/23 12:33	6/16/23 10:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.0145	mg/L	0.009135	0.05075	J
* Arsenic, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.000183	mg/L	0.000112	0.000203	J
* Barium, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.101	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 10:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.0000842	mg/L	0.000068	0.000203	J
* Chromium, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.000381	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.00377	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.000234	mg/L	0.000068	0.000203	
* Manganese, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.418	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 6/12/23 11:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10973

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 10:42		1.015	0.960	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 10:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 10:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	0.107	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	0.000150	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	0.00358	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	0.414	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	0.948	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 19:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:19	6/14/23 12:19		1	0.220	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	52.0	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	162	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	52.0	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 16:48	6/15/23 16:48		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 6/12/23 11:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10973

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:06	6/16/23 10:06		1	6.98	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:13	6/19/23 13:13		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:35	6/23/23 14:35		2	60.4	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/12/23 10:57	6/12/23 10:57			252.96	uS/cm			FA
pH	6/12/23 10:57	6/12/23 10:57			5.81	SU			FA
Temperature	6/12/23 10:57	6/12/23 10:57			17.19	C			FA
Turbidity	6/12/23 10:57	6/12/23 10:57			4.69	NTU			FA
Sulfide	6/12/23 10:57	6/12/23 10:57			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 11:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BD10973

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 11:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BD10973

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/12/23 11:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BD10973

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10973	Solids, Dissolved	mg/L	1.00	25.0			162	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 6/12/23 12:10
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***				***Preparation Method: EPA 1638***				
* Boron, Total	6/15/23 12:33	6/22/23 11:15		1.015	0.0772	mg/L	0.030000	0.1015	J
* Calcium, Total	6/15/23 12:33	6/22/23 11:15		1.015	10.9	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 11:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/15/23 12:33	6/22/23 11:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:15		1.015	4.53	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:15		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:15		1	7.34	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:15		1.015	3.43	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:15		1.015	5.75	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	0.0772	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	11.6	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	4.56	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:18		1	7.38	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	3.45	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:18		1.015	5.55	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/15/23 12:33	6/16/23 10:46		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.0233	mg/L	0.009135	0.05075	J
* Arsenic, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.000133	mg/L	0.000112	0.000203	J
* Barium, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.0304	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 10:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.000457	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.000225	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 10:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.0128	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 6/12/23 12:10
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.938	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 10:46		1.015	0.000931	mg/L	0.000508	0.001015	J
* Thallium, Total	6/15/23 12:33	6/16/23 10:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	0.0223	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	0.0324	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	0.000116	mg/L	0.000068	0.000203	J
* Lead, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	0.0121	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	0.987	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	0.000950	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	6/15/23 09:00	6/15/23 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:21	6/14/23 12:21		1	1.42	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	5.58	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	84.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	5.58	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 17:02	6/15/23 17:02		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 6/12/23 12:10
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:07	6/16/23 10:07		1	5.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:14	6/19/23 13:14		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:24	6/23/23 14:24		1	36.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/12/23 12:08	6/12/23 12:08			133.28	uS/cm			FA
pH	6/12/23 12:08	6/12/23 12:08			4.52	SU			FA
Temperature	6/12/23 12:08	6/12/23 12:08			16.31	C			FA
Turbidity	6/12/23 12:08	6/12/23 12:08			1.41	NTU			FA
Sulfide	6/12/23 12:08	6/12/23 12:08			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 12:10
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BD10974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 12:10
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BD10974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/12/23 12:10
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BD10974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10973	Solids, Dissolved	mg/L	1.00	25.0			162	48.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H Dup

Location Code: WMWGADAP
Collected: 6/12/23 12:10
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***					***Preparation Method: EPA 1638***			
* Boron, Total	6/15/23 12:33	6/22/23 11:18		1.015	0.0772	mg/L	0.030000	0.1015	J
* Calcium, Total	6/15/23 12:33	6/22/23 11:18		1.015	10.8	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 11:18		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/15/23 12:33	6/22/23 11:18		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:18		1.015	4.60	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:18		1	7.36	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:18		1.015	3.44	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:18		1.015	5.85	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	0.0773	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	11.2	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	4.59	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:21		1	7.36	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	3.44	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:21		1.015	5.71	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/15/23 12:33	6/16/23 10:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/15/23 12:33	6/16/23 10:49		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	6/15/23 12:33	6/16/23 10:49		1.015	0.0237	mg/L	0.009135	0.05075	J
* Barium, Total	6/15/23 12:33	6/16/23 10:49		1.015	0.0312	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 10:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 10:49		1.015	0.000290	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:49		1.015	0.000225	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 10:49		1.015	0.0126	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H Dup

Location Code: WMWGADAP
Collected: 6/12/23 12:10
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 10:49		1.015	0.958	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 10:49		1.015	0.000910	mg/L	0.000508	0.001015	J
* Thallium, Total	6/15/23 12:33	6/16/23 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	0.0224	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	0.0332	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	0.000123	mg/L	0.000068	0.000203	J
* Lead, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	0.0125	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	0.996	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	0.000983	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	6/15/23 09:00	6/15/23 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:23	6/14/23 12:23		1	1.49	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	5.26	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	82.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	5.26	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 17:17	6/15/23 17:17		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H Dup

Location Code: WMWGADAP
Collected: 6/12/23 12:10
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:08	6/16/23 10:08		1	5.74	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:15	6/19/23 13:15		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:25	6/23/23 14:25		1	37.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/12/23 12:08	6/12/23 12:08			133.28	uS/cm			FA
pH	6/12/23 12:08	6/12/23 12:08			4.52	SU			FA
Temperature	6/12/23 12:08	6/12/23 12:08			16.31	C			FA
Turbidity	6/12/23 12:08	6/12/23 12:08			1.41	NTU			FA
Sulfide	6/12/23 12:08	6/12/23 12:08			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 12:10
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-18H Dup

Laboratory ID Number: BD10975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 12:10
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-18H Dup

Laboratory ID Number: BD10975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/12/23 12:10
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-18H Dup

Laboratory ID Number: BD10975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10979	Solids, Dissolved	mg/L	1.00	25.0			197	48.0	40.0 to 60.0			1.01	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 6/12/23 14:08
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***					***Preparation Method: EPA 1638***			
* Boron, Total	6/15/23 12:33	6/22/23 11:21		1.015	0.0620	mg/L	0.030000	0.1015	J
* Calcium, Total	6/15/23 12:33	6/22/23 11:21		1.015	37.8	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 11:21		1.015	0.963	mg/L	0.008120	0.0406	
* Lithium, Total	6/15/23 12:33	6/22/23 11:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:21		1.015	7.41	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:21		1	21.1	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:21		1.015	9.88	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:21		1.015	14.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	0.0612	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	37.7	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	0.931	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	7.19	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:24		1	21.3	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	9.94	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:24		1.015	14.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/15/23 12:33	6/16/23 10:53		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/15/23 12:33	6/16/23 10:53		1.015	0.000545	mg/L	0.000112	0.000203	
* Aluminum, Total	6/15/23 12:33	6/16/23 10:53		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	6/15/23 12:33	6/16/23 10:53		1.015	0.146	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 10:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 10:53		1.015	0.000345	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:53		1.015	0.000874	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 10:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 11:46		5.075	1.44	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 6/12/23 14:08
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 10:53		1.015	1.74	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 10:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 10:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	0.000474	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	0.150	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	0.000681	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/16/23 09:53		5.075	1.39	mg/L	0.000761	0.005075	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	1.73	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:25	6/14/23 12:25		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	125	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	185	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	125	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 17:34	6/15/23 17:34		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 6/12/23 14:08
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:09	6/16/23 10:09		1	7.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:17	6/19/23 13:17		1	0.130	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:27	6/23/23 14:27		1	18.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/12/23 14:05	6/12/23 14:05			289.52	uS/cm			FA
pH	6/12/23 14:05	6/12/23 14:05			6.81	SU			FA
Temperature	6/12/23 14:05	6/12/23 14:05			18.60	C			FA
Turbidity	6/12/23 14:05	6/12/23 14:05			2.28	NTU			FA
Sulfide	6/12/23 14:05	6/12/23 14:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 14:08
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BD10976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/12/23 14:08
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BD10976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/12/23 14:08
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BD10976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10979	Solids, Dissolved	mg/L	1.00	25.0			197	48.0	40.0 to 60.0			1.01	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-1

Location Code: WMWGADAPFB
Collected: 6/12/23 15:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10977

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***				***Preparation Method: EPA 1638***				
* Boron, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:24		1	Not Detected	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	6/15/23 12:33	6/22/23 11:24		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 10:56		1.015	0.000216	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:27	6/14/23 12:27		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-1

Location Code: WMWGADAPFB
Collected: 6/12/23 15:00
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10977

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 17:50	6/15/23 17:50		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:10	6/16/23 10:10		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:18	6/19/23 13:18		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:28	6/23/23 14:28		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 6/12/23 15:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BD10977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 6/12/23 15:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BD10977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 6/12/23 15:00
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BD10977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10979	Solids, Dissolved	mg/L	1.00	25.0			197	48.0	40.0 to 60.0			1.01	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 6/13/23 08:53
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***					***Preparation Method: EPA 1638***			
* Boron, Total	6/15/23 12:33	6/22/23 11:28		1.015	0.0428	mg/L	0.030000	0.1015	J
* Calcium, Total	6/15/23 12:33	6/22/23 11:28		1.015	8.71	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 11:28		1.015	0.0762	mg/L	0.008120	0.0406	
* Lithium, Total	6/15/23 12:33	6/22/23 11:28		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:28		1.015	2.44	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:28		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:28		1	16.4	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:28		1.015	7.65	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:28		1.015	12.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	0.0425	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	9.24	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	0.0535	mg/L	0.008120	0.0406	
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	2.46	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:27		1	16.3	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	7.63	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:27		1.015	11.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/15/23 12:33	6/16/23 11:00		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/15/23 12:33	6/16/23 11:00		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	6/15/23 12:33	6/16/23 11:00		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	6/15/23 12:33	6/16/23 11:00		1.015	0.0544	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 11:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 11:00		1.015	0.000189	mg/L	0.000068	0.000203	J
* Chromium, Total	6/15/23 12:33	6/16/23 11:00		1.015	0.000328	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 11:00		1.015	0.00463	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 11:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 11:00		1.015	0.456	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 6/13/23 08:53
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 11:00		1.015	0.240	mg/L	0.169505	0.5075	J
* Selenium, Total	6/15/23 12:33	6/16/23 11:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 11:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	0.0540	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	0.000192	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	0.00381	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	0.402	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	0.245	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:28	6/14/23 12:28		1	0.236	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	46.2	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	74.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	46.0	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 18:03	6/15/23 18:03		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 6/13/23 08:53
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:12	6/16/23 10:12		1	3.43	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:19	6/19/23 13:19		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:29	6/23/23 14:29		1	6.16	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/13/23 08:49	6/13/23 08:49			111.76	uS/cm			FA
pH	6/13/23 08:49	6/13/23 08:49			5.98	SU			FA
Temperature	6/13/23 08:49	6/13/23 08:49			18.20	C			FA
Turbidity	6/13/23 08:49	6/13/23 08:49			1.86	NTU			FA
Sulfide	6/13/23 08:49	6/13/23 08:49			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 08:53
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BD10978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10978	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.109	0.108	0.103	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10978	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0943	0.0932	0.0928	0.0850 to 0.115	94.3	70.0 to 130	1.17	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10978	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0999	0.0999	0.101	0.0850 to 0.115	99.9	70.0 to 130	0.00	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10978	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.151	0.152	0.0980	0.0850 to 0.115	96.6	70.0 to 130	0.660	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10978	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0964	0.0954	0.0964	0.0850 to 0.115	96.4	70.0 to 130	1.04	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10978	Boron, Total	mg/L	0.000366	0.0650	1.00	1.05	1.06	1.02	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10978	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0956	0.0958	0.0979	0.0850 to 0.115	95.4	70.0 to 130	0.209	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10978	Calcium, Total	mg/L	-0.00638	0.152	5.00	13.3	13.2	4.79	4.25 to 5.75	91.8	70.0 to 130	0.755	20.0
BD10978	Chloride	mg/L	-0.0109	1.00	10.0	13.7	13.6	9.98	9.00 to 11.0	103	80.0 to 120	0.733	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10978	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0976	0.0977	0.0986	0.0850 to 0.115	97.3	70.0 to 130	0.102	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10978	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.104	0.102	0.0850 to 0.115	99.4	70.0 to 130	0.00	20.0
BD10978	Fluoride	mg/L	-0.0744	0.125	2.50	2.51	2.57	2.54	2.25 to 2.75	100	80.0 to 120	2.36	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10978	Iron, Total	mg/L	0.000457	0.0176	0.2	0.273	0.274	0.204	0.170 to 0.230	98.4	70.0 to 130	0.366	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 08:53
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BD10978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10978	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10978	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.210	0.215	0.213	0.170 to 0.230	105	70.0 to 130	2.35	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10978	Magnesium, Total	mg/L	0.00141	0.0462	5.00	7.46	7.57	5.16	4.25 to 5.75	100	70.0 to 130	1.46	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10978	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.547	0.546	0.105	0.0850 to 0.115	91.0	70.0 to 130	0.183	20.0
BD10978	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00393	0.00392	0.00393	0.00340 to 0.00460	98.2	70.0 to 130	0.255	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10978	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.202	0.204	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10978	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	9.98	9.93	8.50 to 11.5	98.6	70.0 to 130	1.20	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10978	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10978	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.59	8.58	1.03	0.850 to 1.15	94.0	70.0 to 130	0.116	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10978	Sodium, Total	mg/L	0.00483	0.0880	5.00	17.2	17.4	5.29	4.25 to 5.75	104	70.0 to 130	1.16	20.0
BD10978	Sulfate	mg/L	-0.143	2.0	20.0	25.6	25.8	20.4	18.0 to 22.0	97.2	80.0 to 120	0.778	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10978	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.106	0.106	0.108	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD10978	Total Organic Carbon	mg/L	0.192	1.00	10.0	11.1	10.3	25.6		111	80.0 to 120	7.48	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/13/23 08:53
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BD10978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10978	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.30	0.260	1.96	1.80 to 2.20	103	90.0 to 110	9.68	15.0
BD10979	Solids, Dissolved	mg/L	1.00	25.0			197	48.0	40.0 to 60.0			1.01	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 6/13/23 09:55
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***				***Preparation Method: EPA 1638***				
* Boron, Total	6/15/23 12:33	6/22/23 11:43		1.015	0.0864	mg/L	0.030000	0.1015	J
* Calcium, Total	6/15/23 12:33	6/22/23 11:43		1.015	36.4	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 12:47		10.15	22.8	mg/L	0.08120	0.406	
* Lithium, Total	6/15/23 12:33	6/22/23 11:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:43		1.015	6.18	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:43		1	34.9	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:43		1.015	16.3	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:43		1.015	13.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:31		1.015	0.0866	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:31		1.015	37.7	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 12:12		10.15	25.6	mg/L	0.08120	0.406	
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:31		1.015	6.19	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:31		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:31		1	34.9	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:31		1.015	16.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:31		1.015	12.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/15/23 12:33	6/16/23 11:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	6/15/23 12:33	6/16/23 11:21		1.015	0.00397	mg/L	0.000112	0.000203	
* Aluminum, Total	6/15/23 12:33	6/16/23 11:21		1.015	0.00990	mg/L	0.009135	0.05075	J
* Barium, Total	6/15/23 12:33	6/16/23 11:21		1.015	0.294	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 11:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 11:21		1.015	0.000348	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 11:21		1.015	0.000866	mg/L	0.000068	0.000203	
* Lead, Total	6/15/23 12:33	6/16/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 11:21		1.015	0.707	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 6/13/23 09:55
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 11:21		1.015	0.603	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 11:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	0.00365	mg/L	0.000112	0.000203	
* Barium, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	0.280	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	0.000212	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	0.000757	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	0.707	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	0.641	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:36	6/14/23 12:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	137	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	199	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	137	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 19:31	6/15/23 19:31		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 6/13/23 09:55
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:25	6/16/23 10:25		1	5.45	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:31	6/19/23 13:31		1	0.0805	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:45	6/23/23 14:45		1	21.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/13/23 09:52	6/13/23 09:52			333.80	uS/cm			FA
pH	6/13/23 09:52	6/13/23 09:52			6.55	SU			FA
Temperature	6/13/23 09:52	6/13/23 09:52			19.59	C			FA
Turbidity	6/13/23 09:52	6/13/23 09:52			7.15	NTU			FA
Sulfide	6/13/23 09:52	6/13/23 09:52			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 09:55
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BD10979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10981	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.136	0.137	0.103	0.0850 to 0.115	105	70.0 to 130	0.733	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10981	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0908	0.0912	0.0928	0.0850 to 0.115	90.8	70.0 to 130	0.440	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10981	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0984	0.0981	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.305	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10981	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.144	0.142	0.0980	0.0850 to 0.115	98.4	70.0 to 130	1.40	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10981	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0952	0.0940	0.0964	0.0850 to 0.115	95.2	70.0 to 130	1.27	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10981	Boron, Total	mg/L	0.000366	0.0650	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10981	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0945	0.0946	0.0979	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10981	Calcium, Total	mg/L	-0.00638	0.152	5.00	7.49	7.77	4.79	4.25 to 5.75	93.4	70.0 to 130	3.67	20.0
BD10981	Chloride	mg/L	-0.00691	1.00	10.0	14.2	14.0	9.97	9.00 to 11.0	103	80.0 to 120	1.42	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10981	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0977	0.0979	0.0986	0.0850 to 0.115	97.2	70.0 to 130	0.204	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10981	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0995	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.302	20.0
BD10981	Fluoride	mg/L	0.0432	0.125	2.50	2.28	2.38	2.55	2.25 to 2.75	91.2	80.0 to 120	4.29	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10981	Iron, Total	mg/L	0.000457	0.0176	0.2	0.255	0.260	0.204	0.170 to 0.230	99.6	70.0 to 130	1.94	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 09:55
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BD10979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10981	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10981	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.211	0.210	0.213	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10981	Magnesium, Total	mg/L	0.00141	0.0462	5.00	6.14	6.17	5.16	4.25 to 5.75	100	70.0 to 130	0.487	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10981	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.119	0.119	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10981	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00395	0.00391	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10981	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.201	0.204	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10981	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	10.1	9.93	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10981	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10981	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.04	8.10	1.03	0.850 to 1.15	101	70.0 to 130	0.743	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10981	Sodium, Total	mg/L	0.00483	0.0880	5.00	9.13	9.12	5.29	4.25 to 5.75	102	70.0 to 130	0.110	20.0
BD10981	Sulfate	mg/L	-0.0227	2.0	20.0	19.7	20.0	20.5	18.0 to 22.0	98.5	80.0 to 120	1.51	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10981	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.103	0.105	0.108	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10981	Total Organic Carbon	mg/L	0.134	1.00	10.0	10.9	10.4	25.7		109	80.0 to 120	4.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/13/23 09:55
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BD10979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10981	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	3.01	0.961	1.94	1.80 to 2.20	103	90.0 to 110	0.417	15.0
BD10979	Solids, Dissolved	mg/L	1.00	25.0			197	48.0	40.0 to 60.0			1.01	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 6/13/23 11:05
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***					***Preparation Method: EPA 1638***			
* Boron, Total	6/15/23 12:33	6/22/23 11:46		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/15/23 12:33	6/22/23 11:46		1.015	3.14	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 11:46		1.015	0.0249	mg/L	0.008120	0.0406	J
* Lithium, Total	6/15/23 12:33	6/22/23 11:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:46		1.015	1.01	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:46		1	12.6	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:46		1.015	5.89	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:46		1.015	3.88	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	3.15	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	1.02	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:34		1	12.7	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	5.93	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:34		1.015	3.89	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	6/15/23 12:33	6/16/23 11:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/15/23 12:33	6/16/23 11:25		1.015	0.0219	mg/L	0.009135	0.05075	J
* Arsenic, Total	6/15/23 12:33	6/16/23 11:25		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	6/15/23 12:33	6/16/23 11:25		1.015	0.0277	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 11:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 11:25		1.015	0.000291	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 11:25		1.015	0.0000843	mg/L	0.000068	0.000203	J
* Lead, Total	6/15/23 12:33	6/16/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/15/23 12:33	6/16/23 11:25		1.015	0.00225	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 6/13/23 11:05
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 11:25		1.015	0.410	mg/L	0.169505	0.5075	J
* Selenium, Total	6/15/23 12:33	6/16/23 11:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	0.0293	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	0.00188	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	0.431	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:37	6/14/23 12:37		1	1.04	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	11.2	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	36.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	11.2	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 19:45	6/15/23 19:45		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 6/13/23 11:05
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:26	6/16/23 10:26		1	3.38	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:32	6/19/23 13:32		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:46	6/23/23 14:46		1	1.14	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/13/23 11:01	6/13/23 11:01			44.47	uS/cm			FA
pH	6/13/23 11:01	6/13/23 11:01			5.15	SU			FA
Temperature	6/13/23 11:01	6/13/23 11:01			17.42	C			FA
Turbidity	6/13/23 11:01	6/13/23 11:01			3.92	NTU			FA
Sulfide	6/13/23 11:01	6/13/23 11:01			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 11:05
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BD10980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10981	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.136	0.137	0.103	0.0850 to 0.115	105	70.0 to 130	0.733	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10981	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0908	0.0912	0.0928	0.0850 to 0.115	90.8	70.0 to 130	0.440	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10981	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0984	0.0981	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.305	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10981	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.144	0.142	0.0980	0.0850 to 0.115	98.4	70.0 to 130	1.40	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10981	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0952	0.0940	0.0964	0.0850 to 0.115	95.2	70.0 to 130	1.27	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10981	Boron, Total	mg/L	0.000366	0.0650	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10981	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0945	0.0946	0.0979	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10981	Calcium, Total	mg/L	-0.00638	0.152	5.00	7.49	7.77	4.79	4.25 to 5.75	93.4	70.0 to 130	3.67	20.0
BD10981	Chloride	mg/L	-0.00691	1.00	10.0	14.2	14.0	9.97	9.00 to 11.0	103	80.0 to 120	1.42	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10981	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0977	0.0979	0.0986	0.0850 to 0.115	97.2	70.0 to 130	0.204	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10981	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0995	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.302	20.0
BD10981	Fluoride	mg/L	0.0432	0.125	2.50	2.28	2.38	2.55	2.25 to 2.75	91.2	80.0 to 120	4.29	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10981	Iron, Total	mg/L	0.000457	0.0176	0.2	0.255	0.260	0.204	0.170 to 0.230	99.6	70.0 to 130	1.94	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 11:05
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BD10980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10981	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10981	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.211	0.210	0.213	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10981	Magnesium, Total	mg/L	0.00141	0.0462	5.00	6.14	6.17	5.16	4.25 to 5.75	100	70.0 to 130	0.487	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10981	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.119	0.119	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10981	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00395	0.00391	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10981	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.201	0.204	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10981	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	10.1	9.93	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10981	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10981	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.04	8.10	1.03	0.850 to 1.15	101	70.0 to 130	0.743	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10981	Sodium, Total	mg/L	0.00483	0.0880	5.00	9.13	9.12	5.29	4.25 to 5.75	102	70.0 to 130	0.110	20.0
BD10981	Sulfate	mg/L	-0.0227	2.0	20.0	19.7	20.0	20.5	18.0 to 22.0	98.5	80.0 to 120	1.51	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10981	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.103	0.105	0.108	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10981	Total Organic Carbon	mg/L	0.134	1.00	10.0	10.9	10.4	25.7		109	80.0 to 120	4.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/13/23 11:05
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BD10980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10981	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	3.01	0.961	1.94	1.80 to 2.20	103	90.0 to 110	0.417	15.0
BD10979	Solids, Dissolved	mg/L	1.00	25.0			197	48.0	40.0 to 60.0			1.01	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 6/13/23 12:35
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ELH***				***Preparation Method: EPA 1638***				
* Boron, Total	6/15/23 12:33	6/22/23 11:50		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/15/23 12:33	6/22/23 11:50		1.015	2.82	mg/L	0.070035	0.406	
* Iron, Total	6/15/23 12:33	6/22/23 11:50		1.015	0.0557	mg/L	0.008120	0.0406	
* Lithium, Total	6/15/23 12:33	6/22/23 11:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/15/23 12:33	6/22/23 11:50		1.015	1.12	mg/L	0.021315	0.406	
* Molybdenum, Total	6/15/23 12:33	6/22/23 11:50		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	6/15/23 12:33	6/22/23 11:50		1	15.0	mg/L			
* Silicon, Total	6/15/23 12:33	6/22/23 11:50		1.015	7.03	mg/L	0.02030	0.25375	
* Sodium, Total	6/15/23 12:33	6/22/23 11:50		1.015	4.02	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ELH***								
* Boron, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	2.85	mg/L	0.070035	0.406	
* Iron, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	0.0334	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	1.13	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	6/15/23 09:00	6/22/23 10:37		1	15.2	mg/L			
* Silicon, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	7.10	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/15/23 09:00	6/22/23 10:37		1.015	4.04	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	6/15/23 12:33	6/16/23 11:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	6/15/23 12:33	6/16/23 11:29		1.015	0.0313	mg/L	0.009135	0.05075	J
* Arsenic, Total	6/15/23 12:33	6/16/23 11:29		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	6/15/23 12:33	6/16/23 11:29		1.015	0.0456	mg/L	0.000508	0.001015	
* Beryllium, Total	6/15/23 12:33	6/16/23 11:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/15/23 12:33	6/16/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/15/23 12:33	6/16/23 11:29		1.015	0.000463	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/15/23 12:33	6/16/23 11:29		1.015	0.000155	mg/L	0.000068	0.000203	J
* Lead, Total	6/15/23 12:33	6/16/23 11:29		1.015	0.0000778	mg/L	0.000068	0.000203	J
* Manganese, Total	6/15/23 12:33	6/16/23 11:29		1.015	0.0165	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 6/13/23 12:35
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	6/15/23 12:33	6/16/23 11:29		1.015	0.516	mg/L	0.169505	0.5075	
* Selenium, Total	6/15/23 12:33	6/16/23 11:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/15/23 12:33	6/16/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	0.0470	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	0.000274	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	0.00401	mg/L	0.000152	0.001015	
* Potassium, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	0.526	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/15/23 09:00	6/15/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	6/19/23 14:52	6/19/23 20:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	6/14/23 12:37	6/14/23 12:37		1	0.957	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	6/23/23 09:54	6/23/23 11:37		1	11.7	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	6/15/23 11:40	6/19/23 12:50		1	36.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	11.7	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	6/23/23 09:54	6/23/23 11:37		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	6/15/23 20:00	6/15/23 20:00		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 6/13/23 12:35
Customer ID:
Submittal Date: 6/14/23 09:16

Laboratory ID Number: BD10981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	6/16/23 10:27	6/16/23 10:27		1	3.88	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	6/19/23 13:34	6/19/23 13:34		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/23/23 14:47	6/23/23 14:47		1	Not Detected	mg/L	0.6	2	U
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	6/13/23 12:32	6/13/23 12:32			44.18	uS/cm			FA
pH	6/13/23 12:32	6/13/23 12:32			5.10	SU			FA
Temperature	6/13/23 12:32	6/13/23 12:32			16.70	C			FA
Turbidity	6/13/23 12:32	6/13/23 12:32			4.31	NTU			FA
Sulfide	6/13/23 12:32	6/13/23 12:32			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 12:35
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BD10981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Aluminum, Dissolved	mg/L	0.000201	0.0198	0.100	0.107	0.106	0.107	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BD10981	Aluminum, Total	mg/L	0.00118	0.0198	0.100	0.136	0.137	0.103	0.0850 to 0.115	105	70.0 to 130	0.733	20.0
BD10981	Antimony, Dissolved	mg/L	0.000376	0.00100	0.100	0.0926	0.0899	0.0906	0.0850 to 0.115	92.6	70.0 to 130	2.96	20.0
BD10981	Antimony, Total	mg/L	0.000414	0.00100	0.100	0.0908	0.0912	0.0928	0.0850 to 0.115	90.8	70.0 to 130	0.440	20.0
BD10981	Arsenic, Dissolved	mg/L	0.0000135	0.000200	0.100	0.0982	0.0981	0.0994	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD10981	Arsenic, Total	mg/L	0.0000480	0.000200	0.100	0.0984	0.0981	0.101	0.0850 to 0.115	98.4	70.0 to 130	0.305	20.0
BD10981	Barium, Dissolved	mg/L	0.0000139	0.00100	0.100	0.147	0.143	0.0986	0.0850 to 0.115	100	70.0 to 130	2.76	20.0
BD10981	Barium, Total	mg/L	0.0000394	0.00100	0.100	0.144	0.142	0.0980	0.0850 to 0.115	98.4	70.0 to 130	1.40	20.0
BD10981	Beryllium, Dissolved	mg/L	0.0000278	0.000880	0.100	0.101	0.0986	0.0989	0.0850 to 0.115	101	70.0 to 130	2.40	20.0
BD10981	Beryllium, Total	mg/L	0.000124	0.000880	0.100	0.0952	0.0940	0.0964	0.0850 to 0.115	95.2	70.0 to 130	1.27	20.0
BD10981	Boron, Dissolved	mg/L	-0.000029	0.0650	1.00	1.01	1.01	1.03	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD10981	Boron, Total	mg/L	0.000366	0.0650	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD10981	Cadmium, Dissolved	mg/L	-0.0000033	0.000147	0.100	0.0970	0.0991	0.0982	0.0850 to 0.115	97.0	70.0 to 130	2.14	20.0
BD10981	Cadmium, Total	mg/L	0.0000186	0.000147	0.100	0.0945	0.0946	0.0979	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD10981	Calcium, Dissolved	mg/L	-0.0163	0.152	5.00	7.68	7.57	5.01	4.25 to 5.75	96.6	70.0 to 130	1.44	20.0
BD10981	Calcium, Total	mg/L	-0.00638	0.152	5.00	7.49	7.77	4.79	4.25 to 5.75	93.4	70.0 to 130	3.67	20.0
BD10981	Chloride	mg/L	-0.00691	1.00	10.0	14.2	14.0	9.97	9.00 to 11.0	103	80.0 to 120	1.42	20.0
BD10981	Chromium, Dissolved	mg/L	-0.0000430	0.000440	0.100	0.0979	0.0982	0.0978	0.0850 to 0.115	97.6	70.0 to 130	0.306	20.0
BD10981	Chromium, Total	mg/L	0.0000552	0.000440	0.100	0.0977	0.0979	0.0986	0.0850 to 0.115	97.2	70.0 to 130	0.204	20.0
BD10981	Cobalt, Dissolved	mg/L	-0.000100	0.000147	0.100	0.0988	0.0982	0.0992	0.0850 to 0.115	98.8	70.0 to 130	0.609	20.0
BD10981	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0995	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.302	20.0
BD10981	Fluoride	mg/L	0.0432	0.125	2.50	2.28	2.38	2.55	2.25 to 2.75	91.2	80.0 to 120	4.29	20.0
BD10981	Iron, Dissolved	mg/L	0.00588	0.0176	0.2	0.201	0.202	0.209	0.170 to 0.230	83.8	70.0 to 130	0.496	20.0
BD10981	Iron, Total	mg/L	0.000457	0.0176	0.2	0.255	0.260	0.204	0.170 to 0.230	99.6	70.0 to 130	1.94	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 6/13/23 12:35
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BD10981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10981	Lead, Dissolved	mg/L	0.0000065	0.000147	0.100	0.100	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD10981	Lead, Total	mg/L	0.0000343	0.000147	0.100	0.102	0.103	0.105	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10981	Lithium, Dissolved	mg/L	-0.000274	0.0154	0.200	0.209	0.214	0.207	0.170 to 0.230	104	70.0 to 130	2.36	20.0
BD10981	Lithium, Total	mg/L	-0.0004	0.0154	0.200	0.211	0.210	0.213	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD10981	Magnesium, Dissolved	mg/L	0.00115	0.0462	5.00	6.17	6.21	5.11	4.25 to 5.75	101	70.0 to 130	0.646	20.0
BD10981	Magnesium, Total	mg/L	0.00141	0.0462	5.00	6.14	6.17	5.16	4.25 to 5.75	100	70.0 to 130	0.487	20.0
BD10981	Manganese, Dissolved	mg/L	0.0000046	0.00033	0.100	0.108	0.109	0.104	0.0850 to 0.115	104	70.0 to 130	0.922	20.0
BD10981	Manganese, Total	mg/L	0.0000727	0.00033	0.100	0.119	0.119	0.105	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD10981	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00395	0.00391	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.02	20.0
BD10981	Molybdenum, Dissolved	mg/L	0.000235	0.0100	0.2	0.200	0.201	0.206	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10981	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.201	0.204	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD10981	Potassium, Dissolved	mg/L	-0.00482	0.367	10.0	10.4	10.6	10.1	8.50 to 11.5	98.7	70.0 to 130	1.90	20.0
BD10981	Potassium, Total	mg/L	0.00302	0.367	10.0	10.1	10.1	9.93	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD10981	Selenium, Dissolved	mg/L	0.0000867	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD10981	Selenium, Total	mg/L	0.0000678	0.00100	0.100	0.101	0.100	0.102	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BD10981	Silicon, Dissolved	mg/L	-0.000116	0.0440	1.00	8.11	8.08	1.05	0.850 to 1.15	101	70.0 to 130	0.371	20.0
BD10981	Silicon, Total	mg/L	0.00242	0.0440	1.00	8.04	8.10	1.03	0.850 to 1.15	101	70.0 to 130	0.743	20.0
BD10981	Sodium, Dissolved	mg/L	0.00115	0.0880	5.00	9.14	9.29	5.16	4.25 to 5.75	102	70.0 to 130	1.63	20.0
BD10981	Sodium, Total	mg/L	0.00483	0.0880	5.00	9.13	9.12	5.29	4.25 to 5.75	102	70.0 to 130	0.110	20.0
BD10981	Sulfate	mg/L	-0.0227	2.0	20.0	19.7	20.0	20.5	18.0 to 22.0	98.5	80.0 to 120	1.51	20.0
BD10981	Thallium, Dissolved	mg/L	-0.000114	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10981	Thallium, Total	mg/L	0.0000190	0.000147	0.100	0.103	0.105	0.108	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD10981	Total Organic Carbon	mg/L	0.134	1.00	10.0	10.9	10.4	25.7		109	80.0 to 120	4.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 7/13/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 6/13/23 12:35
Customer ID:
Delivery Date: 6/14/23 09:16

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BD10981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD10976	Alkalinity	mg CaCO3/L					125	50.3	45.0 to 55.0			0.00	10.0
BD10981	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	3.01	0.961	1.94	1.80 to 2.20	103	90.0 to 110	0.417	15.0
BD10979	Solids, Dissolved	mg/L	1.00	25.0			197	48.0	40.0 to 60.0			1.01	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Alabama Power

Project Number: WMWGADAP_1414

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
	2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Relinquish to shipping lab 060723 1300

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-3	06/06/2023	09:45	5	Field Blank		BD10621	☑
MW-4	06/06/2023	09:50	6	Groundwater		BD10622	☑
MW-4 Dup	06/06/2023	09:50	6	Sample Duplicate		BD10623	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.06.08 09:51:30 -05'00'	06/08/2023 09:51

SmarTroll ID	7586-41446-5-5	Cooler Temp	2.0 °C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-6	06/05/2023	13:00	6	Groundwater		BD10634	☑
PZ-2	06/05/2023	14:30	6	Groundwater		BD10635	☑
MW-14	06/06/2023	08:43	6	Groundwater		BD10636	☑
MW-17	06/06/2023	12:28	6	Groundwater		BD10637	☑
MW-16	06/06/2023	14:00	6	Groundwater		BD10638	☑
MW-5	06/07/2023	09:55	6	Groundwater		BD10639	☑
PZ-1	06/07/2023	10:45	6	Groundwater		BD10640	☑
MW-8	06/07/2023	13:45	6	Groundwater		BD10641	☑
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Relinquished By	Received By	Date/Time
		06/08/2023 09:06

SmarTroll ID	7586-41445-5-4	Cooler Temp	2.9 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-4V	06/05/2023	12:07	6	Groundwater		BD10624	☑
MW-20H	06/05/2023	13:08	6	Groundwater		BD10625	☑
MW-3	06/05/2023	14:08	6	Groundwater		BD10626	☑
MW-3 dup	06/05/2023	14:08	6	Sample Duplicate		BD10627	☑
MW-1	06/05/2023	15:15	6	Groundwater		BD10628	☑
MW-2	06/06/2023	09:22	6	Groundwater		BD10629	☑
MW-21VC	06/06/2023	12:33	6	Groundwater		BD10630	☑
MW-2VA	06/07/2023	08:24	6	Groundwater		BD10631	☑
MW-2VB	06/07/2023	10:11	6	Groundwater		BD10632	☑
MW-22VB	06/07/2023	12:14	6	Groundwater		BD10633	☑
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Relinquished By	Received By	Date/Time
		06/08/2023 08:41

SmarTroll ID	7586-41443-5-2	Cooler Temp	0.6 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☐ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-2	06/13/2023	08:25	5	Field Blank		BD10969	☑
MW-12	06/13/2023	09:00	6	Groundwater		BD10970	☑
EB-1	06/13/2023	09:25	5	Equipment Blank		BD10971	☑
MW-11	06/13/2023	10:19	6	Groundwater		BD10972	☑
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Relinquished By	Received By	Date/Time
		06/14/2023 09:07

SmarTroll ID	7586-41443-5-2	Cooler Temp	1.3 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-19H	06/12/2023	11:00	6	Groundwater		BD10973	☑
MW-18H	06/12/2023	12:10	6	Groundwater		BD10974	☑
MW-18H Dup	06/12/2023	12:10	6	Sample Duplicate		BD10975	☑
MW-9	06/12/2023	14:08	6	Groundwater		BD10976	☑
FB-1	06/12/2023	15:00	5	Field Blank		BD10977	☑
MW-7	06/13/2023	08:53	6	Groundwater		BD10978	☑
MW-10	06/13/2023	09:55	6	Groundwater		BD10979	☑
PZ-6	06/13/2023	11:05	6	Groundwater		BD10980	☑
PZ-5	06/13/2023	12:35	6	Groundwater		BD10981	☑
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Relinquished By	Received By	Date/Time
		06/14/2023 09:08

SmarTroll ID	7586-41445-5-4	Cooler Temp	1.9 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Relinquish to Shipping Lab 060723 1300

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-3	06/06/2023	09:45	1	Field Blank		BD10642	☑
MW-4	06/06/2023	09:50	1	Groundwater		BD10643	☑
MW-4 Dup	06/06/2023	09:50	1	Sample Duplicate		BD10644	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.06.08 09:51:48 -05'00'	06/08/2023 09:51

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-57039-1-1	Thermometer ID	N/A
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD @ PZ-2

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-6	06/05/2023	13:00	1	Groundwater		BD10655	☑
PZ-2	06/05/2023	14:30	3	Groundwater		BD10656	☑
MW-14	06/06/2023	08:43	1	Groundwater		BD10657	☑
MW-17	06/06/2023	12:28	1	Groundwater		BD10658	☑
MW-16	06/06/2023	14:00	1	Groundwater		BD10659	☑
MW-5	06/07/2023	09:55	1	Groundwater		BD10660	☑
PZ-1	06/07/2023	10:45	1	Groundwater		BD10661	☑
MW-8	06/07/2023	13:45	1	Groundwater		BD10662	☑
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Relinquished By	Received By	Date/Time
[signature]	[signature]	06/08/2023 09:06

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-20H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-4V	06/05/2023	12:07	1	Groundwater		BD10645	☑
MW-20H	06/05/2023	13:08	3	Groundwater		BD10646	☑
MW-3	06/05/2023	14:08	1	Groundwater		BD10647	☑
MW-3 dup	06/05/2023	14:08	1	Sample Duplicate		BD10648	☑
MW-1	06/05/2023	15:15	1	Groundwater		BD10649	☑
MW-2	06/06/2023	09:22	1	Groundwater		BD10650	☑
MW-21VC	06/06/2023	12:33	1	Groundwater		BD10651	☑
MW-2VA	06/07/2023	08:24	1	Groundwater		BD10652	☑
MW-2VB	06/07/2023	10:11	1	Groundwater		BD10653	☑
MW-22VB	06/07/2023	12:14	1	Groundwater		BD10654	☑
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Relinquished By	Received By	Date/Time
Dallas Gentry	Brandon Patton	06/08/2023 08:41

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-2	06/13/2023	08:25	1	Field Blank		BD10982	☑
MW-12	06/13/2023	09:00	1	Groundwater		BD10983	☑
EB-1	06/13/2023	09:25	1	Equipment Blank		BD10984	☑
MW-11	06/13/2023	10:19	1	Groundwater		BD10985	☑
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Relinquished By	Received By	Date/Time
		06/14/2023 09:07

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

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Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-19H	06/12/2023	11:00	1	Groundwater		BD10986	☑
MW-18H	06/12/2023	12:10	1	Groundwater		BD10987	☑
MW-18H Dup	06/12/2023	12:10	1	Sample Duplicate		BD10988	☑
MW-9	06/12/2023	14:08	1	Groundwater		BD10989	☑
FB-1	06/12/2023	15:00	1	Field Blank		BD10990	☑
MW-7	06/13/2023	08:53	1	Groundwater		BD10991	☑
MW-10	06/13/2023	09:55	1	Groundwater		BD10992	☑
PZ-6	06/13/2023	11:05	1	Groundwater		BD10993	☑
PZ-5	06/13/2023	12:35	1	Groundwater		BD10994	☑
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Relinquished By	Received By	Date/Time
		06/14/2023 09:08

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1414	pH Strip ID	10620-61242-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

July 18, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGADAP_1414
Pace Project No.: 30598257

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on June 19, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

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Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: WMWGADAP_1414
Pace Project No.: 30598257

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30598257001	**BD10642 FB-3**	Water	06/06/23 09:45	06/19/23 10:20
30598257002	**BD10643 MW-4**	Water	06/06/23 09:50	06/19/23 10:20
30598257003	**BD10644 MW-4 Dup**	Water	06/06/23 09:50	06/19/23 10:20
30598257004	**BD10645 MW-4V**	Water	06/05/23 12:07	06/19/23 10:20
30598257005	**BD10646 MW-20H**	Water	06/05/23 13:08	06/19/23 10:20
30598257006	**BD10646 MW-20H MS**	Water	06/05/23 13:08	06/19/23 10:20
30598257007	**BD10646 MW-20H MSD**	Water	06/05/23 13:08	06/19/23 10:20
30598257008	**BD10647 MW-3**	Water	06/05/23 14:08	06/19/23 10:20
30598257009	**BD10648 MW-3 Dup**	Water	06/05/23 14:08	06/19/23 10:20
30598257010	**BD10649 MW-1**	Water	06/05/23 15:15	06/19/23 10:20
30598257011	**BD10650 MW-2**	Water	06/06/23 09:22	06/19/23 10:20
30598257012	**BD10651 MW-21VC**	Water	06/06/23 12:33	06/19/23 10:20
30598257013	**BD10652 MW-2VA**	Water	06/07/23 08:24	06/19/23 10:20
30598257014	**BD10653 MW-2VB**	Water	06/07/23 10:11	06/19/23 10:20
30598257015	**BD10654 MW-22VB**	Water	06/07/23 12:14	06/19/23 10:20
30598257016	**BD10655 MW-6**	Water	06/05/23 13:00	06/19/23 10:20
30598257017	**BD10656 PZ-2**	Water	06/05/23 14:30	06/19/23 10:20
30598257018	**BD10656 PZ-2 MS**	Water	06/05/23 14:30	06/19/23 10:20
30598257019	**BD10656 PZ-2 MSD**	Water	06/05/23 14:30	06/19/23 10:20
30598257020	**BD10657 MW-14**	Water	06/06/23 08:43	06/19/23 10:20
30598257021	**BD10658 MW-17**	Water	06/06/23 12:28	06/19/23 10:20
30598257022	**BD10659 MW-16**	Water	06/06/23 14:00	06/19/23 10:20
30598257023	**BD10660 MW-5**	Water	06/07/23 09:55	06/19/23 10:20
30598257024	**BD10661 PZ-1**	Water	06/07/23 10:45	06/19/23 10:20
30598257025	**BD10662 MW-8**	Water	06/07/23 13:45	06/19/23 10:20
30598257026	**BD10982 FB-2**	Water	06/13/23 08:25	06/19/23 10:20
30598257027	**BD10983 MW-12**	Water	06/13/23 09:00	06/19/23 10:20
30598257028	**BD10984 EB-1**	Water	06/13/23 09:25	06/19/23 10:20
30598257029	**BD10985 MW-11**	Water	06/13/23 10:19	06/19/23 10:20
30598257030	**BD10986 MW-19H**	Water	06/12/23 11:00	06/19/23 10:20
30598257031	**BD10987 MW-18H**	Water	06/12/23 12:10	06/19/23 10:20
30598257032	**BD10988 MW-18H Dup**	Water	06/12/23 12:10	06/19/23 10:20
30598257033	**BD10989 MW-9**	Water	06/12/23 14:08	06/19/23 10:20
30598257034	**BD10990 FB-1**	Water	06/12/23 15:00	06/19/23 10:20
30598257035	**BD10991 MW-7**	Water	06/13/23 08:53	06/19/23 10:20
30598257036	**BD10992 MW-10**	Water	06/13/23 09:55	06/19/23 10:20
30598257037	**BD10993 PZ-6**	Water	06/13/23 11:05	06/19/23 10:20

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30598257038	**BD10994 PZ-5**	Water	06/13/23 12:35	06/19/23 10:20

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30598257001	**BD10642 FB-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257002	**BD10643 MW-4**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257003	**BD10644 MW-4 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257004	**BD10645 MW-4V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257005	**BD10646 MW-20H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257006	**BD10646 MW-20H MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJY	1	PASI-PA
30598257007	**BD10646 MW-20H MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJY	1	PASI-PA
30598257008	**BD10647 MW-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257009	**BD10648 MW-3 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257010	**BD10649 MW-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257011	**BD10650 MW-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257012	**BD10651 MW-21VC**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257013	**BD10652 MW-2VA**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30598257014	**BD10653 MW-2VB**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257015	**BD10654 MW-22VB**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257016	**BD10655 MW-6**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257017	**BD10656 PZ-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257018	**BD10656 PZ-2 MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30598257019	**BD10656 PZ-2 MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30598257020	**BD10657 MW-14**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257021	**BD10658 MW-17**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257022	**BD10659 MW-16**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257023	**BD10660 MW-5**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257024	**BD10661 PZ-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257025	**BD10662 MW-8**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257026	**BD10982 FB-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30598257027	**BD10983 MW-12**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257028	**BD10984 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257029	**BD10985 MW-11**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257030	**BD10986 MW-19H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257031	**BD10987 MW-18H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257032	**BD10988 MW-18H Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257033	**BD10989 MW-9**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257034	**BD10990 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257035	**BD10991 MW-7**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257036	**BD10992 MW-10**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257037	**BD10993 PZ-6**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30598257038	**BD10994 PZ-5**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: WMWGADAP_1414
Pace Project No.: 30598257

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: July 18, 2023

General Information:
38 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: WMWGADAP_1414
Pace Project No.: 30598257

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: July 18, 2023

General Information:
38 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: WMWGADAP_1414
Pace Project No.: 30598257

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: July 18, 2023

General Information:
34 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10642 FB-3 **Lab ID: 30598257001** Collected: 06/06/23 09:45 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.298U ± 0.254 (0.467) C:91% T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.235U ± 0.372 (0.806) C:76% T:89%**	pCi/L	07/10/23 16:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.533U ± 0.626 (1.27)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10643 MW-4 **Lab ID: 30598257002** Collected: 06/06/23 09:50 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.468U ± 0.333 (0.556) C:75% T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.698U ± 0.455 (0.863) C:78% T:80%**	pCi/L	07/10/23 16:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17U ± 0.788 (1.42)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10644 MW-4 Dup **Lab ID: 30598257003** Collected: 06/06/23 09:50 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.443U ± 0.327 (0.574) C:75% T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.471U ± 0.377 (0.744) C:83% T:80%**	pCi/L	07/10/23 16:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.914U ± 0.704 (1.32)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10645 MW-4V **Lab ID: 30598257004** Collected: 06/05/23 12:07 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.270U ± 0.253 (0.485) C:91% T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.163U ± 0.331 (0.731) C:79% T:91%**	pCi/L	07/10/23 16:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.433U ± 0.584 (1.22)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10646 MW-20H **Lab ID: 30598257005** Collected: 06/05/23 13:08 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.248U ± 0.308 (0.661) C:92% T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.376U ± 0.416 (0.867) C:74% T:80%**	pCi/L	07/10/23 16:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.624U ± 0.724 (1.53)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10646 MW-20H MS **Lab ID: 30598257006** Collected: 06/05/23 13:08 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**108.84 %REC ± NA (NA) C:NA T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**78.37 %REC ± NA (NA) C:NA T:NA**	pCi/L	07/10/23 16:42	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10646 MW-20H MSD **Lab ID: 30598257007** Collected: 06/05/23 13:08 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**105.59 %REC 3.03RPD ± NA (NA) C:NA T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**66.45 %REC 16.47 RPD ± NA (NA) C:NA T:NA**	pCi/L	07/10/23 16:40	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10647 MW-3 **Lab ID: 30598257008** Collected: 06/05/23 14:08 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.249U ± 0.250 (0.494) C:94% T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.173U ± 0.360 (0.795) C:84% T:85%**	pCi/L	07/10/23 16:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.422U ± 0.610 (1.29)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10648 MW-3 Dup **Lab ID: 30598257009** Collected: 06/05/23 14:08 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.285U ± 0.286 (0.575) C:92% T:NA**	pCi/L	07/16/23 12:52	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.595U ± 0.428 (0.836) C:82% T:85%**	pCi/L	07/10/23 16:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.880U ± 0.714 (1.41)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10649 MW-1 **Lab ID: 30598257010** Collected: 06/05/23 15:15 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.271U ± 0.247 (0.471) C:92% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.821U ± 0.495 (0.927) C:69% T:88%**	pCi/L	07/10/23 16:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.09U ± 0.742 (1.40)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10650 MW-2 **Lab ID: 30598257011** Collected: 06/06/23 09:22 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.631 ± 0.320 (0.439) C:94% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.276U ± 0.344 (0.729) C:81% T:86%**	pCi/L	07/10/23 16:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.907U ± 0.664 (1.17)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10651 MW-21VC **Lab ID: 30598257012** Collected: 06/06/23 12:33 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.476 ± 0.287 (0.426) C:84% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.181U ± 0.331 (0.811) C:81% T:85%**	pCi/L	07/10/23 16:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.476U ± 0.618 (1.24)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10652 MW-2VA **Lab ID: 30598257013** Collected: 06/07/23 08:24 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0854U ± 0.200 (0.474) C:93% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.364U ± 0.376 (0.776) C:77% T:83%**	pCi/L	07/10/23 16:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.449U ± 0.576 (1.25)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10653 MW-2VB **Lab ID: 30598257014** Collected: 06/07/23 10:11 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.337U ± 0.242 (0.402) C:95% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.421U ± 0.377 (0.757) C:73% T:86%**	pCi/L	07/10/23 16:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.758U ± 0.619 (1.16)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10654 MW-22VB **Lab ID: 30598257015** Collected: 06/07/23 12:14 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.188U ± 0.191 (0.356) C:95% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.256U ± 0.323 (0.684) C:80% T:87%**	pCi/L	07/10/23 16:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.444U ± 0.514 (1.04)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10655 MW-6 **Lab ID: 30598257016** Collected: 06/05/23 13:00 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.270U ± 0.226 (0.407) C:93% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.434U ± 0.328 (0.635) C:82% T:93%**	pCi/L	07/10/23 16:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.704U ± 0.554 (1.04)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10656 PZ-2 **Lab ID: 30598257017** Collected: 06/05/23 14:30 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.377 ± 0.240 (0.346) C:98% T:NA**	pCi/L	07/16/23 12:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.285U ± 0.332 (0.698) C:79% T:85%**	pCi/L	07/10/23 12:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.662U ± 0.572 (1.04)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10656 PZ-2 MS **Lab ID: 30598257018** Collected: 06/05/23 14:30 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**117.21 %REC ± NA (NA) C:NA T:NA**	pCi/L	07/16/23 12:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**98.52 %REC ± NA (NA) C:NA T:NA**	pCi/L	07/10/23 12:40	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10656 PZ-2 MSD **Lab ID: 30598257019** Collected: 06/05/23 14:30 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**92.72 %REC 23.34RPD ± NA (NA) C:NA T:NA**	pCi/L	07/16/23 12:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**79.08 %REC 21.89RPD ± NA (NA) C:NA T:NA**	pCi/L	07/10/23 12:40	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10657 MW-14 **Lab ID: 30598257020** Collected: 06/06/23 08:43 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.666 ± 0.335 (0.483) C:96% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.685U ± 0.425 (0.776) C:78% T:75%**	pCi/L	07/10/23 16:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.35 ± 0.760 (1.26)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10658 MW-17 **Lab ID: 30598257021** Collected: 06/06/23 12:28 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.217U ± 0.222 (0.437) C:93% T:NA**	pCi/L	07/16/23 12:53	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.307U ± 0.352 (0.735) C:79% T:82%**	pCi/L	07/10/23 16:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.524U ± 0.574 (1.17)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10659 MW-16 **Lab ID: 30598257022** Collected: 06/06/23 14:00 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.538 ± 0.310 (0.459) C:91% T:NA**	pCi/L	07/16/23 12:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.312U ± 0.389 (0.824) C:79% T:83%**	pCi/L	07/10/23 16:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.850U ± 0.699 (1.28)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10660 MW-5 **Lab ID: 30598257023** Collected: 06/07/23 09:55 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.386U ± 0.264 (0.420) C:92% T:NA**	pCi/L	07/16/23 12:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.678U ± 0.428 (0.806) C:76% T:88%**	pCi/L	07/10/23 16:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.06U ± 0.692 (1.23)**	pCi/L	07/17/23 14:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10661 PZ-1 **Lab ID: 30598257024** Collected: 06/07/23 10:45 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.347U ± 0.277 (0.495) C:90% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.744 ± 0.366 (0.624) C:81% T:85%**	pCi/L	07/10/23 12:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.09U ± 0.643 (1.12)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10662 MW-8 **Lab ID: 30598257025** Collected: 06/07/23 13:45 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.175U ± 0.220 (0.459) C:89% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.507U ± 0.368 (0.714) C:79% T:80%**	pCi/L	07/10/23 12:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.682U ± 0.588 (1.17)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10982 FB-2 **Lab ID: 30598257026** Collected: 06/13/23 08:25 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.292U ± 0.296 (0.594) C:81% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.181U ± 0.291 (0.631) C:86% T:88%**	pCi/L	07/10/23 12:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.473U ± 0.587 (1.23)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10983 MW-12 **Lab ID: 30598257027** Collected: 06/13/23 09:00 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.277U ± 0.250 (0.464) C:91% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.238U ± 0.312 (0.665) C:80% T:83%**	pCi/L	07/10/23 12:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.515U ± 0.562 (1.13)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10984 EB-1 **Lab ID: 30598257028** Collected: 06/13/23 09:25 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0311U ± 0.0984 (0.332) C:98% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0813U ± 0.281 (0.639) C:77% T:89%**	pCi/L	07/10/23 12:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0813U ± 0.379 (0.971)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10985 MW-11 **Lab ID: 30598257029** Collected: 06/13/23 10:19 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0976U ± 0.163 (0.363) C:91% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.00 ± 0.446 (0.745) C:82% T:79%**	pCi/L	07/10/23 12:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.10U ± 0.609 (1.11)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10986 MW-19H **Lab ID: 30598257030** Collected: 06/12/23 11:00 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.216U ± 0.190 (0.322) C:93% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.757 ± 0.405 (0.730) C:81% T:83%**	pCi/L	07/10/23 12:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.973U ± 0.595 (1.05)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10987 MW-18H **Lab ID: 30598257031** Collected: 06/12/23 12:10 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.236U ± 0.190 (0.312) C:111% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.328U ± 0.351 (0.731) C:80% T:86%**	pCi/L	07/10/23 12:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.564U ± 0.541 (1.04)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10988 MW-18H Dup **Lab ID: 30598257032** Collected: 06/12/23 12:10 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.123U ± 0.235 (0.540) C:72% T:NA**	pCi/L	07/16/23 12:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.623U ± 0.400 (0.761) C:79% T:81%**	pCi/L	07/10/23 12:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.746U ± 0.635 (1.30)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10989 MW-9 **Lab ID: 30598257033** Collected: 06/12/23 14:08 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.214U ± 0.239 (0.478) C:76% T:NA**	pCi/L	07/16/23 12:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.181U ± 0.297 (0.645) C:81% T:85%**	pCi/L	07/10/23 12:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.395U ± 0.536 (1.12)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10990 FB-1 **Lab ID: 30598257034** Collected: 06/12/23 15:00 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.113U ± 0.173 (0.370) C:82% T:NA**	pCi/L	07/16/23 12:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0134U ± 0.299 (0.700) C:83% T:82%**	pCi/L	07/10/23 12:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.113U ± 0.472 (1.07)**	pCi/L	07/17/23 14:20	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10991 MW-7 **Lab ID: 30598257035** Collected: 06/13/23 08:53 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.311U ± 0.226 (0.354) C:95% T:NA**	pCi/L	07/16/23 12:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.766 ± 0.369 (0.617) C:83% T:83%**	pCi/L	07/10/23 12:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.08 ± 0.595 (0.971)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10992 MW-10 **Lab ID: 30598257036** Collected: 06/13/23 09:55 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.737 ± 0.342 (0.396) C:92% T:NA**	pCi/L	07/16/23 12:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.647 ± 0.333 (0.572) C:81% T:88%**	pCi/L	07/10/23 12:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.38 ± 0.675 (0.968)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10993 PZ-6 **Lab ID: 30598257037** Collected: 06/13/23 11:05 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0194U ± 0.202 (0.544) C:71% T:NA**	pCi/L	07/16/23 12:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.311U ± 0.287 (0.579) C:82% T:86%**	pCi/L	07/10/23 12:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.330U ± 0.489 (1.12)**	pCi/L	07/17/23 14:20	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

Sample: BD10994 PZ-5 **Lab ID: 30598257038** Collected: 06/13/23 12:35 Received: 06/19/23 10:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0302U ± 0.177 (0.463) C:85% T:NA**	pCi/L	07/16/23 12:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.709 ± 0.340 (0.566) C:84% T:87%**	pCi/L	07/10/23 12:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.739U ± 0.517 (1.03)**	pCi/L	07/17/23 14:20	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

QC Batch: 596842
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30598257017, 30598257018, 30598257019, 30598257024, 30598257025, 30598257026, 30598257027, 30598257028, 30598257029, 30598257030, 30598257031, 30598257032, 30598257033, 30598257034, 30598257035, 30598257036, 30598257037, 30598257038

METHOD BLANK: 2901128
Matrix: Water
Associated Lab Samples: 30598257017, 30598257018, 30598257019, 30598257024, 30598257025, 30598257026, 30598257027, 30598257028, 30598257029, 30598257030, 30598257031, 30598257032, 30598257033, 30598257034, 30598257035, 30598257036, 30598257037, 30598257038

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.148 ± 0.101 (0.161) C:92% T:NA	pCi/L	07/16/23 12:54	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

QC Batch: 596802
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30598257001, 30598257002, 30598257003, 30598257004, 30598257005, 30598257006, 30598257007, 30598257008, 30598257009, 30598257010, 30598257011, 30598257012, 30598257013, 30598257014, 30598257015, 30598257016, 30598257020, 30598257021, 30598257022, 30598257023

METHOD BLANK: 2900962
Matrix: Water
Associated Lab Samples: 30598257001, 30598257002, 30598257003, 30598257004, 30598257005, 30598257006, 30598257007, 30598257008, 30598257009, 30598257010, 30598257011, 30598257012, 30598257013, 30598257014, 30598257015, 30598257016, 30598257020, 30598257021, 30598257022, 30598257023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0578 ± 0.0857 (0.186) C:88% T:NA	pCi/L	07/16/23 12:52	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

QC Batch: 598645
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30598257001, 30598257002, 30598257003, 30598257004, 30598257005, 30598257006, 30598257007, 30598257008, 30598257009, 30598257010, 30598257011, 30598257012, 30598257013, 30598257014, 30598257015, 30598257016, 30598257020, 30598257021, 30598257022, 30598257023

METHOD BLANK: 2909896
Matrix: Water
Associated Lab Samples: 30598257001, 30598257002, 30598257003, 30598257004, 30598257005, 30598257006, 30598257007, 30598257008, 30598257009, 30598257010, 30598257011, 30598257012, 30598257013, 30598257014, 30598257015, 30598257016, 30598257020, 30598257021, 30598257022, 30598257023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.107 ± 0.311 (0.700) C:81% T:86%	pCi/L	07/10/23 16:41	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1414
Pace Project No.: 30598257

QC Batch: 598646
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30598257017, 30598257018, 30598257019, 30598257024, 30598257025, 30598257026, 30598257027, 30598257028, 30598257029, 30598257030, 30598257031, 30598257032, 30598257033, 30598257034, 30598257035, 30598257036, 30598257037, 30598257038

METHOD BLANK: 2909897
Matrix: Water
Associated Lab Samples: 30598257017, 30598257018, 30598257019, 30598257024, 30598257025, 30598257026, 30598257027, 30598257028, 30598257029, 30598257030, 30598257031, 30598257032, 30598257033, 30598257034, 30598257035, 30598257036, 30598257037, 30598257038

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0315 ± 0.235 (0.562) C:84% T:89%	pCi/L	07/10/23 12:40	

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QUALIFIERS

Project: WMWGADAP_1414
Pace Project No.: 30598257

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30598257001	**BD10642 FB-3**	EPA 9315	596802		
30598257002	**BD10643 MW-4**	EPA 9315	596802		
30598257003	**BD10644 MW-4 Dup**	EPA 9315	596802		
30598257004	**BD10645 MW-4V**	EPA 9315	596802		
30598257005	**BD10646 MW-20H**	EPA 9315	596802		
30598257006	**BD10646 MW-20H MS**	EPA 9315	596802		
30598257007	**BD10646 MW-20H MSD**	EPA 9315	596802		
30598257008	**BD10647 MW-3**	EPA 9315	596802		
30598257009	**BD10648 MW-3 Dup**	EPA 9315	596802		
30598257010	**BD10649 MW-1**	EPA 9315	596802		
30598257011	**BD10650 MW-2**	EPA 9315	596802		
30598257012	**BD10651 MW-21VC**	EPA 9315	596802		
30598257013	**BD10652 MW-2VA**	EPA 9315	596802		
30598257014	**BD10653 MW-2VB**	EPA 9315	596802		
30598257015	**BD10654 MW-22VB**	EPA 9315	596802		
30598257016	**BD10655 MW-6**	EPA 9315	596802		
30598257017	**BD10656 PZ-2**	EPA 9315	596842		
30598257018	**BD10656 PZ-2 MS**	EPA 9315	596842		
30598257019	**BD10656 PZ-2 MSD**	EPA 9315	596842		
30598257020	**BD10657 MW-14**	EPA 9315	596802		
30598257021	**BD10658 MW-17**	EPA 9315	596802		
30598257022	**BD10659 MW-16**	EPA 9315	596802		
30598257023	**BD10660 MW-5**	EPA 9315	596802		
30598257024	**BD10661 PZ-1**	EPA 9315	596842		
30598257025	**BD10662 MW-8**	EPA 9315	596842		
30598257026	**BD10982 FB-2**	EPA 9315	596842		
30598257027	**BD10983 MW-12**	EPA 9315	596842		
30598257028	**BD10984 EB-1**	EPA 9315	596842		
30598257029	**BD10985 MW-11**	EPA 9315	596842		
30598257030	**BD10986 MW-19H**	EPA 9315	596842		
30598257031	**BD10987 MW-18H**	EPA 9315	596842		
30598257032	**BD10988 MW-18H Dup**	EPA 9315	596842		
30598257033	**BD10989 MW-9**	EPA 9315	596842		
30598257034	**BD10990 FB-1**	EPA 9315	596842		
30598257035	**BD10991 MW-7**	EPA 9315	596842		
30598257036	**BD10992 MW-10**	EPA 9315	596842		
30598257037	**BD10993 PZ-6**	EPA 9315	596842		
30598257038	**BD10994 PZ-5**	EPA 9315	596842		
30598257001	**BD10642 FB-3**	EPA 9320	598645		
30598257002	**BD10643 MW-4**	EPA 9320	598645		
30598257003	**BD10644 MW-4 Dup**	EPA 9320	598645		
30598257004	**BD10645 MW-4V**	EPA 9320	598645		
30598257005	**BD10646 MW-20H**	EPA 9320	598645		
30598257006	**BD10646 MW-20H MS**	EPA 9320	598645		
30598257007	**BD10646 MW-20H MSD**	EPA 9320	598645		
30598257008	**BD10647 MW-3**	EPA 9320	598645		
30598257009	**BD10648 MW-3 Dup**	EPA 9320	598645		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30598257010	**BD10649 MW-1**	EPA 9320	598645		
30598257011	**BD10650 MW-2**	EPA 9320	598645		
30598257012	**BD10651 MW-21VC**	EPA 9320	598645		
30598257013	**BD10652 MW-2VA**	EPA 9320	598645		
30598257014	**BD10653 MW-2VB**	EPA 9320	598645		
30598257015	**BD10654 MW-22VB**	EPA 9320	598645		
30598257016	**BD10655 MW-6**	EPA 9320	598645		
30598257017	**BD10656 PZ-2**	EPA 9320	598646		
30598257018	**BD10656 PZ-2 MS**	EPA 9320	598646		
30598257019	**BD10656 PZ-2 MSD**	EPA 9320	598646		
30598257020	**BD10657 MW-14**	EPA 9320	598645		
30598257021	**BD10658 MW-17**	EPA 9320	598645		
30598257022	**BD10659 MW-16**	EPA 9320	598645		
30598257023	**BD10660 MW-5**	EPA 9320	598645		
30598257024	**BD10661 PZ-1**	EPA 9320	598646		
30598257025	**BD10662 MW-8**	EPA 9320	598646		
30598257026	**BD10982 FB-2**	EPA 9320	598646		
30598257027	**BD10983 MW-12**	EPA 9320	598646		
30598257028	**BD10984 EB-1**	EPA 9320	598646		
30598257029	**BD10985 MW-11**	EPA 9320	598646		
30598257030	**BD10986 MW-19H**	EPA 9320	598646		
30598257031	**BD10987 MW-18H**	EPA 9320	598646		
30598257032	**BD10988 MW-18H Dup**	EPA 9320	598646		
30598257033	**BD10989 MW-9**	EPA 9320	598646		
30598257034	**BD10990 FB-1**	EPA 9320	598646		
30598257035	**BD10991 MW-7**	EPA 9320	598646		
30598257036	**BD10992 MW-10**	EPA 9320	598646		
30598257037	**BD10993 PZ-6**	EPA 9320	598646		
30598257038	**BD10994 PZ-5**	EPA 9320	598646		
30598257001	**BD10642 FB-3**	Total Radium Calculation	601991		
30598257002	**BD10643 MW-4**	Total Radium Calculation	601991		
30598257003	**BD10644 MW-4 Dup**	Total Radium Calculation	601991		
30598257004	**BD10645 MW-4V**	Total Radium Calculation	601991		
30598257005	**BD10646 MW-20H**	Total Radium Calculation	601991		
30598257008	**BD10647 MW-3**	Total Radium Calculation	601991		
30598257009	**BD10648 MW-3 Dup**	Total Radium Calculation	601991		
30598257010	**BD10649 MW-1**	Total Radium Calculation	601991		
30598257011	**BD10650 MW-2**	Total Radium Calculation	601991		
30598257012	**BD10651 MW-21VC**	Total Radium Calculation	601991		
30598257013	**BD10652 MW-2VA**	Total Radium Calculation	601991		
30598257014	**BD10653 MW-2VB**	Total Radium Calculation	601991		
30598257015	**BD10654 MW-22VB**	Total Radium Calculation	601991		
30598257016	**BD10655 MW-6**	Total Radium Calculation	601991		
30598257017	**BD10656 PZ-2**	Total Radium Calculation	601993		
30598257020	**BD10657 MW-14**	Total Radium Calculation	601991		
30598257021	**BD10658 MW-17**	Total Radium Calculation	601991		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGADAP_1414
Pace Project No.: 30598257

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30598257022	**BD10659 MW-16**	Total Radium Calculation	601991		
30598257023	**BD10660 MW-5**	Total Radium Calculation	601991		
30598257024	**BD10661 PZ-1**	Total Radium Calculation	601993		
30598257025	**BD10662 MW-8**	Total Radium Calculation	601993		
30598257026	**BD10982 FB-2**	Total Radium Calculation	601993		
30598257027	**BD10983 MW-12**	Total Radium Calculation	601993		
30598257028	**BD10984 EB-1**	Total Radium Calculation	601993		
30598257029	**BD10985 MW-11**	Total Radium Calculation	601993		
30598257030	**BD10986 MW-19H**	Total Radium Calculation	601993		
30598257031	**BD10987 MW-18H**	Total Radium Calculation	601993		
30598257032	**BD10988 MW-18H Dup**	Total Radium Calculation	601993		
30598257033	**BD10989 MW-9**	Total Radium Calculation	601993		
30598257034	**BD10990 FB-1**	Total Radium Calculation	601993		
30598257035	**BD10991 MW-7**	Total Radium Calculation	601993		
30598257036	**BD10992 MW-10**	Total Radium Calculation	601993		
30598257037	**BD10993 PZ-6**	Total Radium Calculation	601993		
30598257038	**BD10994 PZ-5**	Total Radium Calculation	601993		

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8
	Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC87119-0001
Project Name:	Plant Gadsden Ash Pond
Project Number:	WMWGADAP_1414

Section C — Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3			Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum			Residual Chlorine (Y/N)	
1	BD10642	FB-3	APCO-GSD-AP-FB-03	APCO_Plant_Gadsden_AshPond				GW	G	6/6/2023	9:45	1			X				X	X	X				001
2	BD10643	MW-4	APCO-GSD-AP-MW-4	APCO_Plant_Gadsden_AshPond				GW	G	6/6/2023	9:50	1			X				X	X	X				002
3	BD10644	MW-4 Dup	APCO-GSD-AP-MW-4	APCO_Plant_Gadsden_AshPond	x			GW	G	6/6/2023	9:50	1			X				X	X	X				003
4	BD10645	MW-4V	APCO-GSD-AP-MW-4V	APCO_Plant_Gadsden_AshPond				GW	G	6/5/2023	12:07	1			X				X	X	X				004
5	BD10646	MW-20H	APCO-GSD-AP-MW-20H	APCO_Plant_Gadsden_AshPond		x		GW	G	6/5/2023	13:08	3			X				X	X	X				005,006,007
6	BD10647	MW-3	APCO-GSD-AP-MW-3	APCO_Plant_Gadsden_AshPond				GW	G	6/5/2023	14:08	1			X				X	X	X				008
7	BD10648	MW-3 Dup	APCO-GSD-AP-MW-3	APCO_Plant_Gadsden_AshPond	x			GW	G	6/5/2023	14:08	1			X				X	X	X				009
8	BD10649	MW-1	APCO-GSD-AP-MW-1	APCO_Plant_Gadsden_AshPond				GW	G	6/5/2023	15:15	1			X				X	X	X				010
9	BD10650	MW-2	APCO-GSD-AP-MW-2	APCO_Plant_Gadsden_AshPond				GW	G	6/6/2023	9:22	1			X				X	X	X				011
10	BD10651	MW-21VC	APCO-GSD-AP-MW-21VC	APCO_Plant_Gadsden_AshPond				GW	G	6/6/2023	12:33	1			x				x	x	x				012
11	BD10652	MW-2VA	APCO-GSD-AP-MW-2VA	APCO_Plant_Gadsden_AshPond				GW	G	6/7/2023	8:24	1			x				x	x	x				013
12	BD10653	MW-2VB	APCO-GSD-AP-MW-2VB	APCO_Plant_Gadsden_AshPond				GW	G	6/7/2023	10:11	1			x				x	x	x				014

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	6/14/2023	16:47	[signature]	6/19/23	10:20	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

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

WO# : 30598257

30598257

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8
	Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC87119-0001
Project Name:	Plant Gadsden Ash Pond
Project Number:	WMWGADAP_1414

Section C — Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	
1	BD10654	MW-22VB	APCO-GSD-AP-MW-22VB	APCO_Plant_Gadsden_AshPond				GW	G	6/7/2023	12:14	1			X		X	X	X		015
2	BD10655	MW-6	APCO-GSD-AP-MW-6	APCO_Plant_Gadsden_AshPond				GW	G	6/5/2023	13:00	1			X		X	X	X		016
3	BD10656	PZ-2	APCO-GSD-AP-PZ-2	APCO_Plant_Gadsden_AshPond		x		GW	G	6/5/2023	14:30	3			X		X	X	X		017, 018, 019
4	BD10657	MW-14	APCO-GSD-AP-MW-14	APCO_Plant_Gadsden_AshPond				GW	G	6/6/2023	8:43	1			X		X	X	X		020
5	BD10658	MW-17	APCO-GSD-AP-MW-17	APCO_Plant_Gadsden_AshPond				GW	G	6/6/2023	12:28	1			X		X	X	X		021
6	BD10659	MW-16	APCO-GSD-AP-MW-16	APCO_Plant_Gadsden_AshPond				GW	G	6/6/2023	14:00	1			X		X	X	X		022
7	BD10660	MW-5	APCO-GSD-AP-MW-5	APCO_Plant_Gadsden_AshPond				GW	G	6/7/2023	9:55	1			X		X	X	X		023
8	BD10661	PZ-1	APCO-GSD-AP-PZ-1	APCO_Plant_Gadsden_AshPond				GW	G	6/7/2023	10:45	1			X		X	X	X		024
9	BD10662	MW-8	APCO-GSD-AP-MW-8	APCO_Plant_Gadsden_AshPond				GW	G	6/7/2023	13:45	1			X		X	X	X		025
10	BD10982	FB-2	APCO-GSD-AP-FB-02	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	8:25	1			x		x	x	x		026
11	BD10983	MW-12	APCO-GSD-AP-MW-12	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	9:00	1			x		x	x	x		027
12	BD10984	EB-1	APCO-GSD-AP-EB-01	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	9:25	1			x		x	x	x		028

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	6/14/2023	16:47	J Hunt	6/14/23	10:20	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

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

WO# : 30598257

PM: SCR Due Date: 07/18/23

CLIENT: ALABAMA PWR

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Address:	744 Highway 87 GSC Bldg #8
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Requested Due Date:	28 days

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Project Name:	Plant Gadsden Ash Pond
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Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: H2SO4	Preservatives: HNO3	Preservatives:	Preservatives:	Y/N	Analyses Test: EPA 9315	Analyses Test: EPA 9320	Analyses Test: Total Radium Sum			Residual Chlorine (Y/N)	
1	BD10985	MW-11	APCO-GSD-AP-MW-11	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	10:19	1			X				X	X	X				029
2	BD10986	MW-19H	APCO-GSD-AP-MW-19H	APCO_Plant_Gadsden_AshPond				GW	G	6/12/2023	11:00	1			X				X	X	X				030
3	BD10987	MW-18H	APCO-GSD-AP-MW-18H	APCO_Plant_Gadsden_AshPond				GW	G	6/12/2023	12:10	1			X				X	X	X				031
4	BD10988	MW-18H Dup	APCO-GSD-AP-MW-18H	APCO_Plant_Gadsden_AshPond	x			GW	G	6/12/2023	12:10	1			X				X	X	X				032
5	BD10989	MW-9	APCO-GSD-AP-MW-9	APCO_Plant_Gadsden_AshPond				GW	G	6/12/2023	14:08	1			X				X	X	X				033
6	BD10990	FB-1	APCO-GSD-AP-FB-01	APCO_Plant_Gadsden_AshPond				GW	G	6/12/2023	15:00	1			X				X	X	X				034
7	BD10991	MW-7	APCO-GSD-AP-MW-7	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	8:53	1			X				X	X	X				035
8	BD10992	MW-10	APCO-GSD-AP-MW-10	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	9:55	1			X				X	X	X				036
9	BD10993	PZ-6	APCO-GSD-AP-PZ-6	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	11:05	1			X				X	X	X				037
10	BD10994	PZ-5	APCO-GSD-AP-PZ-5	APCO_Plant_Gadsden_AshPond				GW	G	6/13/2023	12:35	1			x				x	x	x				038
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Brooke Caton/ APC GTL	6/14/2023	16:47		6/14/23	1020

SAMPLE CONDITIONS

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

WO# : 30598257

PM SCR Due Date: 07/18/23

CLIENT: ALABAMA PWR

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO# : 30598257

PM: SCR Due Date: 07/18/23

CLIENT: ALABAMA PWR

Client Name: Alabama Power

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

Tracking Number: 636884654226

Examined By	DH
Labeled By	DH
Temped By	—

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: — **Type of Ice:** Wet Blue (None)

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 100324 / D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	J			1.
Chain of Custody Filled Out:	J			2.
-Were client corrections present on COC		J		
Chain of Custody Relinquished	J			3.
Sampler Name & Signature on COC:		J		4.
Sample Labels match COC:	J			5.
-Includes date/time/ID				
Matrix:	WT			
Samples Arrived within Hold Time:	J			6.
Short Hold Time Analysis (<72hr remaining):		J		7.
Rush Turn Around Time Requested:		J		8.
Sufficient Volume:	J			9.
Correct Containers Used:	J			10.
-Pace Containers Used	J			
Containers Intact:	J			11.
Orthophosphate field filtered:			J	12.
Hex Cr Aqueous samples field filtered:			J	13.
Organic Samples checked for dechlorination			J	14:
Filtered volume received for dissolved tests:	J			15:
All containers checked for preservation:				16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				pH<2
All containers meet method preservation requirements:	J			Initial when completed: DH Date/Time of Preservation: — Lot# of added Preservative: —
8260C/D: Headspace in VOA Vials (> 6mm)			J	17.
624.1: Headspace in VOA Vials (0mm)			J	18.
Trip Blank Present:			J	Trip blank custody seal present? YES or NO
Rad Samples Screened <0.5 mrem/hr.	J			Initial when completed: DH Date: 6/19/23 Survey Meter SN: 1565

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

DC#_Title: ENV-FRM-GBUR-0072 v02_Sample Container Count Offshore Projects
Effective Date: 1/11/2023

Client _____

Site Plant Gadsden Ash Pond

Page 1 of 1

Profile Number 16788

Notes _____

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1	SL						1																						
38																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide ja
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
	250mL plastic NAOH
	500mL plastic H2SO4
	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

WO# : 30598257
PM: SCR Due Date: 07/18/23
CLIENT: ALABAMA PWR

Qualtrax ID: 55678

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	7/5/2023
Worklist:	74076
Matrix:	

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	
MB concentration:	
MB MDC:	
MB Numerical Performance Indicator:	
MB Status vs Numerical Indicator:	
MB Status vs. MDC:	

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS74076	LCSD74076
Count Date:	7/13/2023	
Spike I.D.:	23-040	
Decay Corrected Spike Concentration (pCi/mL):	39.197	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.804	
Target Conc. (pCi/L, g, F):	4.874	
Uncertainty (Calculated):	0.239	
Result (pCi/L, g, F):	5.196	
	1.110	
Numerical Performance Indicator:	0.56	
Percent Recovery:	106.60%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

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

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

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

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

Comments:

7-14-23
JJS

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	7/5/2023
Worklist:	74076
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2909896
MB concentration:	0.107
M/B 2 Sigma CSU:	0.311
MB MDC:	0.700
MB Numerical Performance Indicator:	0.68
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS74076	LCSD74076
Count Date:	7/10/2023	
Spike I.D.:	23-040	
Decay Corrected Spike Concentration (pCi/mL):	39.233	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.804	
Target Conc. (pCi/L, g, F):	4.878	
Uncertainty (Calculated):	0.239	
Result (pCi/L, g, F):	2.900	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.787	
Numerical Performance Indicator:	-4.71	
Percent Recovery:	59.46%	
Status vs Numerical Indicator:	Fail**	X
Status vs Recovery:	Fail Low**	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	6/5/2023	
Sample I.D.	30598257005	
Sample MS I.D.	30598257006	
Sample MSD I.D.	30598257007	
Spike I.D.:	23-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	39.691	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.801	
MS Target Conc.(pCi/L, g, F):	9.905	
MSD Aliquot (L, g, F):	0.800	
MSD Target Conc. (pCi/L, g, F):	9.919	
MS Spike Uncertainty (calculated):	0.485	
MSD Spike Uncertainty (calculated):	0.486	
Sample Result:	0.376	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.416	
Sample Matrix Spike Result:	8.139	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.684	
Sample Matrix Spike Duplicate Result:	6.967	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.476	
MS Numerical Performance Indicator:	-2.331	
MSD Numerical Performance Indicator:	-4.055	
MS Percent Recovery:	78.37%	
MSD Percent Recovery:	66.45%	
MS Status vs Numerical Indicator:	Warning	
MSD Status vs Numerical Indicator:	Fail****	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass ✓	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	30598257005
Sample MS I.D.	30598257006
Sample MSD I.D.	30598257007
Sample Matrix Spike Result:	8.139
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.684
Sample Matrix Spike Duplicate Result:	6.967
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.476
Duplicate Numerical Performance Indicator:	1.026
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	16.47%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass ✓
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

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

Comments:

~~**Batch must be re-prepped due to LCS failure.~~ RT and recount LCS

7/11/23

7/11/23 VAL

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	6/27/2023
Worklist:	73940
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2900962
MB concentration:	0.058
M/B 2 Sigma CSU:	0.086
MB MDC:	0.186
MB Numerical Performance Indicator:	1.32
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS73940	LCSD73940
Count Date:	7/16/2023	7/16/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.015	24.015
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.514	0.510
Target Conc. (pCi/L, g, F):	4.675	4.708
Uncertainty (Calculated):	0.056	0.057
Result (pCi/L, g, F):	5.088	5.117
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.881	0.885
Numerical Performance Indicator:	0.92	0.90
Percent Recovery:	108.84%	108.68%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	6/5/2023	
Sample I.D.	30598257005	
Sample MS I.D.	30598257006	
Sample MSD I.D.	30598257007	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.016	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.206	
MS Target Conc.(pCi/L, g, F):	23.356	
MSD Aliquot (L, g, F):	0.213	
MSD Target Conc. (pCi/L, g, F):	22.544	
MS Spike Uncertainty (calculated):	0.280	
MSD Spike Uncertainty (calculated):	0.271	
Sample Result:	0.248	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.308	
Sample Matrix Spike Result:	25.669	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.094	
Sample Matrix Spike Duplicate Result:	24.052	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.833	
MS Numerical Performance Indicator:	0.983	
MSD Numerical Performance Indicator:	0.640	
MS Percent Recovery:	108.84%	
MSD Percent Recovery:	105.59%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	N/A	
MSD Status vs Recovery:	N/A	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS73940	
Duplicate Sample I.D.	LCSD73940	
Sample Result (pCi/L, g, F):	5.088	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.881	
Sample Duplicate Result (pCi/L, g, F):	5.117	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.885	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.045	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.15%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30598257005	
Sample MS I.D.	30598257006	
Sample MSD I.D.	30598257007	
Sample Matrix Spike Result:	25.669	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.094	
Sample Matrix Spike Duplicate Result:	24.052	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.833	
Duplicate Numerical Performance Indicator:	0.565	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	3.03%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

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

Comments:

7/17-23

LAM 7/17/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	6/27/2023
Worklist:	73943
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2901128
MB concentration:	0.148
M/B 2 Sigma CSU:	0.101
MB MDC:	0.161
MB Numerical Performance Indicator:	2.87
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS73943	LCSD73943
Count Date:	7/16/2023	7/16/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.015	24.015
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.503
Target Conc. (pCi/L, g, F):	4.751	4.771
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.920	5.278
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.878	0.913
Numerical Performance Indicator:	0.38	1.09
Percent Recovery:	103.57%	110.64%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	6/5/2023	
Sample I.D.	30598257017	
Sample MS I.D.	30598257018	
Sample MSD I.D.	30598257019	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.016	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.203	
MS Target Conc.(pCi/L, g, F):	23.720	
MSD Aliquot (L, g, F):	0.206	
MSD Target Conc. (pCi/L, g, F):	23.334	
MS Spike Uncertainty (calculated):	0.285	
MSD Spike Uncertainty (calculated):	0.280	
Sample Result:	0.377	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.240	
Sample Matrix Spike Result:	28.180	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.465	
Sample Matrix Spike Duplicate Result:	22.011	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.532	
MS Numerical Performance Indicator:	1.786	
MSD Numerical Performance Indicator:	-0.938	
MS Percent Recovery:	117.21%	
MSD Percent Recovery:	92.72%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	N/A	
MSD Status vs Recovery:	N/A	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS73943	
Duplicate Sample I.D.	LCSD73943	
Sample Result (pCi/L, g, F):	4.920	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.878	
Sample Duplicate Result (pCi/L, g, F):	5.278	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.913	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.554	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.60%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30598257017	
Sample MS I.D.	30598257018	
Sample MSD I.D.	30598257019	
Sample Matrix Spike Result:	28.180	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.465	
Sample Matrix Spike Duplicate Result:	22.011	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.532	
Duplicate Numerical Performance Indicator:	2.124	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	23.34%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Warning	
MS/ MSD Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

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

Comments:

LAM 7/17/23

Appendix D

Appendix D. Horizontal Groundwater Flow Velocity Calculations
Plant Gadsden Ash Pond

2022 Semi-Annual Monitoring Event								
Date of Measurement	**PZ-6** h_1 **(ft)**	**MW-10** h_2 **(ft)**	**Distance** Δl **(ft)**	**Hydraulic Gradient** $\Delta h/\Delta l$ **(ft/ft)**	**Hydraulic Conductivity** **K**	**Effective Porosity** **n**	**Calculated Groundwater Flow Velocity (ft/d)**	**Calculated Groundwater Flow Velocity (ft/yr)**
10/24/2022	508.98	508.35	1455.0	0.00043	12.33	0.20	0.03	9.74

2023 Semi-Annual Monitoring Event								
Date of Measurement	**PZ-6** h_1 **(ft)**	**MW-10** h_2 **(ft)**	**Distance** Δl **(ft)**	**Hydraulic Gradient** $\Delta h/\Delta l$ **(ft/ft)**	**Hydraulic Conductivity** **K**	**Effective Porosity** **n**	**Calculated Groundwater Flow Velocity (ft/d)**	**Calculated Groundwater Flow Velocity (ft/yr)**
6/5/2023	515.24	508.85	1455.0	0.00439	12.33	0.20	0.27	98.82

Notes:

ft = feet

ft/d = feet/day

ft/ft = feet per foot

ft/yr = feet per year

Appendix E

GROUNDWATER STATS CONSULTING

July 20, 2023

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gadsden Ash Pond
2nd 2022 Semi-Annual Analysis – June 2023

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the June 2023 2nd 2022 semi-annual sample event for Alabama Power Company's Plant Gadsden Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in December 2017, and at least 8 background samples have been collected at each of the groundwater monitoring wells.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GSD-AP-MW-14, GSD-AP-MW-16, and GSD-AP-MW-17
- **Downgradient wells:** GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6

- **Delineation wells:** GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-4V, GSD-AP-MW-18H, GSD-AP-MW-19H, GSD-AP-MW-20H, GSD-AP-MW-21VC, and GSD-AP-MW-22VB
- **Piezometers:** GSD-AP-MW-2V

Delineation wells do not require statistics; therefore, data for these wells are plotted only on time series and box plots. Downgradient well GSD-AP-PZ-2 has recently been converted from a piezometer to a downgradient well. Since this well has the required minimum of 4 samples, data from this well are evaluated with confidence intervals for Appendix IV constituents. Prediction limits will be used to evaluate Appendix III constituents when a minimum of 8 samples are available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The CCR program consists of the following constituents:

Appendix III (Detection Monitoring) – boron, calcium, chloride, fluoride, pH, sulfate, and TDS
Appendix IV (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter. Due to historic varying detection limits, the following reporting limits were substituted across all wells:

- Cadmium: 0.000203 mg/L
- Chromium: 0.001015 mg/L
- Cobalt: 0.000203 mg/L
- Lead: 0.000203 mg/L
- Selenium: 0.001015 mg/L
- Thallium: 0.000203 mg/L

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box

plots provide visual representation of variation within individual wells and between all wells. Previously flagged outliers may be seen in a lighter font and as a disconnected symbol on the graphs, and a summary of all flagged outliers follows this report (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 13
- # Background Samples (Interwell): 52
- # Constituents: 7
- # Downgradient wells: 15

While the 1-of-3 resample plan was initially recommended for parameters that use intrawell statistical methods due to the sample size; the power curve included in this analysis demonstrates that the increased number of samples in background provide sufficient power using the 1-of-2 resample plan.

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for fluoride and pH
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate

associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new samples are available to determine whether earlier concentrations are representative of present-day groundwater quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in April 2019

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, two outliers were identified. A summary of those findings was included with the 2019 background screening. While this is not the case in the present data set, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e., measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one value was flagged as an outlier in the database since the other value was similar to remaining measurements within the same well and neighboring wells. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Testing

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed several statistically significant decreasing and increasing trends for the Appendix III parameters and were included with the 2019 background screening. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short with less than two years of record, making it difficult to separate trends from normal year-to-year variation; therefore, no adjustments were made to the data sets. If the observed decreasing or increasing trends persist over a longer time frame, some records may need to be truncated.

Appendix III – Evaluation of Statistical Approaches

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

Based on the results of the 2019 background screening for Appendix III parameters, intrawell methods were recommended for fluoride and pH, and interwell methods were recommended for boron, calcium, chloride, sulfate, and TDS. If further evaluation confirms

natural variation in groundwater, intrawell methods will be considered for parameters currently recommended for interwell methods.

Summary of Background Update – Fall 2021

Outlier Analysis

Prior to performing prediction limits, proposed background data through March 2021 were reviewed through visual screening to identify any newly suspected outliers at all wells for fluoride and pH and at upgradient wells for boron, calcium, chloride, sulfate, and TDS. When identified as outliers, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. No suspected outliers were identified for Appendix III parameters. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages.

Mann-Whitney Test of Medians

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through February 7, 2019, to compliance data through March 2021. When the medians of the two groups are not statistically significantly different at the 99% confidence level, background data sets are updated to include the newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

Increase:

- Fluoride: GSD-AP-MW-1

Decrease:

- pH: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects an occurring shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

While a statistically significant increase in median concentrations was identified for fluoride in well GSD-AP-MW-1, this record was updated with more recent data because the compliance data contained 100% non-detects. Although statistically significant decreases in median concentrations were identified for pH in wells GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11, the magnitude of the decreases were marginal compared to the historical concentrations. Therefore, all of the records with statistically significant Mann-Whitney results for CCR Appendix III constituents that use intrawell methods were updated.

All records will be re-evaluated during the next background update and if future concentrations are similar to those observed currently, the earlier portion of the records may require deselection so only more recent data are used to construct statistical limits which are reflective of present-day water quality conditions. If, however, concentrations return to historical lower levels, more recent higher measurements may be flagged as outliers and deselected prior to construction of statistical limits.

Trend Tests – Upgradient Wells

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data may require deselection prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. The following upgradient well/constituent pairs were found to have statistically significant trends:

Increasing

- None

Decreasing

- Chloride: GSD-AP-MW-17

The slope for chloride at well GSD-AP-MW-17 is influenced by several similar and slightly higher values earlier in the record, but the median slope for the overall record was small relative to average concentrations at these wells and reported measurements were similar across all upgradient wells. Therefore, no adjustments were required.

Evaluation of Appendix III Parameters – June 2023

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Background data are re-evaluated when a minimum of 4 compliance samples are available.

Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for fluoride and pH using screened background data through March 2021 at each well (Figure D). The June 2023 sample at each well was compared to its respective intrawell prediction limit. Note that for the October 2022 event, the reporting limit for fluoride increased from 0.1 mg/L to 0.125 mg/L and resulted in a slight change in the prediction limit for well GSD-AP-MW-3. Previously flagged outliers may be seen in a lighter font and as a disconnected symbol on the graphs, and a summary of all flagged outliers follows this report.

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, sulfate, and TDS (Figure E).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter (pages 16-20). The following exceedances were noted for the intrawell and interwell prediction limits:

Intrawell

- pH: GSD-AP-PZ-6 (lower limit)

Interwell

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, and GSD-AP-MW-11
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12
- Chloride: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-8, GSD-AP- MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12
- Sulfate: GSD-AP-MW-1 and GSD-AP-MW-12
- TDS: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-11, and GSD-AP-MW-12

Trend Tests

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter (pages 21-22). Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: GSD-AP-MW-11
- Calcium: GSD-AP-MW-11
- TDS: GSD-AP-MW-11

Decreasing:

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-4, and GSD-AP-MW-5
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, and GSD-AP-MW-3
- Chloride: GSD-AP-MW-17 (upgradient) and GSD-AP-MW-3

- pH: GSD-AP-MW-16 (upgradient)
- TDS: GSD-AP-MW-1 and GSD-AP-MW-3

Evaluation of Appendix IV Parameters – June 2023

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis and no new values were flagged as outliers. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during the 2021 1st semi-annual statistical analysis. The GWPS will be updated again during the 2023 1st semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using tolerance limits constructed from pooled upgradient well data through October 2021 (Figure G). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed. A summary table of the upper tolerance limits follows this report (page 23).

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H, page 24)) in the confidence interval comparisons described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through June 2023 for each of the Appendix IV parameters (Figure I). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals,

which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

The lower confidence limit for arsenic at WGWC-24 would have resulted in a negative if a parametric confidence interval had been constructed. A non-parametric confidence interval, which is bound by reported high and low measurements within a given well, was constructed for this particular case and may be found at the end of Figure H. This is a more conservative approach in that the lower confidence limit reflects the lowest reported measurement in the data set rather than a negative number.

As mentioned above, well/constituent pairs containing 100% non-detects among the most recent 8 samples did not require statistics and were deselected prior to construction confidence intervals. A list of deselected well/constituent pairs also follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (pages 25-27).

- Arsenic: GSD-AP-MW-2 and GSD-AP-MW-4

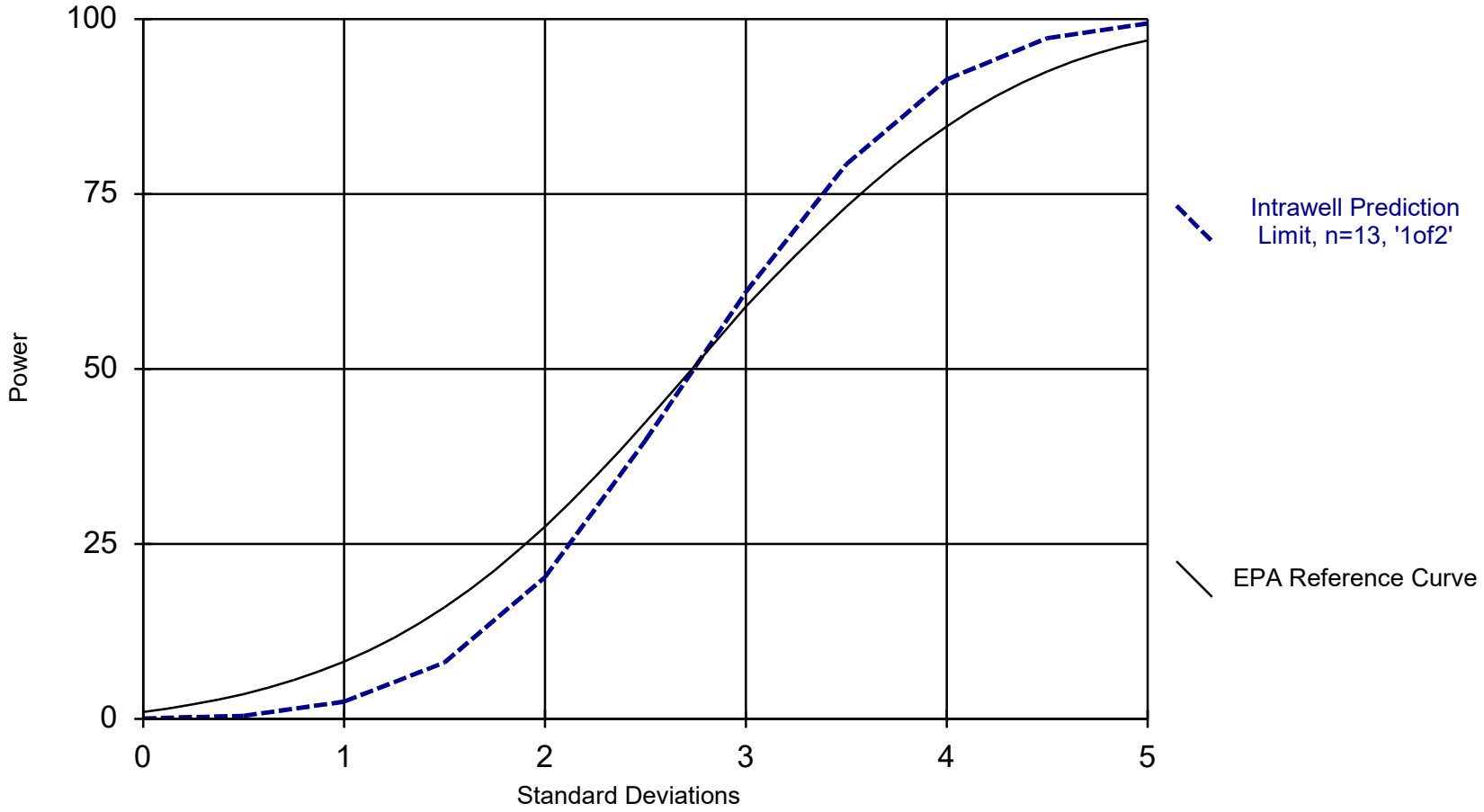
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Gadsden Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Tristan Clark
Groundwater Analyst

Andrew Collins
Project Manager

Intrawell Power Curve

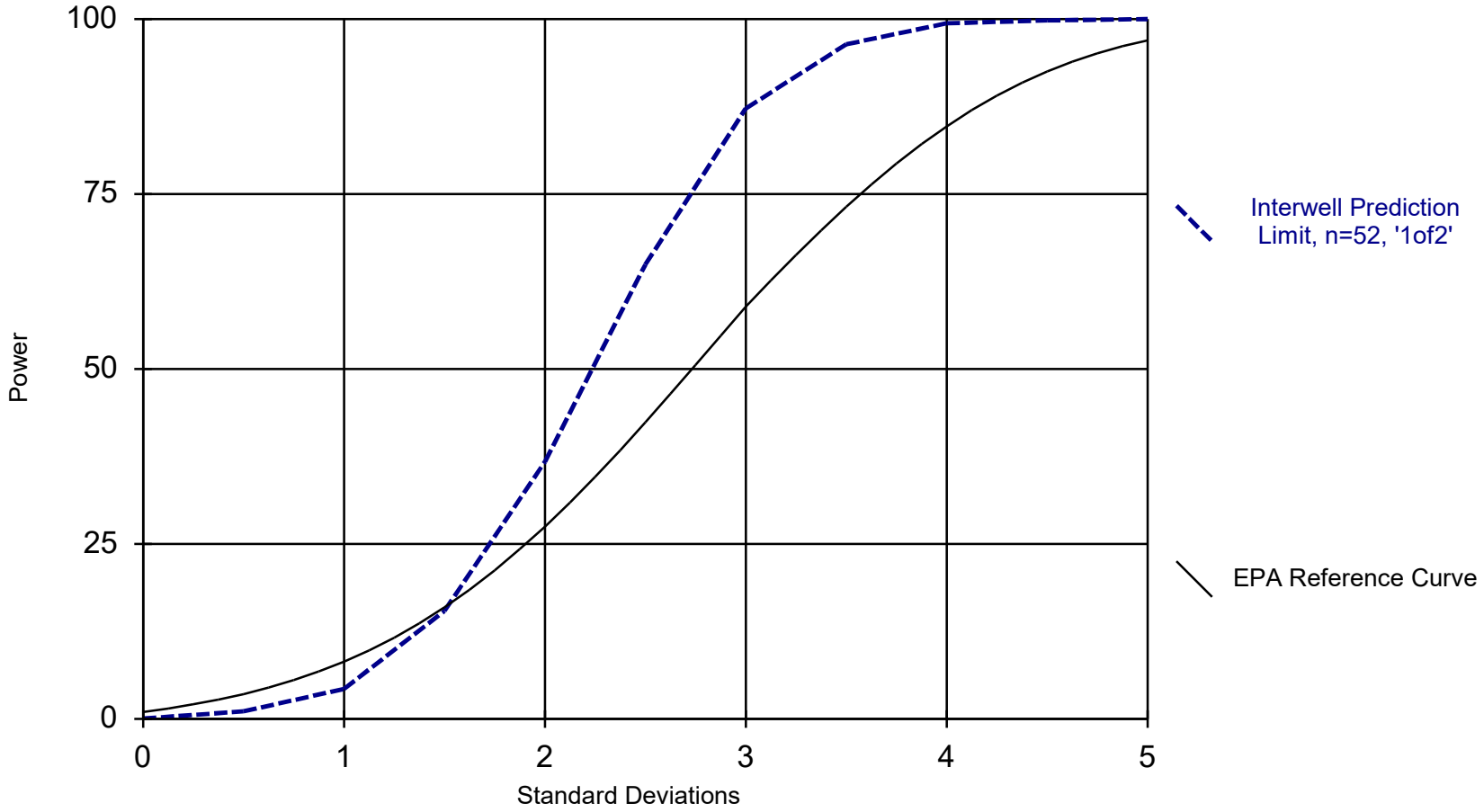


Kappa = 2.711, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 7/18/2023 4:42 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Interwell Power Curve



Kappa = 2.133, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 7/19/2023 1:04 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

100% Non-Detects: Appendix IV Downgradient

Analysis Run 7/18/2023 4:29 PM View: Appendix IV
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Antimony (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Beryllium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Cadmium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-6

Fluoride (mg/L)
GSD-AP-MW-6, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Lead (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1

Lithium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Mercury (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5

Molybdenum (mg/L)
GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-6, GSD-AP-PZ-5, GSD-AP-PZ-6

Selenium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Thallium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Intrawell Prediction Limit - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:01 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**GSD-AP-PZ-6**	**5.699**	**5.348**	**6/13/2023**	**5.15**	**Yes**	**13**	**5.523**	**0.06473**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Intrawell Prediction Limit - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:01 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	6/5/2023	0.125ND	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-10	0.1381	n/a	6/13/2023	0.0805J	No	13	0.08731	0.01872	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-11	0.1122	n/a	6/13/2023	0.105J	No	13	0.0646	0.01756	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-12	0.125	n/a	6/13/2023	0.0795J	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	6/6/2023	0.125ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.1599	n/a	6/6/2023	0.125ND	No	14	0.1026	0.02163	50	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	6/6/2023	0.113J	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	6/6/2023	0.204	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1359	n/a	6/5/2023	0.125ND	No	14	0.07651	0.02239	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	6/6/2023	0.225	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-5	0.08126	n/a	6/7/2023	0.0625ND	No	13	0.05878	0.008293	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-6	0.09393	n/a	6/5/2023	0.125ND	No	13	0.3704	0.03104	38.46	Kaplan-Meier	x^(1/3)	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-7	0.109	n/a	6/13/2023	0.125ND	No	13	0.0755	0.01236	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-8	0.1549	n/a	6/7/2023	0.128	No	13	0.09159	0.02334	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1718	n/a	6/12/2023	0.13	No	13	0.01358	0.00588	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1638	n/a	6/7/2023	0.125ND	No	13	0.109	0.02021	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	n/a	6/13/2023	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	n/a	6/13/2023	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	6/5/2023	5.68	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	6/13/2023	6.55	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-11	7.012	6.206	6/13/2023	6.4	No	13	6.609	0.1486	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-12	5.692	5.209	6/13/2023	5.48	No	13	5.451	0.08911	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-14	4.1	3.25	6/6/2023	3.82	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	6/6/2023	3.65	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	6/6/2023	7.8	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-2	6.801	6.273	6/6/2023	6.63	No	13	6.537	0.09742	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-3	6.88	5.224	6/5/2023	5.66	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	6/6/2023	6.74	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-5	6.352	5.982	6/7/2023	6.25	No	13	6.167	0.06836	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-6	6.703	5.385	6/5/2023	5.68	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-7	6.847	5.694	6/13/2023	5.98	No	13	6.271	0.2126	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-8	7.032	6.084	6/7/2023	6.37	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	6/12/2023	6.81	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	6/7/2023	5.9	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	6/13/2023	5.1	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-PZ-6**	**5.699**	**5.348**	**6/13/2023**	**5.15**	**Yes**	**13**	**5.523**	**0.06473**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Interwell Prediction Limit - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:03 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	0.1015	n/a	6/5/2023	0.88	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-11	0.1015	n/a	6/13/2023	0.143	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-2	0.1015	n/a	6/6/2023	0.367	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-3	0.1015	n/a	6/5/2023	0.858	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-4	0.1015	n/a	6/6/2023	0.415	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-5	0.1015	n/a	6/7/2023	0.234	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GSD-AP-MW-1	31.74	n/a	6/5/2023	166	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-10	31.74	n/a	6/13/2023	36.4	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-11	31.74	n/a	6/13/2023	94.5	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-12	31.74	n/a	6/13/2023	53.2	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-2	31.74	n/a	6/6/2023	60.7	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-3	31.74	n/a	6/5/2023	55.4	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-4	31.74	n/a	6/6/2023	39.8	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-5	31.74	n/a	6/7/2023	46.5	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-8	31.74	n/a	6/7/2023	56.3	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-9	31.74	n/a	6/12/2023	37.8	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-1	4.021	n/a	6/5/2023	6.12	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-10	4.021	n/a	6/13/2023	5.45	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-11	4.021	n/a	6/13/2023	5.51	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-12	4.021	n/a	6/13/2023	5.18	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-3	4.021	n/a	6/5/2023	4.57	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-4	4.021	n/a	6/6/2023	6.68	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-5	4.021	n/a	6/7/2023	6.81	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-6	4.021	n/a	6/5/2023	10.9	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-8	4.021	n/a	6/7/2023	5.02	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-9	4.021	n/a	6/12/2023	7.07	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-2	4.021	n/a	6/5/2023	5.7	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	GSD-AP-MW-1	207	n/a	6/5/2023	406	Yes	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-12	207	n/a	6/13/2023	212	Yes	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	276.7	n/a	6/5/2023	710	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	276.7	n/a	6/13/2023	374	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	276.7	n/a	6/13/2023	370	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	276.7	n/a	6/5/2023	334	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limit - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:03 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**0.1015**	**n/a**	**6/5/2023**	**0.88**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-10	0.1015	n/a	6/13/2023	0.0864J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-11**	**0.1015**	**n/a**	**6/13/2023**	**0.143**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-12	0.1015	n/a	6/13/2023	0.0902J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-2**	**0.1015**	**n/a**	**6/6/2023**	**0.367**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-3**	**0.1015**	**n/a**	**6/5/2023**	**0.858**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-4**	**0.1015**	**n/a**	**6/6/2023**	**0.415**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-5**	**0.1015**	**n/a**	**6/7/2023**	**0.234**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-6	0.1015	n/a	6/5/2023	0.0776J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-7	0.1015	n/a	6/13/2023	0.0428J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-8	0.1015	n/a	6/7/2023	0.0355J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-9	0.1015	n/a	6/12/2023	0.062J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-1	0.1015	n/a	6/7/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-2	0.1015	n/a	6/5/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-5	0.1015	n/a	6/13/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-6	0.1015	n/a	6/13/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GSD-AP-MW-1**	**31.74**	**n/a**	**6/5/2023**	**166**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-10**	**31.74**	**n/a**	**6/13/2023**	**36.4**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-11**	**31.74**	**n/a**	**6/13/2023**	**94.5**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-12**	**31.74**	**n/a**	**6/13/2023**	**53.2**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-2**	**31.74**	**n/a**	**6/6/2023**	**60.7**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-3**	**31.74**	**n/a**	**6/5/2023**	**55.4**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-4**	**31.74**	**n/a**	**6/6/2023**	**39.8**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-5**	**31.74**	**n/a**	**6/7/2023**	**46.5**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-6	31.74	n/a	6/5/2023	10.6	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-7	31.74	n/a	6/13/2023	8.71	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-8**	**31.74**	**n/a**	**6/7/2023**	**56.3**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-9**	**31.74**	**n/a**	**6/12/2023**	**37.8**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-PZ-1	31.74	n/a	6/7/2023	20.9	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-2	31.74	n/a	6/5/2023	13.4	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-5	31.74	n/a	6/13/2023	2.82	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-6	31.74	n/a	6/13/2023	3.14	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-1**	**4.021**	**n/a**	**6/5/2023**	**6.12**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-10**	**4.021**	**n/a**	**6/13/2023**	**5.45**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-11**	**4.021**	**n/a**	**6/13/2023**	**5.51**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-12**	**4.021**	**n/a**	**6/13/2023**	**5.18**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-2	4.021	n/a	6/6/2023	2.02	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-3**	**4.021**	**n/a**	**6/5/2023**	**4.57**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-4**	**4.021**	**n/a**	**6/6/2023**	**6.68**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-5**	**4.021**	**n/a**	**6/7/2023**	**6.81**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-6**	**4.021**	**n/a**	**6/5/2023**	**10.9**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-7	4.021	n/a	6/13/2023	3.43	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-8**	**4.021**	**n/a**	**6/7/2023**	**5.02**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-9**	**4.021**	**n/a**	**6/12/2023**	**7.07**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-1	4.021	n/a	6/7/2023	3.37	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-PZ-2**	**4.021**	**n/a**	**6/5/2023**	**5.7**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-5	4.021	n/a	6/13/2023	3.88	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-6	4.021	n/a	6/13/2023	3.38	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-1**	**207**	**n/a**	**6/5/2023**	**406**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006777**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-10	207	n/a	6/13/2023	21.9	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-11	207	n/a	6/13/2023	150	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-12**	**207**	**n/a**	**6/13/2023**	**212**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006777**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-2	207	n/a	6/6/2023	73.9	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-3	207	n/a	6/5/2023	171	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-4	207	n/a	6/6/2023	88.7	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-5	207	n/a	6/7/2023	27.5	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-6	207	n/a	6/5/2023	15.1	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-7	207	n/a	6/13/2023	6.16	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-8	207	n/a	6/7/2023	12.5	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-9	207	n/a	6/12/2023	18.9	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-1	207	n/a	6/7/2023	2.38	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-2	207	n/a	6/5/2023	1.31J	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-5	207	n/a	6/13/2023	1ND	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-6	207	n/a	6/13/2023	1.14J	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**276.7**	**n/a**	**6/5/2023**	**710**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-10	276.7	n/a	6/13/2023	199	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**276.7**	**n/a**	**6/13/2023**	**374**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-12**	**276.7**	**n/a**	**6/13/2023**	**370**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**

Interwell Prediction Limit - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:03 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	276.7	n/a	6/6/2023	246	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**276.7**	**n/a**	**6/5/2023**	**334**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-4	276.7	n/a	6/6/2023	263	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-5	276.7	n/a	6/7/2023	202	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-6	276.7	n/a	6/5/2023	94	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-7	276.7	n/a	6/13/2023	74.7	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-8	276.7	n/a	6/7/2023	226	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-9	276.7	n/a	6/12/2023	185	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-1	276.7	n/a	6/7/2023	96.7	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-2	276.7	n/a	6/5/2023	84	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-5	276.7	n/a	6/13/2023	36.7	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-6	276.7	n/a	6/13/2023	36	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2

Trend Test - Prediction Limit Exceedances - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2023, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06545**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-11**	**0.008031**	**71**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-2**	**-0.06555**	**-101**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.03648**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0587**	**-108**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.38**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-11**	**4.222**	**81**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-2**	**-10.61**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-8.07**	**-113**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.1806**	**-89**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.6787**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.238**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-94.39**	**-111**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.06**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-37.84**	**-119**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test - Prediction Limit Exceedances - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2023, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06545**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-11**	**0.008031**	**71**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0	62	68	No	18	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.0004276	-18	-63	No	17	5.882	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.06555**	**-101**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-3	0.01315	19	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-4**	**-0.03648**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0587**	**-108**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.38**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	-0.1406	-2	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**4.222**	**81**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	0.562	7	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-0.4521	-21	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.5496	-18	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.075	35	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-10.61**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-8.07**	**-113**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-4	-0.1087	-4	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-5	-0.3422	-11	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	0.2938	7	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.3991	4	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	0.04212	23	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	-0.04095	-9	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	-0.02352	-5	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	-0.04669	-20	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.007055	4	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.03593	-23	-68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.1806**	**-89**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.6787**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	-0.1751	-22	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.2008	-62	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-6	-0.06986	-23	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.1052	25	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.1355	38	63	No	17	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-14 (bg)	-0.02092	-34	-63	No	17	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.238**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.2195	-43	-63	No	17	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-PZ-6	-0.03315	-48	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-1	-28.25	-45	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-12	-1.336	-4	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-2.347	-13	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	16.58	42	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-0.5792	-51	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-94.39**	**-111**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.06**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	-6.947	-15	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-6.913	-14	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	17.09	43	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-4.49	-44	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-37.84**	**-119**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00101	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.056	0.056
Combined Radium-226/228	pCi/L	2.01	5
Fluoride	mg/L	0.23	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/20/2023, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7603**	**0.4772**	**0.01**	**Yes**	**8**	**0.6188**	**0.1335**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01454**	**0.01189**	**0.01**	**Yes**	**8**	**0.01321**	**0.001252**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/20/2023, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-MW-2	0.001015	0.000538	0.006	No	8	0.0009554	0.0001686	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.00412	0.002028	0.01	No	8	0.003074	0.0009869	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004233	0.002734	0.01	No	8	0.003446	0.0009387	0	None	x^3	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002885	0.002327	0.01	No	8	0.002609	0.0002723	0	None	x^2	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-12	0.000203	0.000102	0.01	No	8	0.0001904	0.00003571	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7603**	**0.4772**	**0.01**	**Yes**	**8**	**0.6188**	**0.1335**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.000311	0.00016	0.01	No	8	0.0002116	0.00004305	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01454**	**0.01189**	**0.01**	**Yes**	**8**	**0.01321**	**0.001252**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.00025	0.00008	0.01	No	8	0.0001692	0.00006352	50	None	No	0.004	NP (selected)
Arsenic (mg/L)	GSD-AP-MW-6	0.000203	0.000151	0.01	No	8	0.0001965	0.00001838	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.000203	0.00007	0.01	No	8	0.0001741	0.00005428	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003204	0.002856	0.01	No	8	0.00303	0.0001646	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.005	0.000545	0.01	No	8	0.00177	0.002004	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-1	0.000203	0.000164	0.01	No	8	0.0001981	0.00001379	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-2	0.000203	0.0000826	0.01	No	7	0.0001528	0.00005839	42.86	None	No	0.008	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.000203	0.0000808	0.01	No	8	0.0001877	0.0000432	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-6	0.000203	0.00015	0.01	No	8	0.0001964	0.00001874	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.03552	0.02746	2	No	8	0.03149	0.003802	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3591	0.2787	2	No	8	0.3189	0.03793	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.1994	0.1316	2	No	8	0.1655	0.03201	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-12	0.04618	0.03077	2	No	8	0.03848	0.007267	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.1013	0.06363	2	No	8	0.08249	0.01779	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.03802	0.02938	2	No	8	0.0337	0.004079	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-4	0.2395	0.1665	2	No	8	0.203	0.03443	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2403	0.2217	2	No	8	0.231	0.008816	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07882	0.06635	2	No	8	0.07259	0.005882	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08758	0.05454	2	No	8	0.07106	0.01559	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.2963	0.2012	2	No	8	0.2488	0.04486	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1888	0.1449	2	No	8	0.1669	0.0207	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.08446	0.05191	2	No	8	0.06819	0.01535	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1353	0.05232	2	No	7	0.09381	0.03494	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.085	0.0456	2	No	8	0.0553	0.01259	0	None	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.03117	0.02838	2	No	8	0.02978	0.001316	0	None	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.0002106	0.00007919	0.005	No	8	0.0001795	0.00006233	37.5	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-12	0.0006026	0.0002878	0.005	No	8	0.000442	0.0001606	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.000203	0.0000688	0.005	No	8	0.0001862	0.00004745	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.0003714	0.0001265	0.005	No	8	0.0002864	0.0001076	25	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-7	0.000203	0.000097	0.005	No	8	0.000188	0.00003709	75	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.000203	0.00007	0.005	No	8	0.0001714	0.00005862	75	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.000203	0.00008	0.005	No	8	0.0001876	0.00004349	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.001015	0.00023	0.1	No	8	0.0005616	0.0003781	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-10	0.001015	0.000207	0.1	No	8	0.0005663	0.0003742	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-11	0.0004714	0.0002936	0.1	No	8	0.000619	0.0003356	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GSD-AP-MW-12	0.001015	0.000276	0.1	No	8	0.0006233	0.0003302	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-2	0.0004727	0.000259	0.1	No	8	0.0006085	0.0003468	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	GSD-AP-MW-3	0.001015	0.00023	0.1	No	8	0.0005496	0.0003859	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-4	0.001015	0.000206	0.1	No	8	0.0007293	0.0003958	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.001015	0.000272	0.1	No	8	0.0006924	0.0003539	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-6	0.001015	0.000222	0.1	No	8	0.0006403	0.000402	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-7	0.001015	0.00025	0.1	No	8	0.0006618	0.0003808	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-8	0.001015	0.00022	0.1	No	8	0.00073	0.0003939	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.001015	0.00021	0.1	No	8	0.0006684	0.000375	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-PZ-1	0.001015	0.00027	0.1	No	8	0.0006815	0.0003596	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-PZ-2	0.0007364	0.0002756	0.1	No	7	0.0007241	0.0003148	42.86	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.0004976	0.0002877	0.1	No	8	0.0006254	0.0003332	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-6	0.0004496	0.0002442	0.1	No	8	0.0005968	0.0003575	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-1	0.02118	0.01312	0.056	No	8	0.01715	0.003806	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.00091	0.000203	0.056	No	8	0.000569	0.0003512	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-11	0.006281	0.0001587	0.056	No	8	0.003033	0.003801	12.5	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-12	0.006229	0.003906	0.056	No	8	0.005068	0.001095	0	None	No	0.01	Param.

Confidence Intervals - All Results

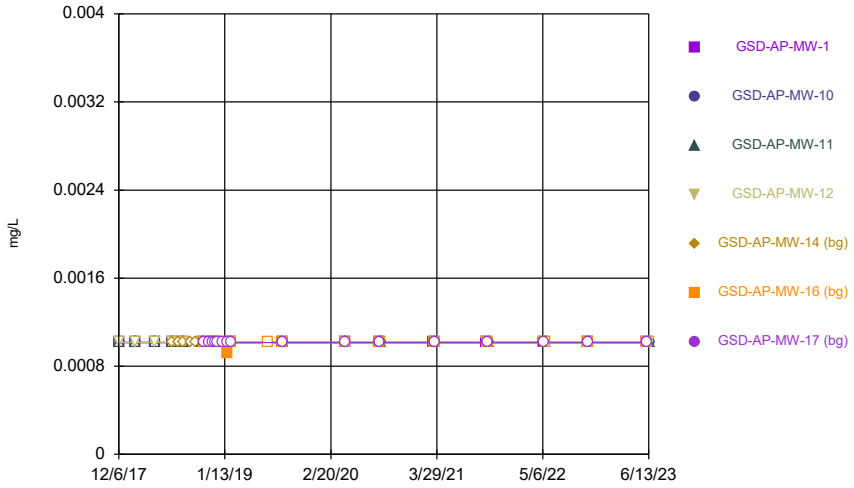
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/20/2023, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-MW-2	0.03925	0.02417	0.056	No	8	0.03171	0.007114	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02225	0.01267	0.056	No	8	0.01746	0.004521	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.02975	0.02417	0.056	No	8	0.02696	0.002633	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.001984	0.0004487	0.056	No	8	0.001217	0.0007245	12.5	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-6	0.001158	0.0005829	0.056	No	8	0.0007674	0.0004707	37.5	Kaplan-Meier	x^4	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-7	0.00463	0.00016	0.056	No	8	0.0008749	0.001544	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-8	0.004063	0.002702	0.056	No	8	0.003375	0.0006634	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.001037	0.0003195	0.056	No	8	0.0006706	0.0003991	37.5	Kaplan-Meier	x^2	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.00014	0.056	No	8	0.0002248	0.00008972	75	Kaplan-Meier	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.006483	0.002014	0.056	No	7	0.004249	0.001881	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00225	0.00008	0.056	No	8	0.0004535	0.0007311	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-PZ-6	0.0001303	0.00008198	0.056	No	8	0.0001424	0.00005381	37.5	Kaplan-Meier	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	1.036	0.4257	5	No	8	0.7308	0.2878	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	3.076	0.007785	5	No	8	1.301	2.15	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.285	0.6568	5	No	8	0.9711	0.2965	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.176	0.2683	5	No	8	0.7044	0.4531	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.506	0.2875	5	No	8	0.8705	0.6687	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.531	0.1411	5	No	8	0.8079	1.006	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.363	0.1769	5	No	8	0.7701	0.5596	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.303	0.4195	5	No	8	0.8613	0.4168	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	0.9253	-0.03704	5	No	8	0.4441	0.454	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	1.061	0.2294	5	No	8	0.6452	0.3923	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.6761	0.3664	5	No	8	0.5213	0.1461	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.17	0.1815	5	No	8	0.6758	0.4663	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	1.402	-0.0365	5	No	8	0.6826	0.6785	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	0.9617	0.1125	5	No	7	0.5371	0.3575	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.9271	0.3452	5	No	8	0.6361	0.2745	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.15	0.003834	5	No	8	0.4553	0.4964	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.125	0.0601	4	No	8	0.1169	0.02295	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.201	0.0805	4	No	8	0.1079	0.03892	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-11	0.1131	0.07075	4	No	8	0.1066	0.02434	37.5	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-12	0.125	0.0795	4	No	8	0.1193	0.01609	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-2	0.2815	0.2063	4	No	8	0.2439	0.03548	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.125	0.0592	4	No	8	0.1101	0.02783	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2618	0.1895	4	No	8	0.2256	0.0341	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.122	0.0567	4	No	8	0.07355	0.02126	12.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-7	0.128	0.0627	4	No	8	0.1006	0.02834	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-8	0.1146	0.06397	4	No	8	0.08929	0.02389	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.1411	0.1083	4	No	8	0.1247	0.01549	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1078	0.07653	4	No	8	0.1045	0.02107	37.5	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GSD-AP-MW-2	0.000203	0.00009	0.015	No	8	0.0001889	0.00003995	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.0002824	0.0001178	0.015	No	7	0.0002134	0.00008493	42.86	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	GSD-AP-PZ-5	0.000203	0.000078	0.015	No	8	0.0001783	0.00004789	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.000203	0.0000835	0.015	No	8	0.0001673	0.00005053	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.047	0.02238	0.04	No	8	0.03469	0.01161	0	None	No	0.01	Param.
Mercury (mg/L)	GSD-AP-PZ-6	0.00286	0.0005	0.002	No	8	0.000795	0.0008344	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-1	0.01015	0.000198	0.1	No	8	0.008906	0.003519	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.01015	0.000204	0.1	No	8	0.00527	0.005217	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-11	0.01015	0.00012	0.1	No	8	0.006393	0.005185	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.027	0.0164	0.1	No	8	0.02144	0.003652	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-4	0.01015	0.00106	0.1	No	8	0.005646	0.004815	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-5	0.01015	0.00011	0.1	No	8	0.006423	0.005145	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.01015	0.0001	0.1	No	8	0.007646	0.004636	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.01015	0.00032	0.1	No	8	0.005262	0.005225	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-9	0.01015	0.00018	0.1	No	8	0.005196	0.005296	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.01015	0.00007	0.1	No	8	0.007634	0.004659	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.01015	0.00022	0.1	No	7	0.007321	0.004831	71.43	None	No	0.008	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.000203	0.000101	0.002	No	8	0.0001698	0.00004655	62.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.0004043	0.0003064	0.002	No	8	0.0003554	0.00004619	0	None	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.000203	0.000104	0.002	No	8	0.0001493	0.00004579	37.5	None	No	0.004	NP (normality)

FIGURE A.

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 7/20/2023 11:42 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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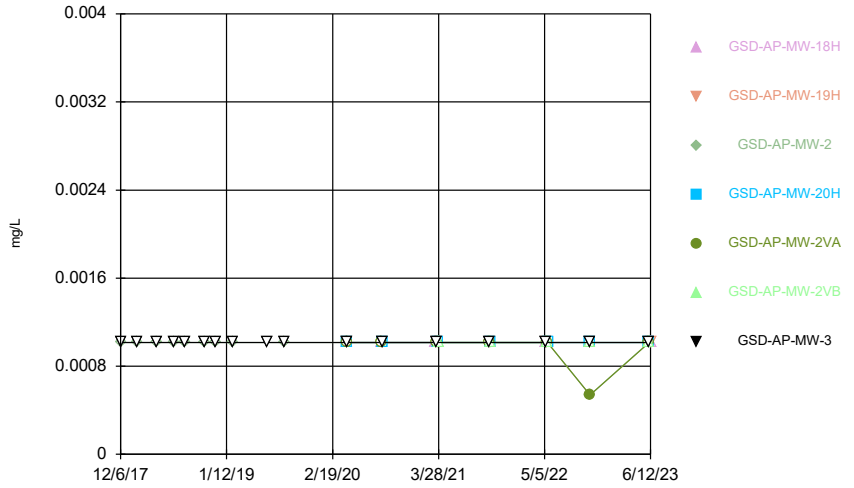

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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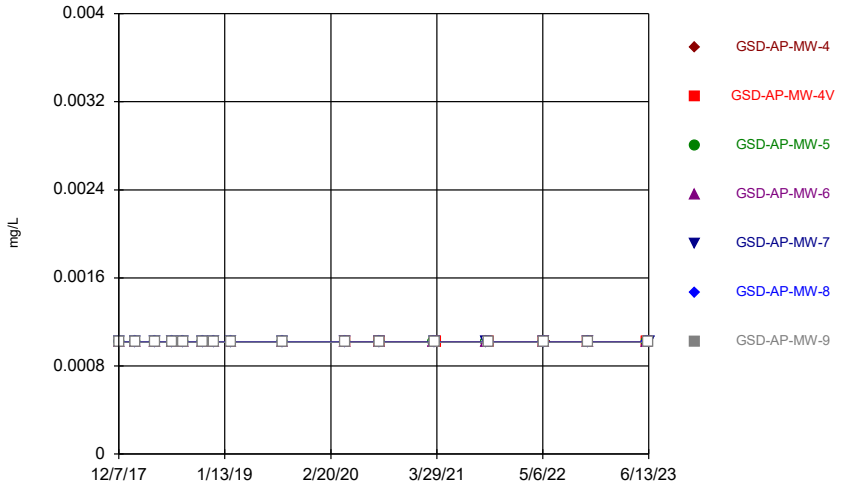

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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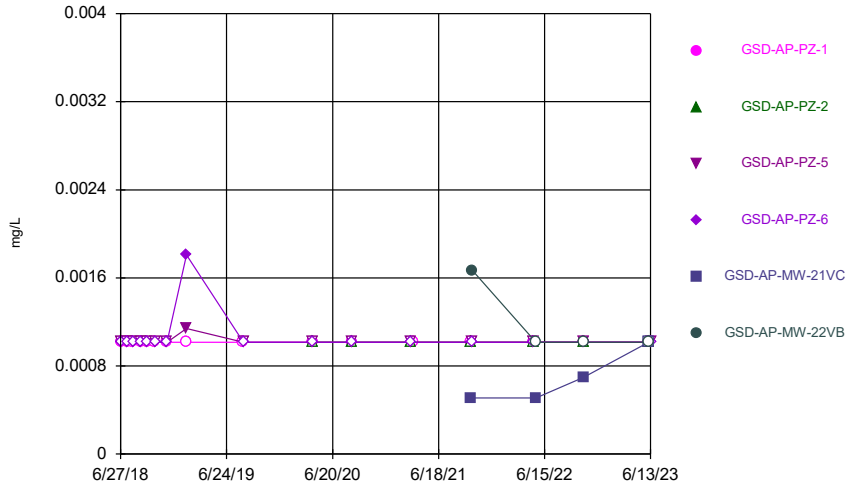

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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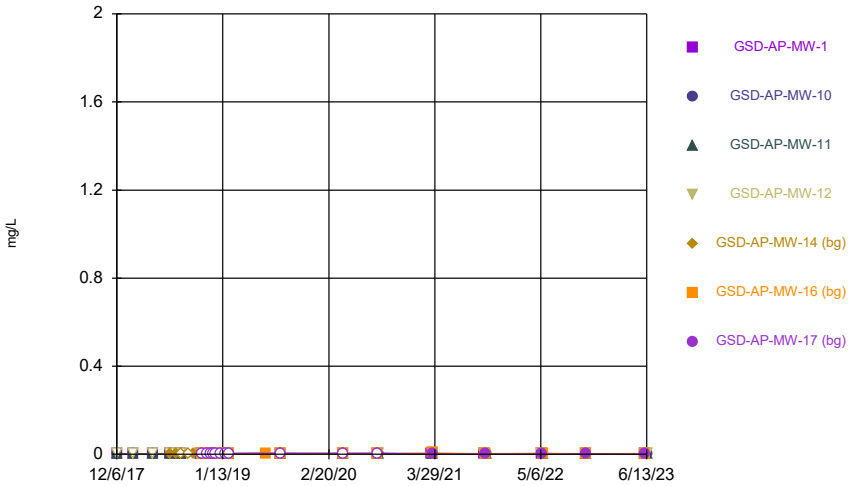

Constituent: Arsenic Analysis Run 7/20/2023 11:42 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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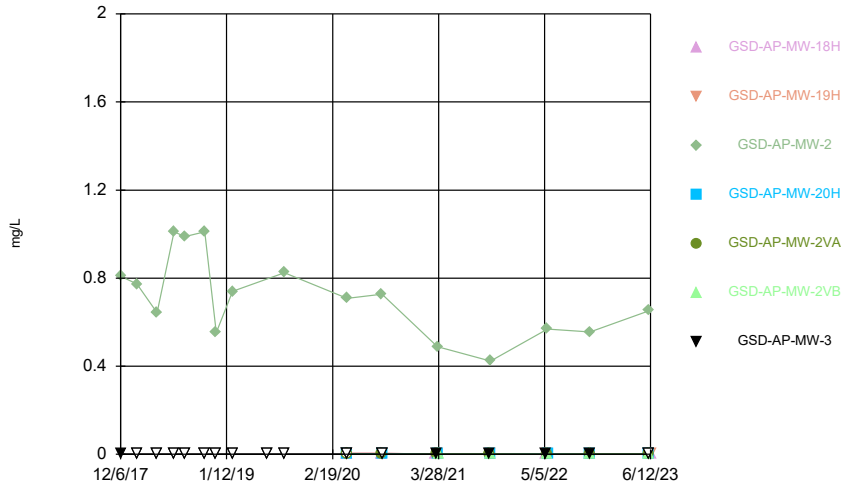

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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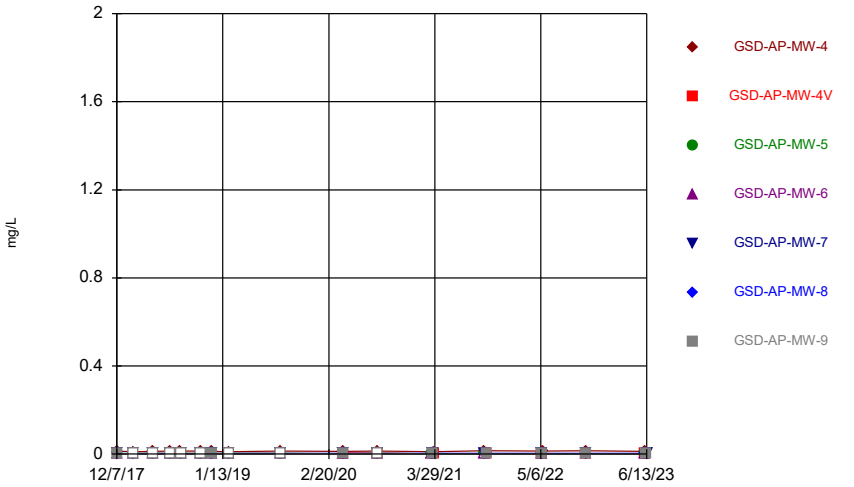

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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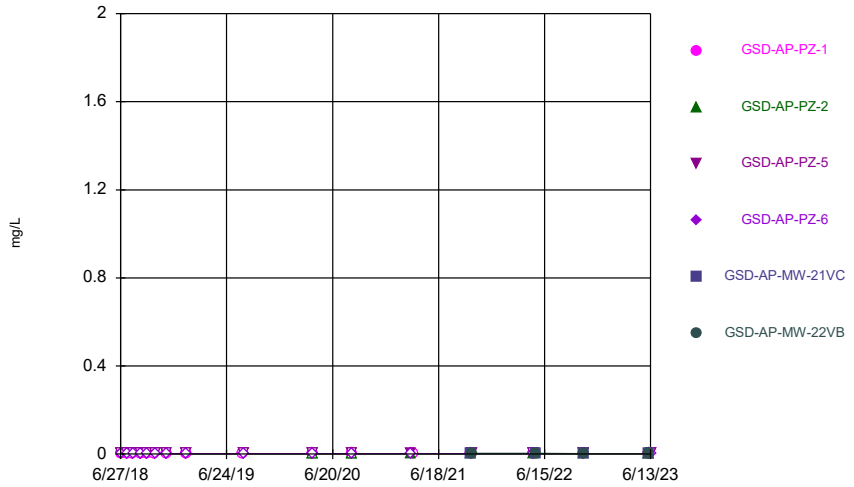

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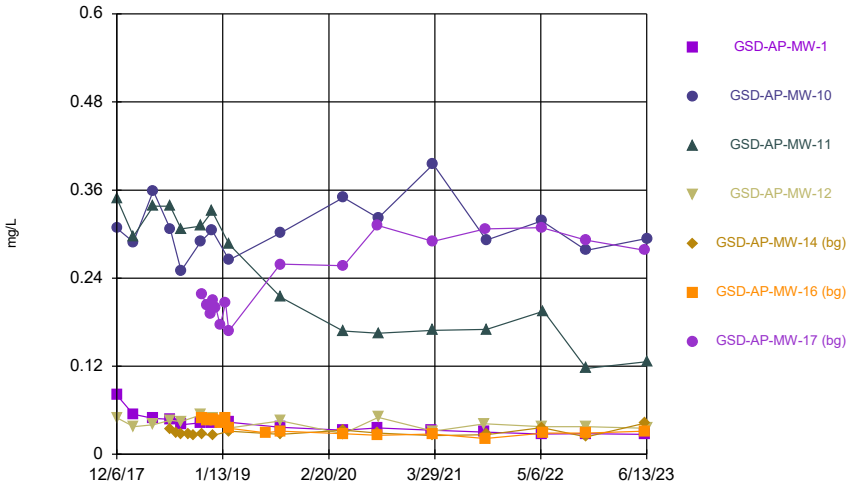
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

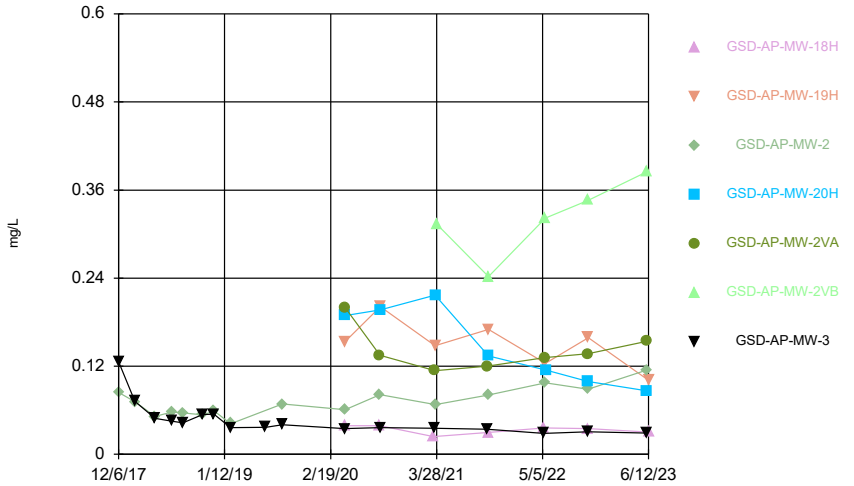


Constituent: Barium Analysis Run 7/20/2023 11:42 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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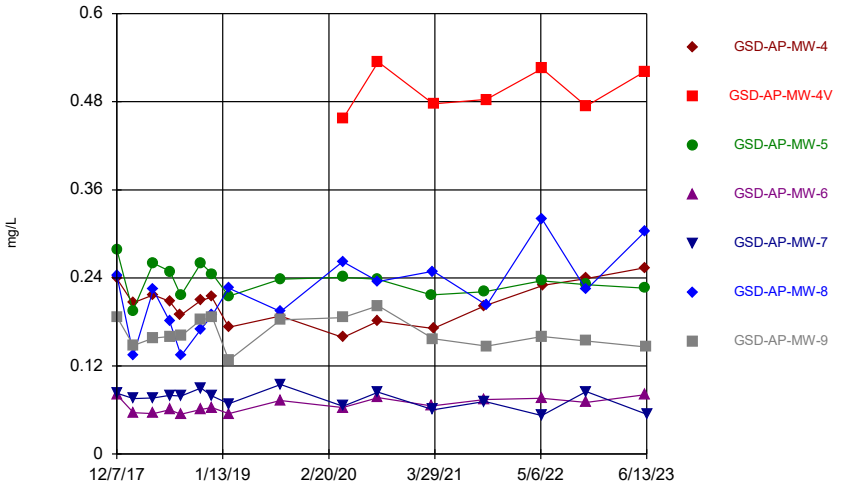
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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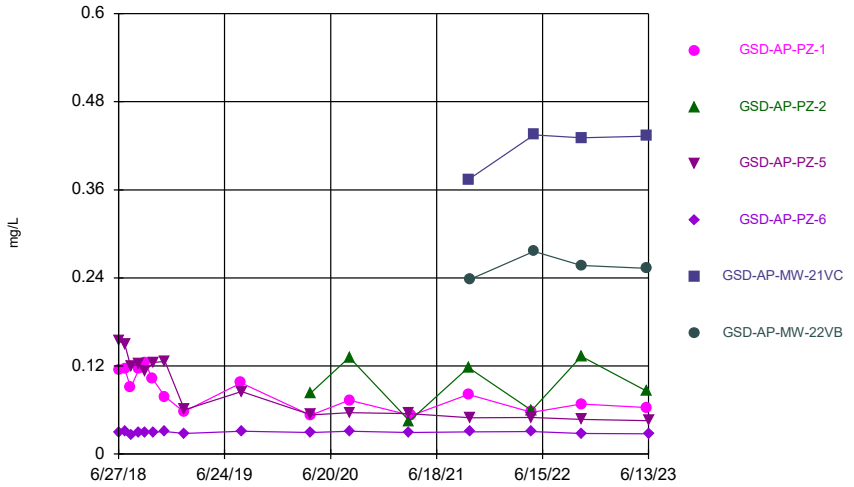
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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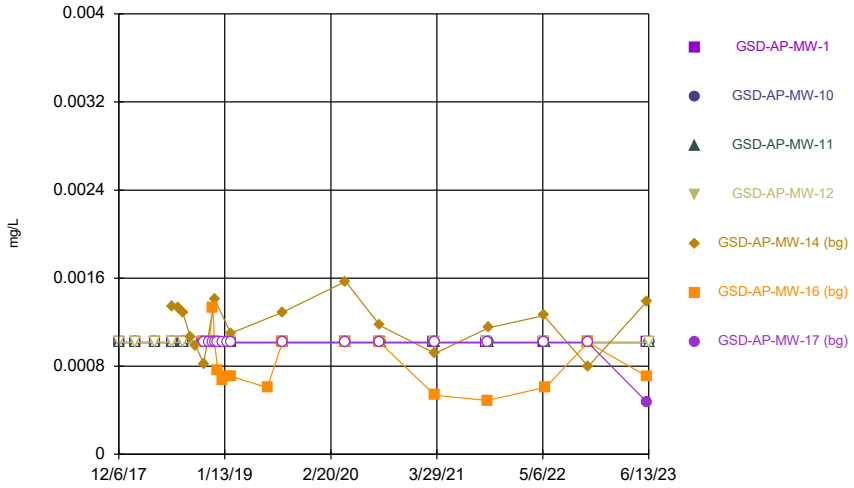

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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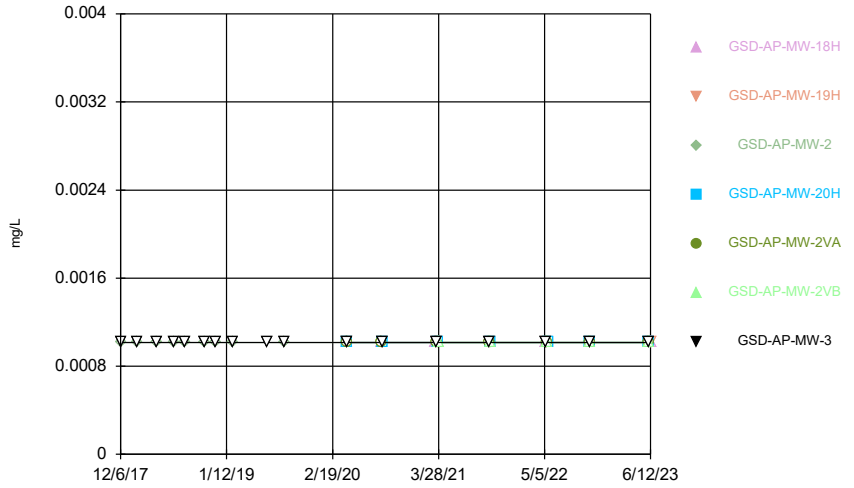

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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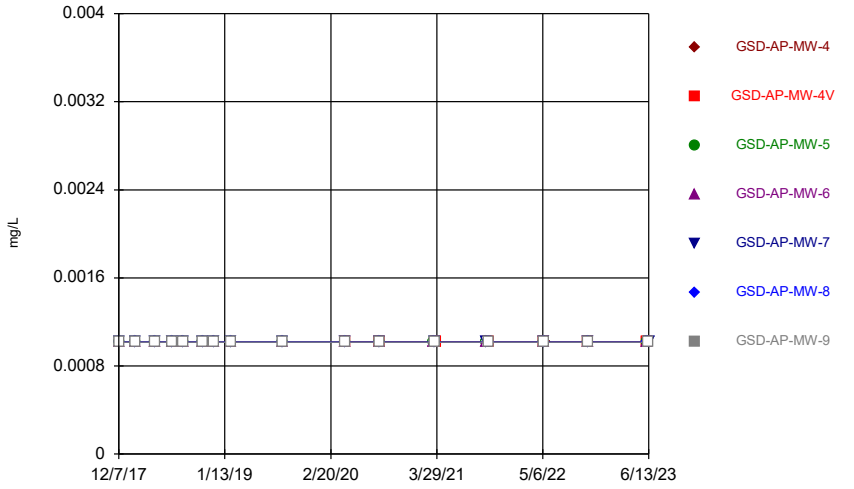

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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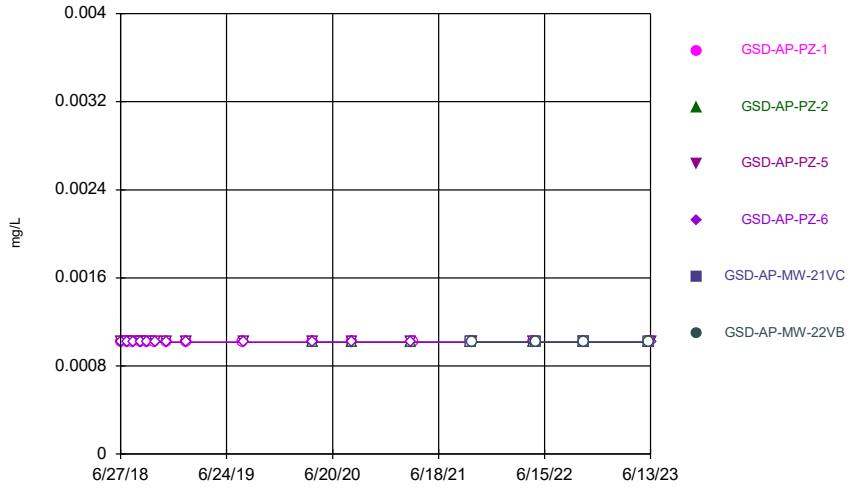

Constituent: Beryllium Analysis Run 7/20/2023 11:42 AM
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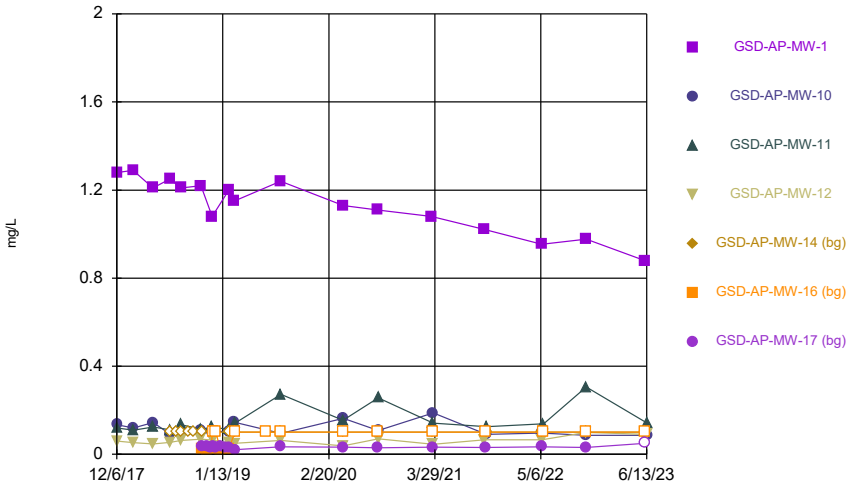

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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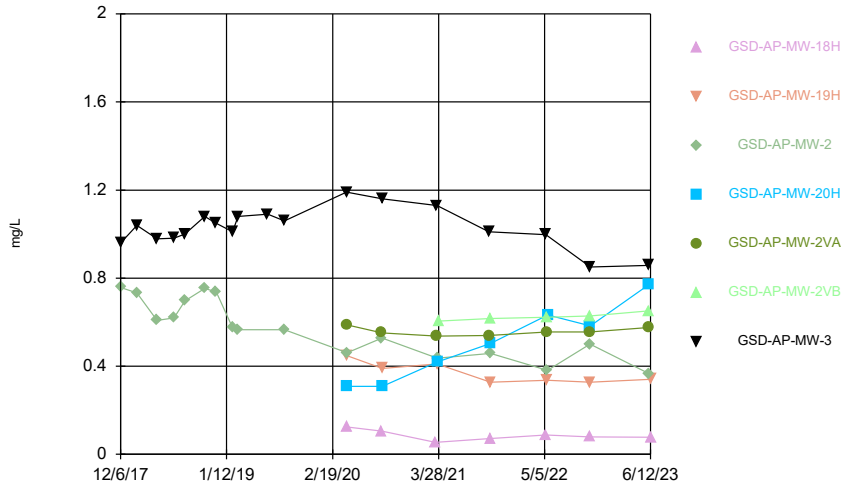

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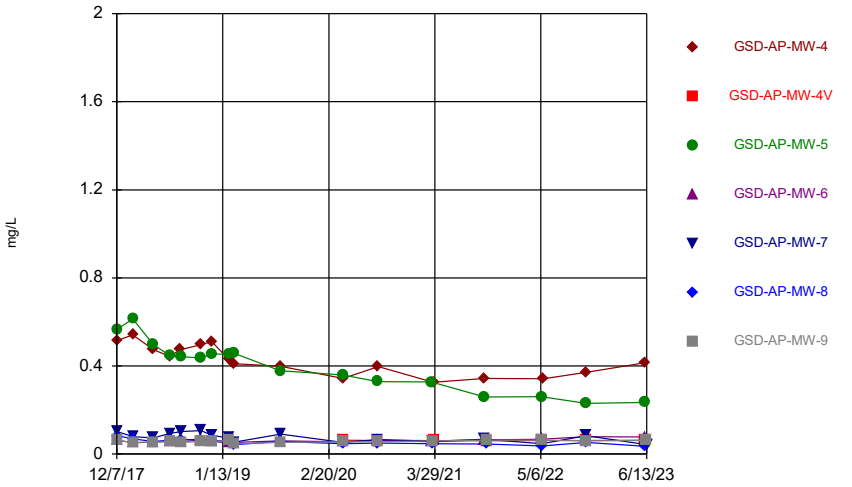

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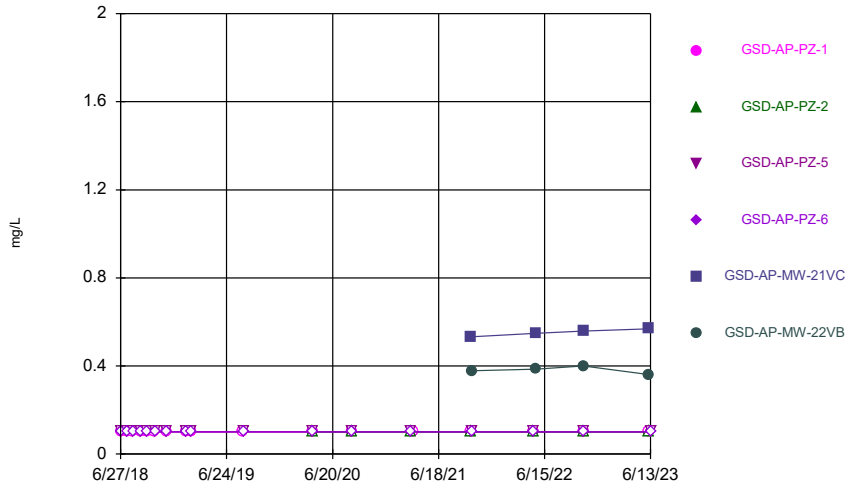

Constituent: Boron Analysis Run 7/20/2023 11:42 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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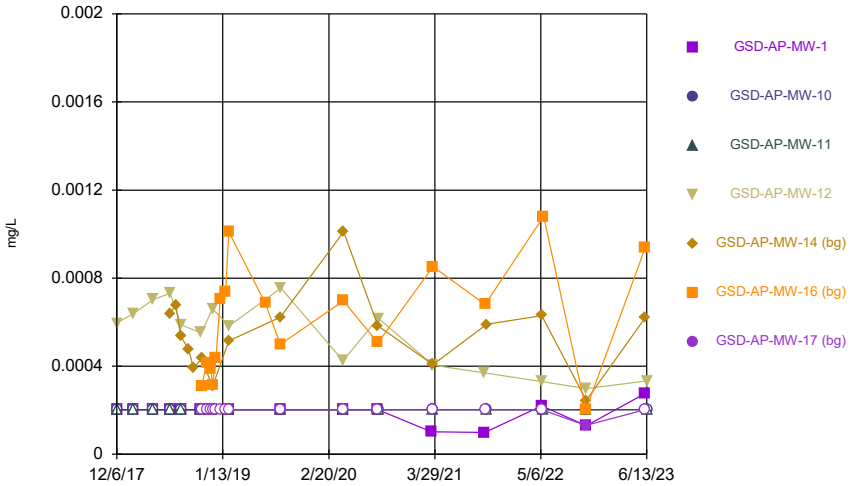
Hollow symbols indicate censored values.

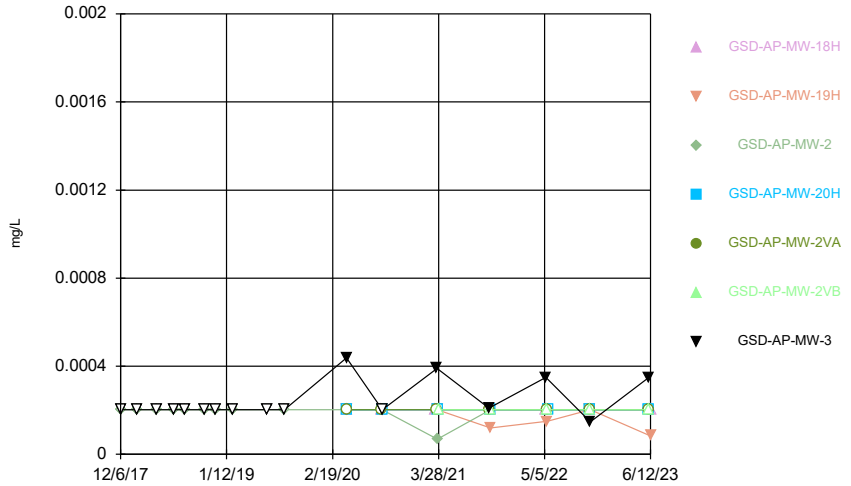
Time Series



Constituent: Cadmium Analysis Run 7/20/2023 11:42 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

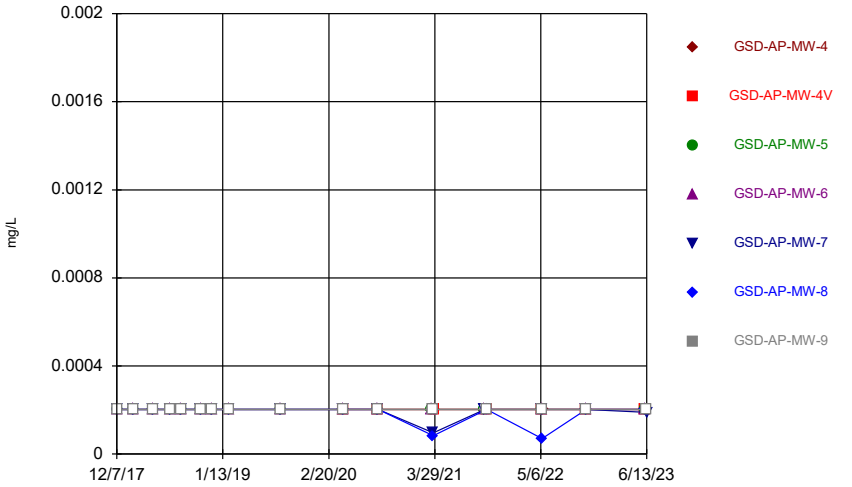
Time Series



Constituent: Cadmium Analysis Run 7/20/2023 11:42 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

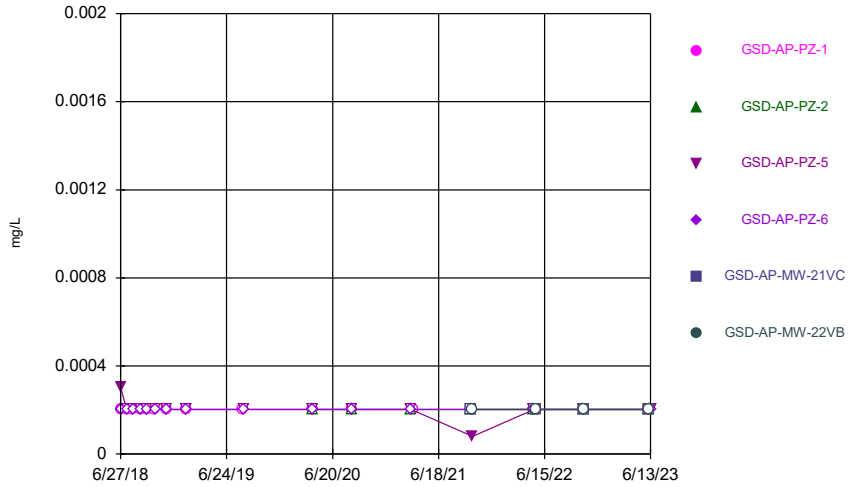
Time Series



Constituent: Cadmium Analysis Run 7/20/2023 11:42 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

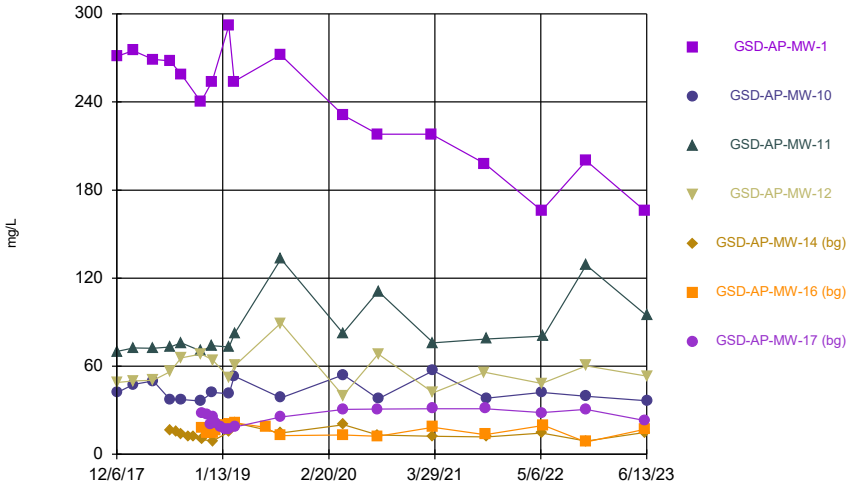
Time Series



Constituent: Cadmium Analysis Run 7/20/2023 11:42 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

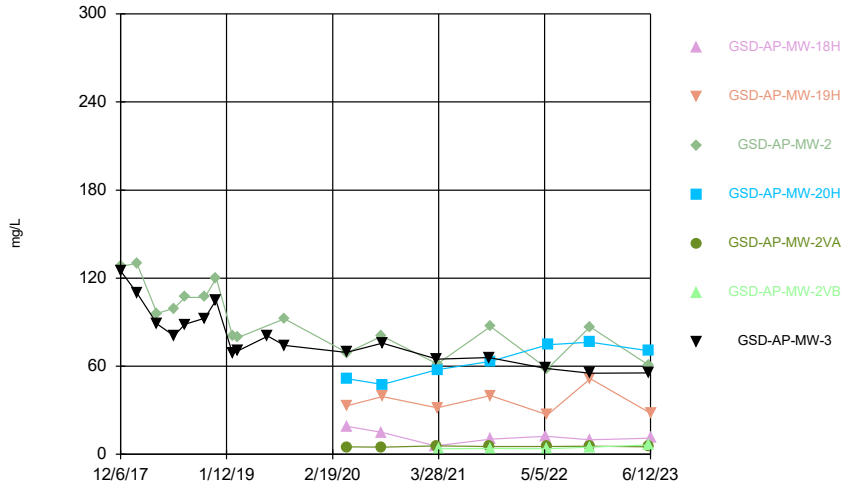


Constituent: Calcium Analysis Run 7/20/2023 11:42 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

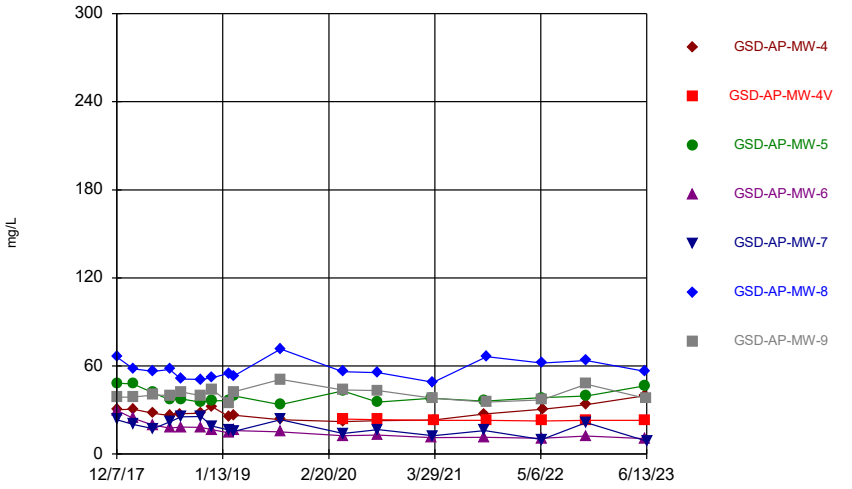


Constituent: Calcium Analysis Run 7/20/2023 11:42 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

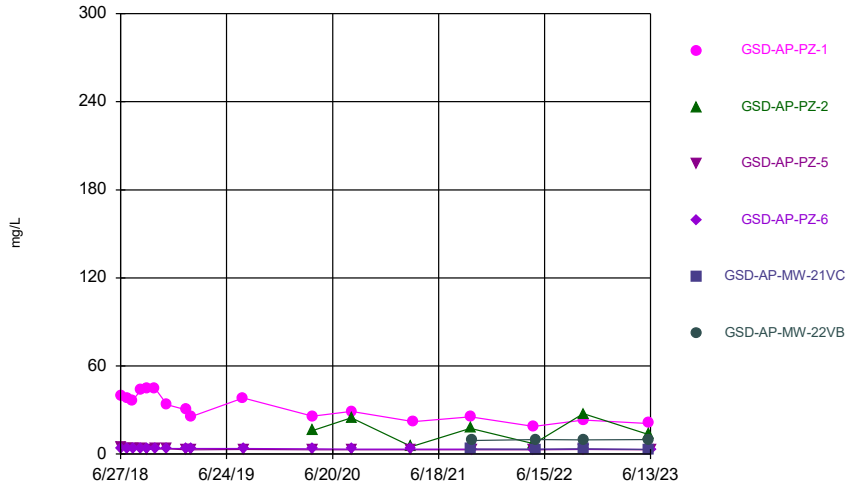


Constituent: Calcium Analysis Run 7/20/2023 11:42 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

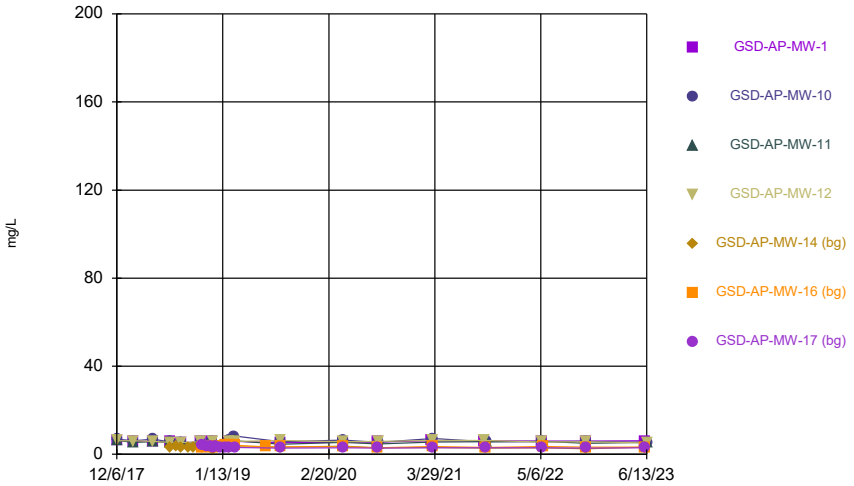


Constituent: Calcium Analysis Run 7/20/2023 11:42 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

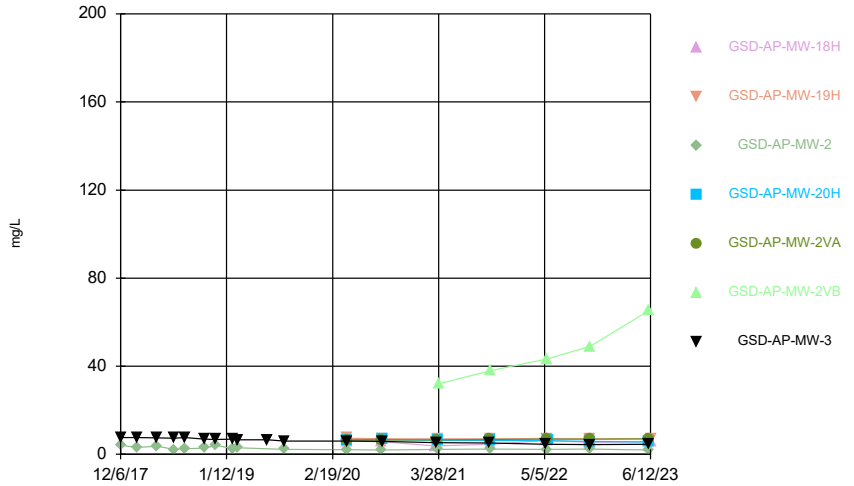


Constituent: Chloride Analysis Run 7/20/2023 11:42 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



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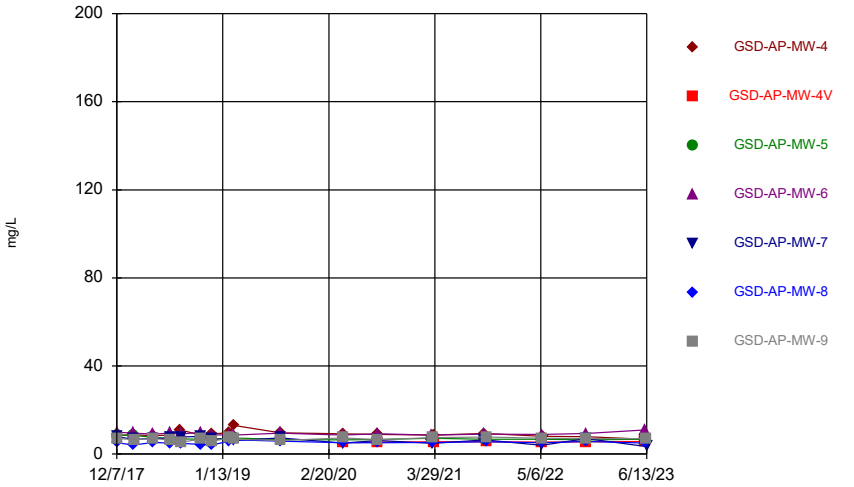
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

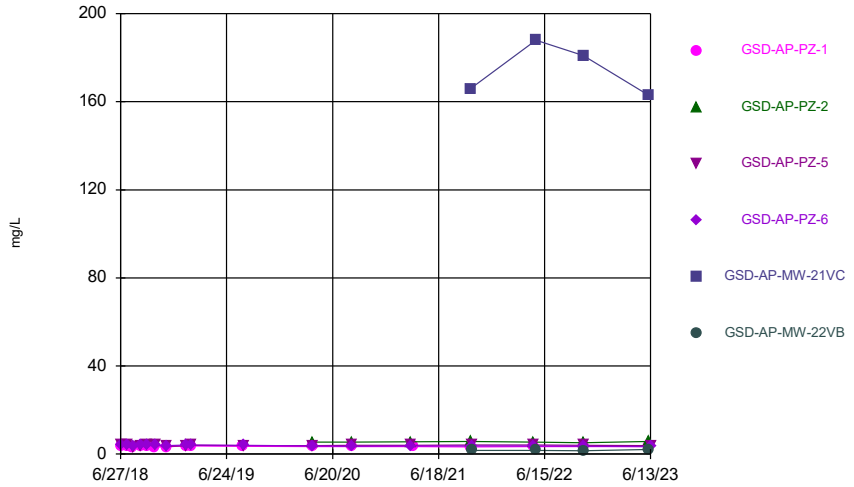


Constituent: Chloride Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

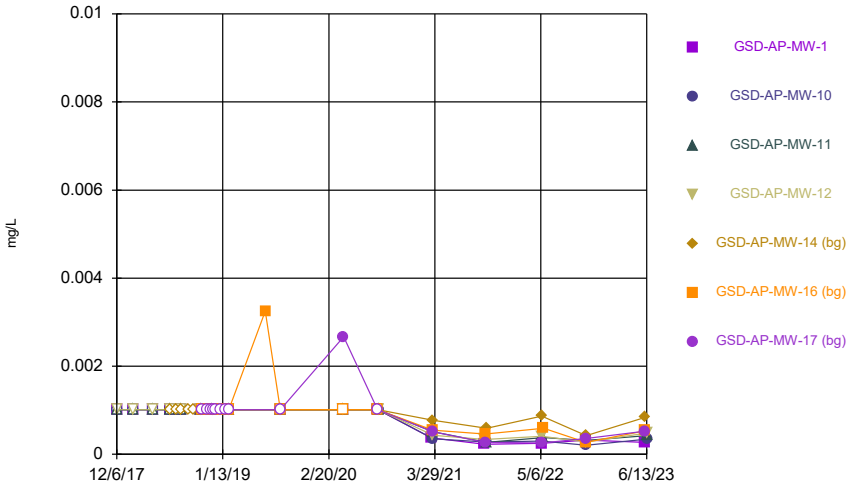


Constituent: Chloride Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

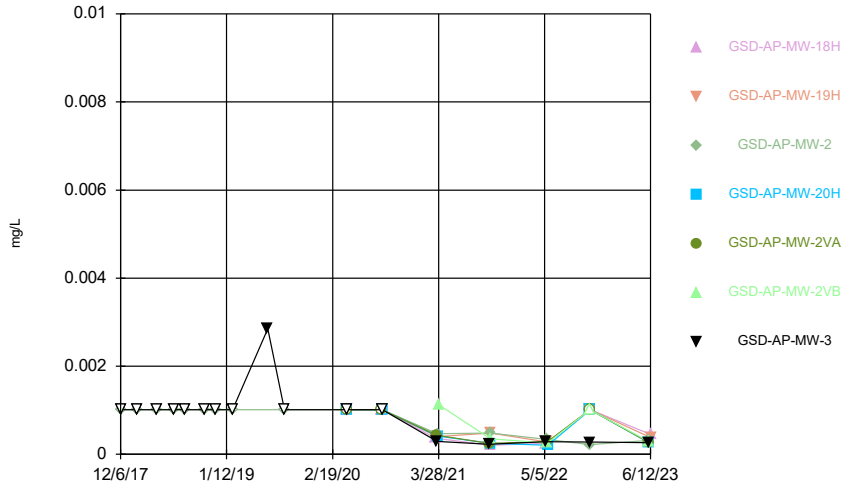
Time Series



Constituent: Chromium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

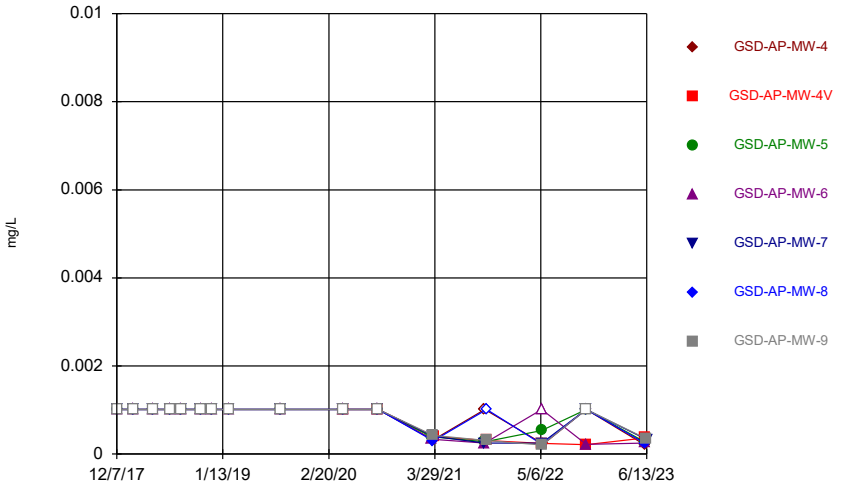
Time Series



Constituent: Chromium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

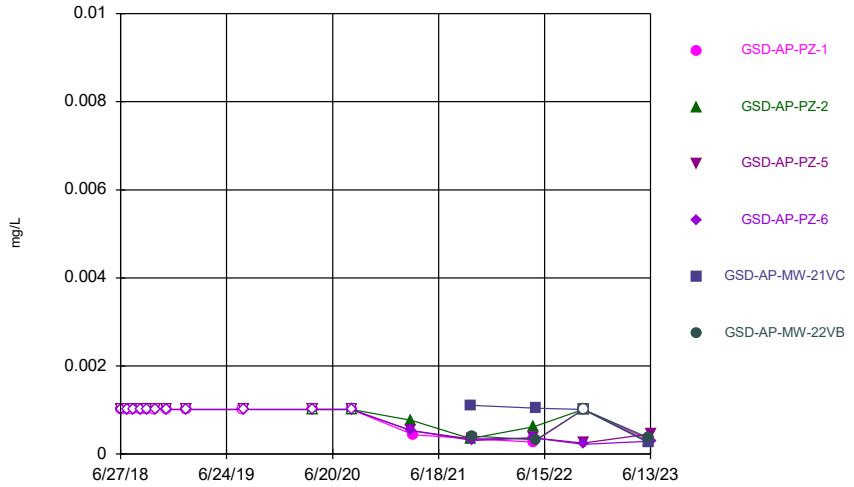
Time Series



Constituent: Chromium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

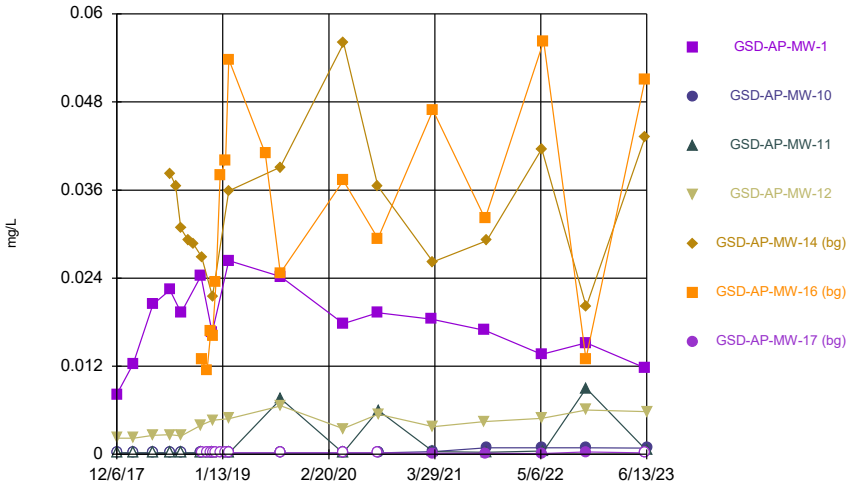
Time Series



Constituent: Chromium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

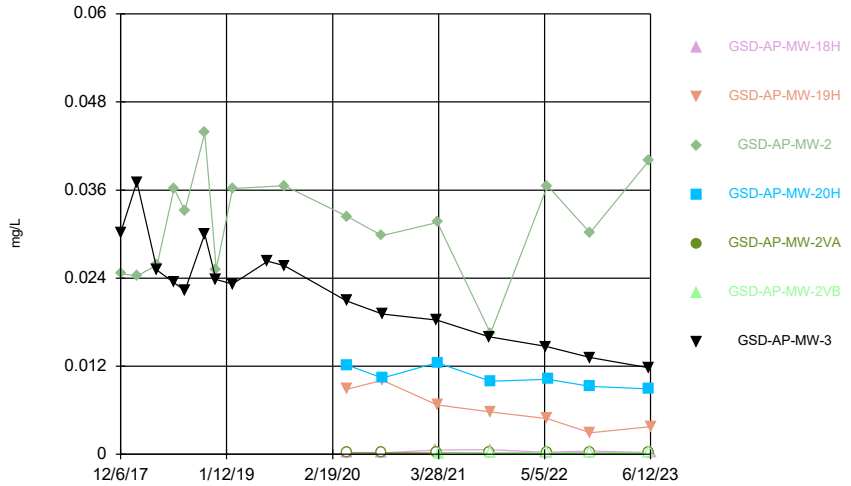
Time Series



Constituent: Cobalt Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

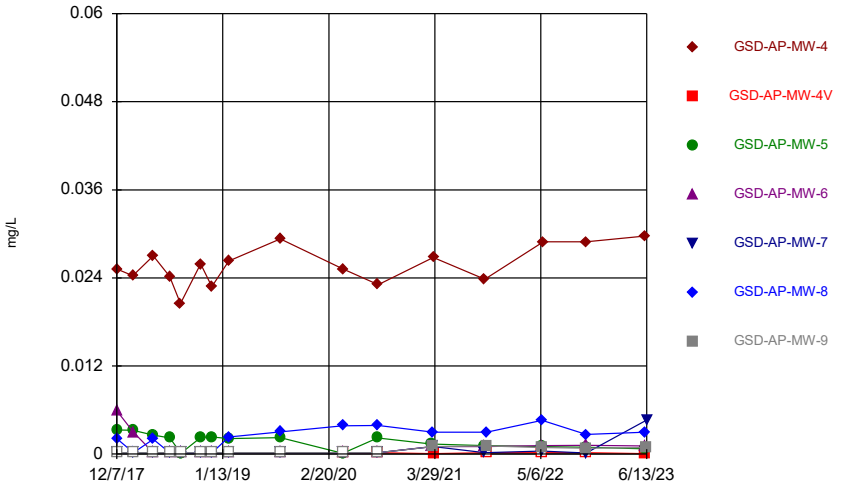
Time Series



Constituent: Cobalt Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

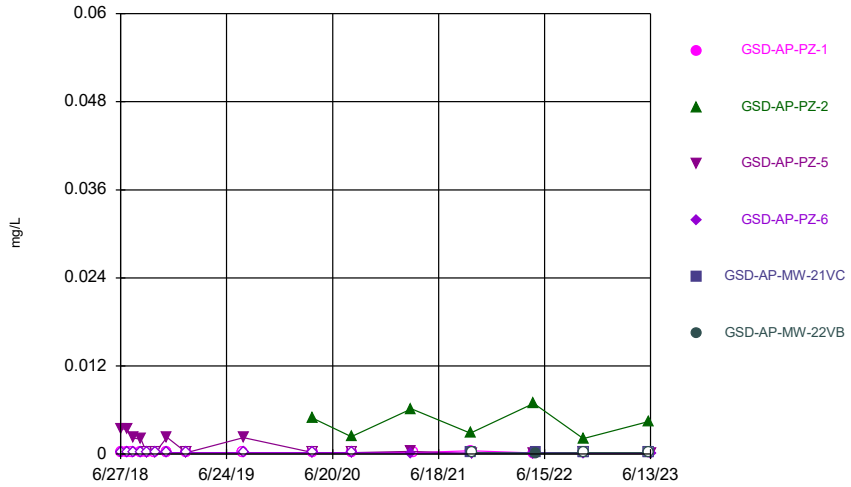
Time Series



Constituent: Cobalt Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

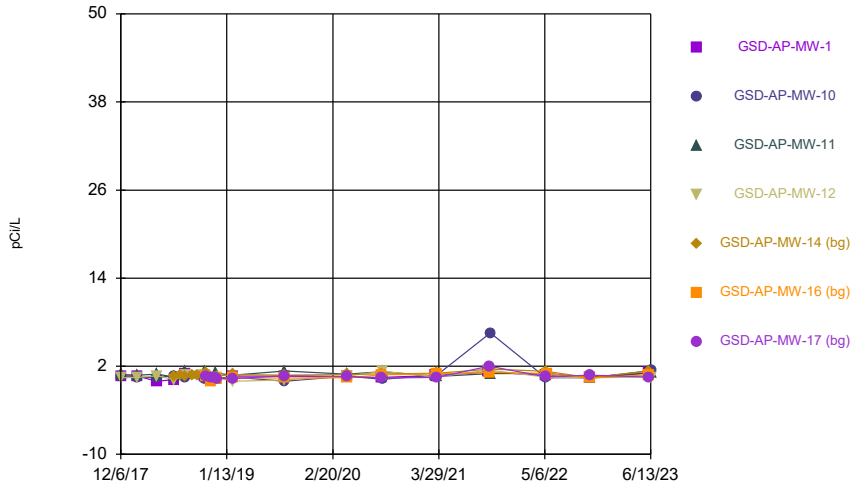
Time Series



Constituent: Cobalt Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

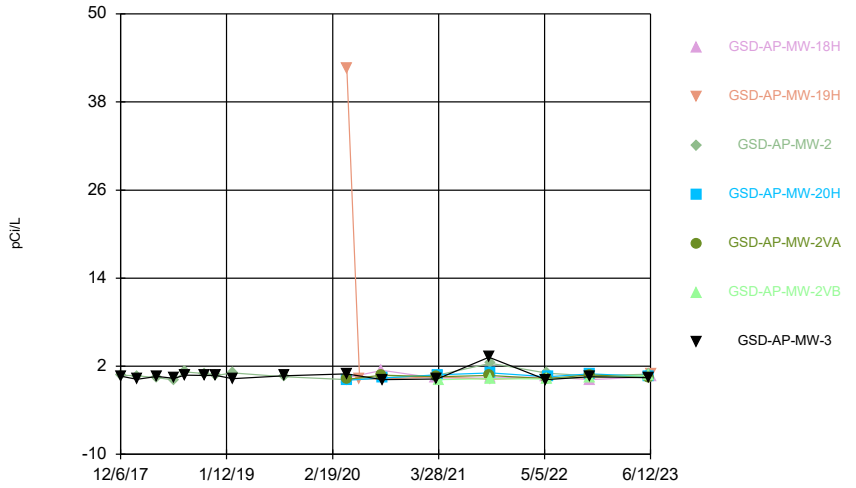


Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

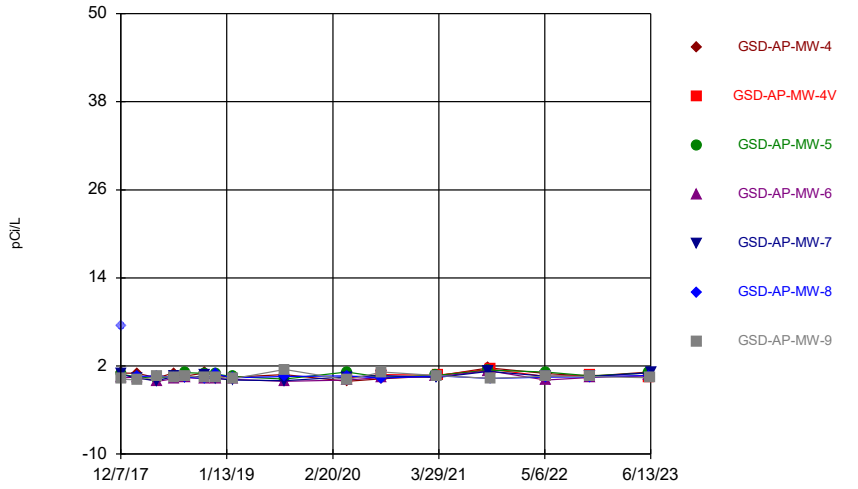


Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

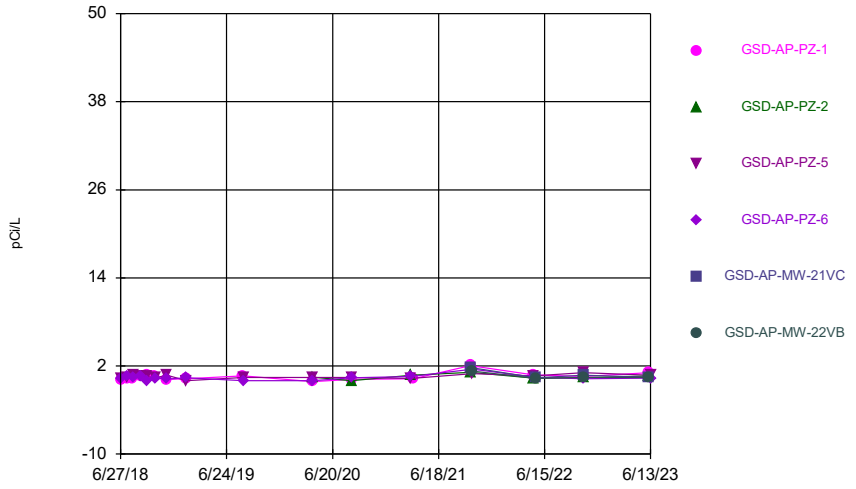


Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

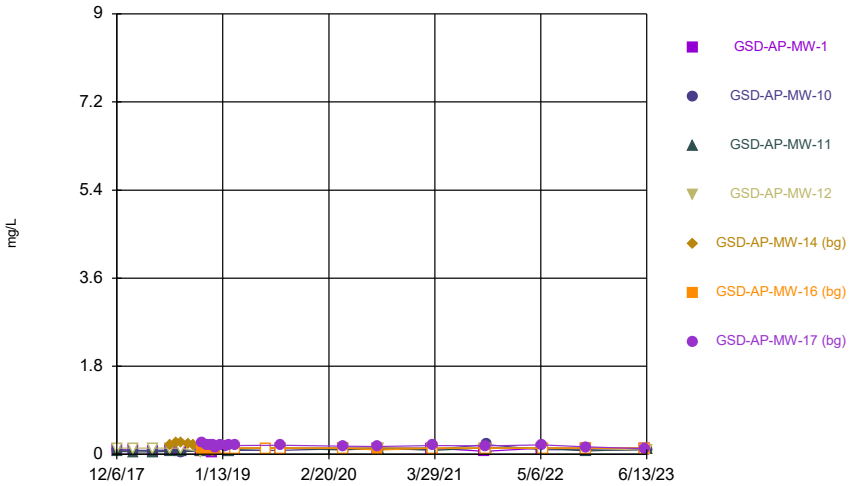


Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

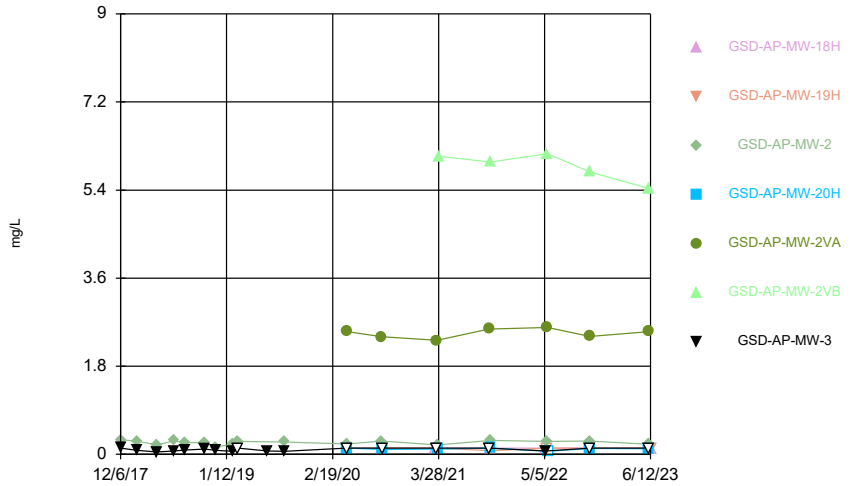
Time Series



Constituent: Fluoride Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

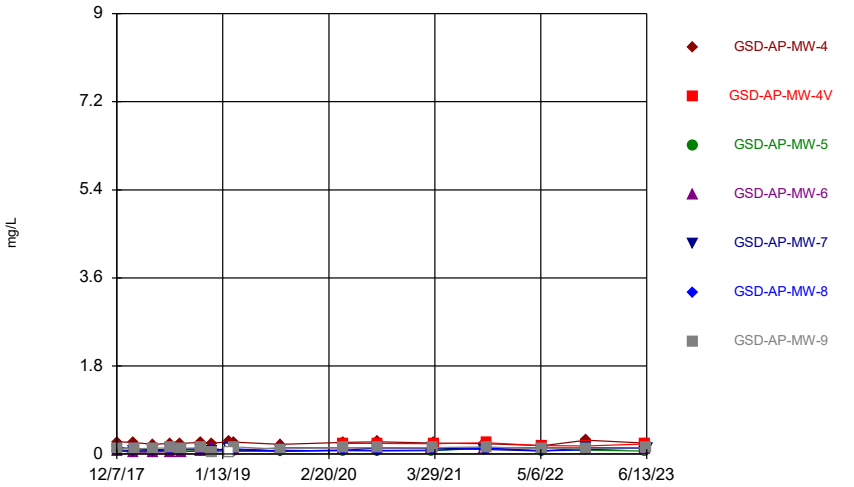
Time Series



Constituent: Fluoride Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

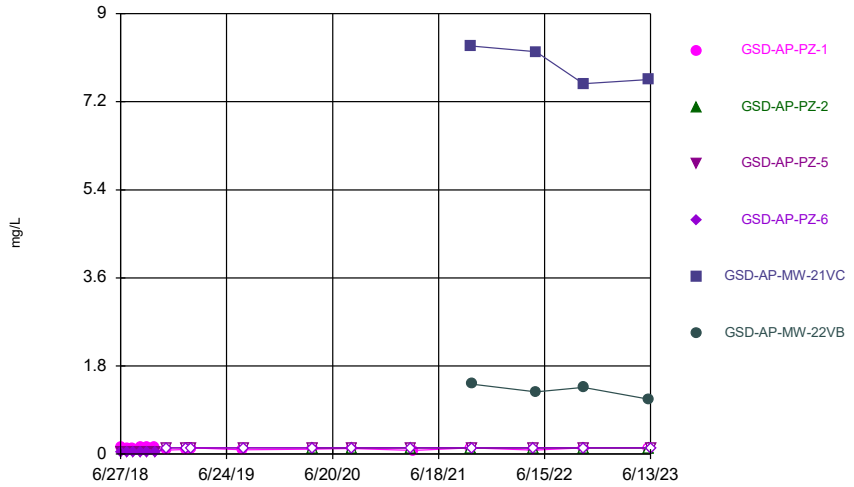
Time Series



Constituent: Fluoride Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

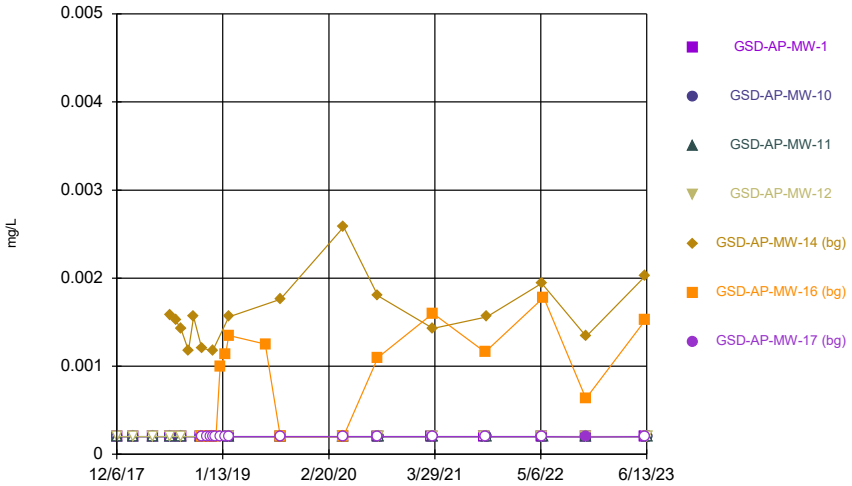
Time Series



Constituent: Fluoride Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

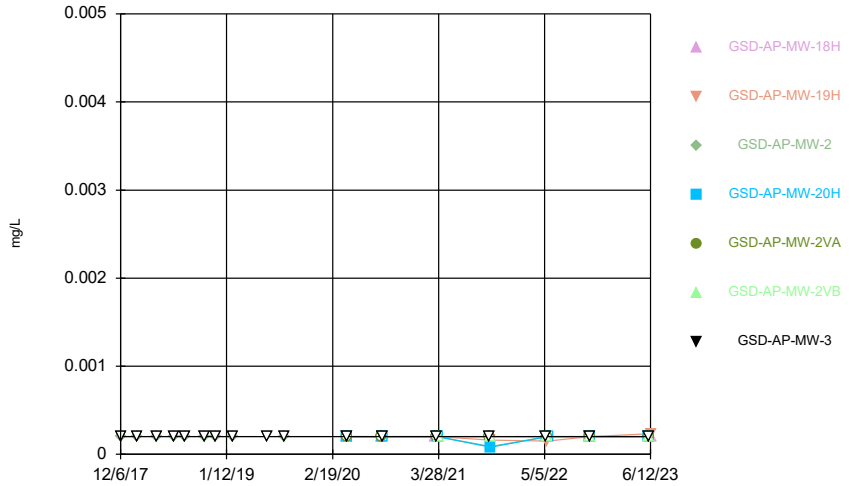
Time Series



Constituent: Lead Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

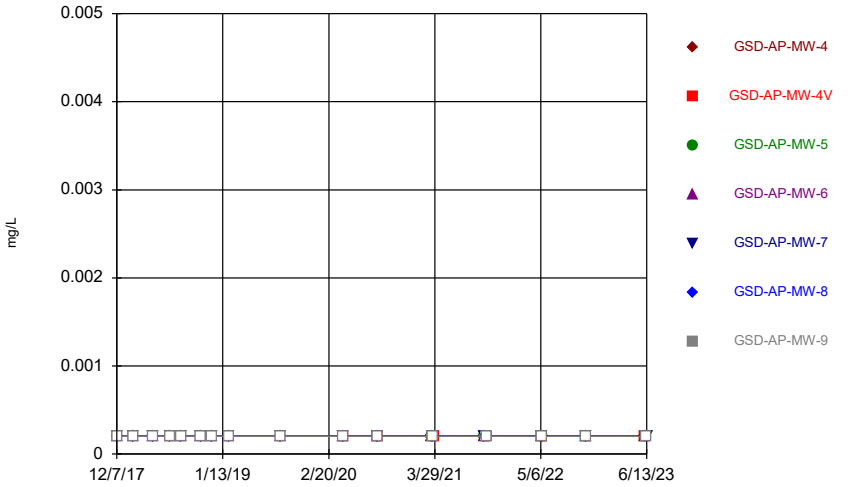
Time Series



Constituent: Lead Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

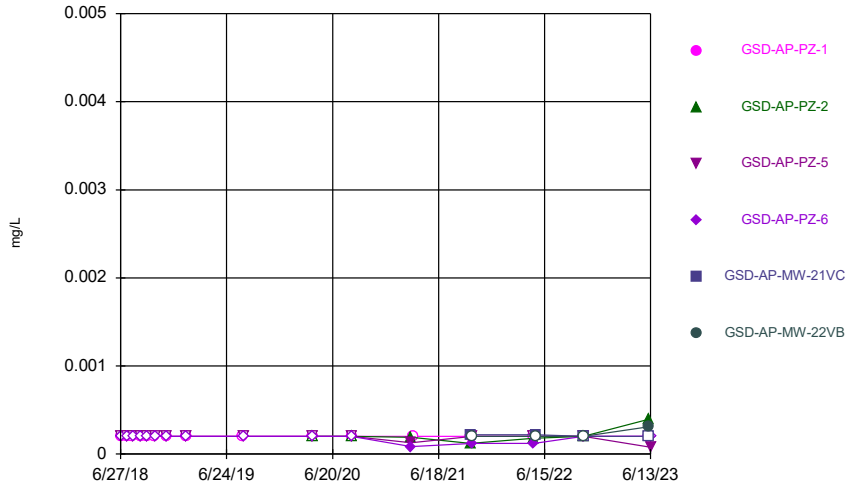
Time Series



Constituent: Lead Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

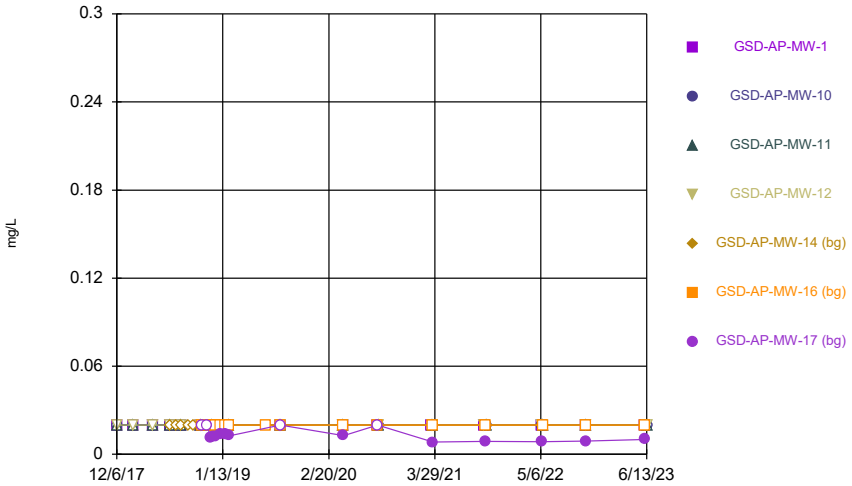
Time Series



Constituent: Lead Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

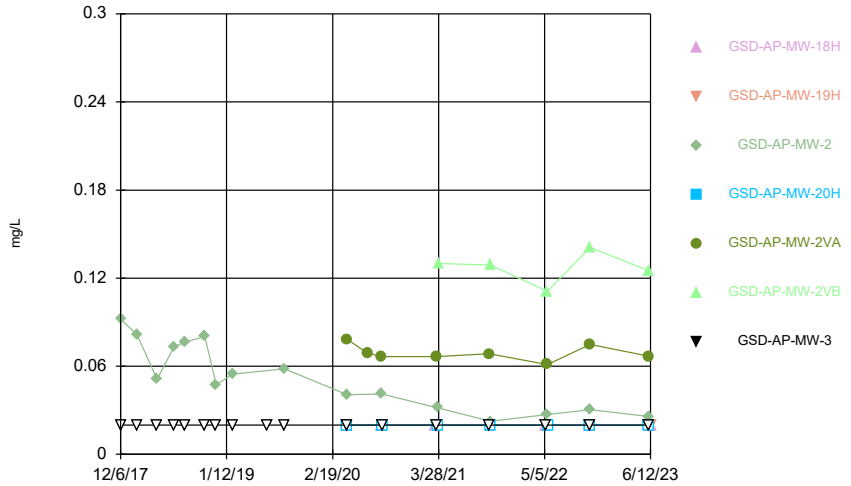
Time Series



Constituent: Lithium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

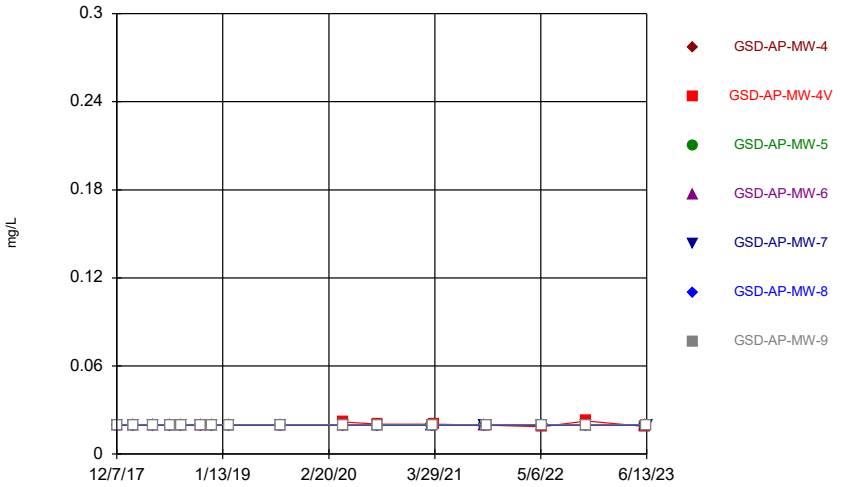
Time Series



Constituent: Lithium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

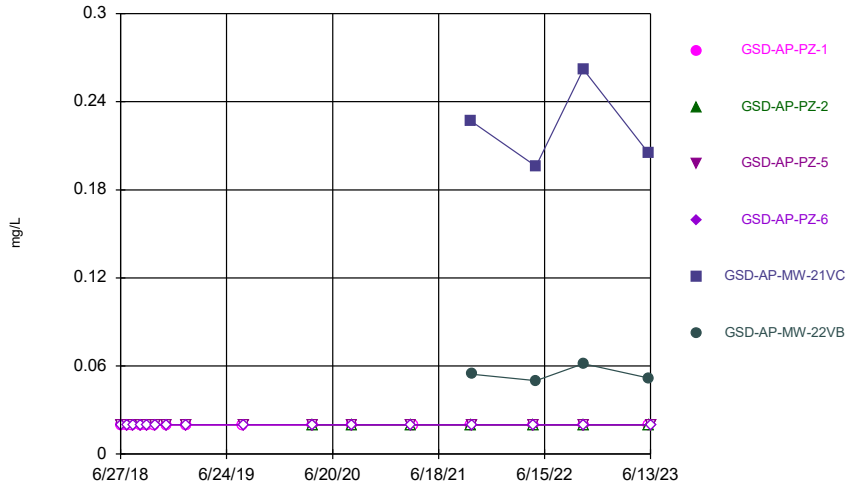
Time Series



Constituent: Lithium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

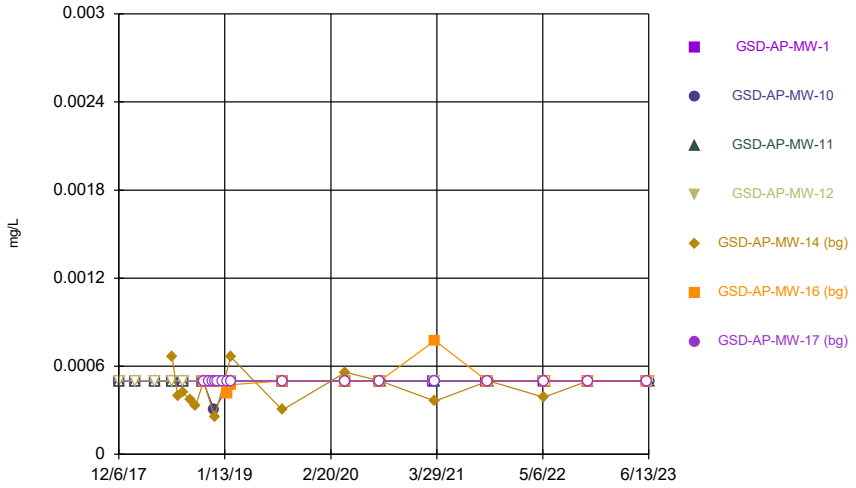
Time Series



Constituent: Lithium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

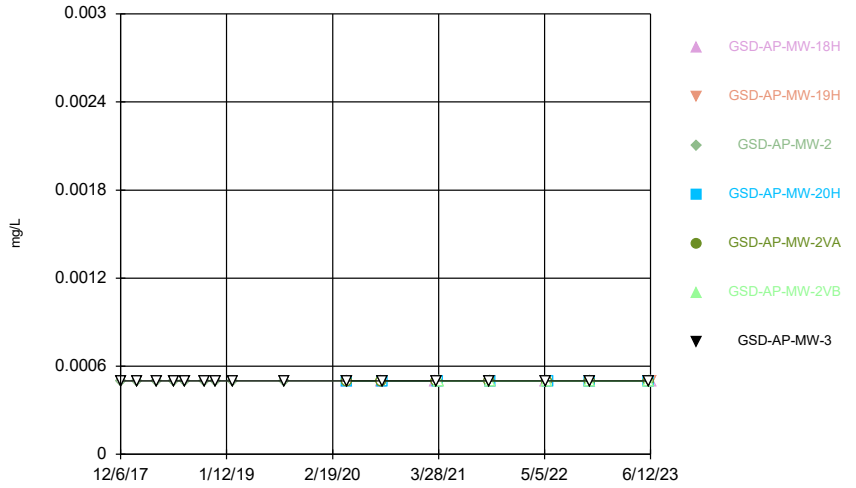
Time Series



Constituent: Mercury Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

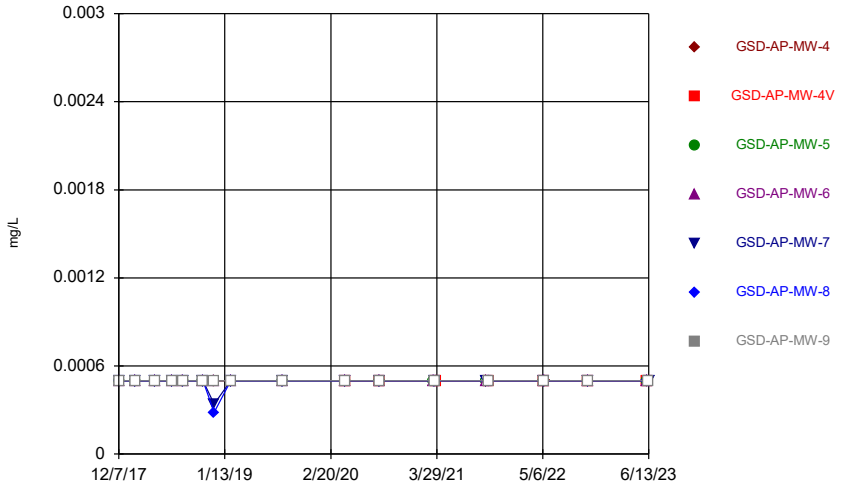
Time Series



Constituent: Mercury Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

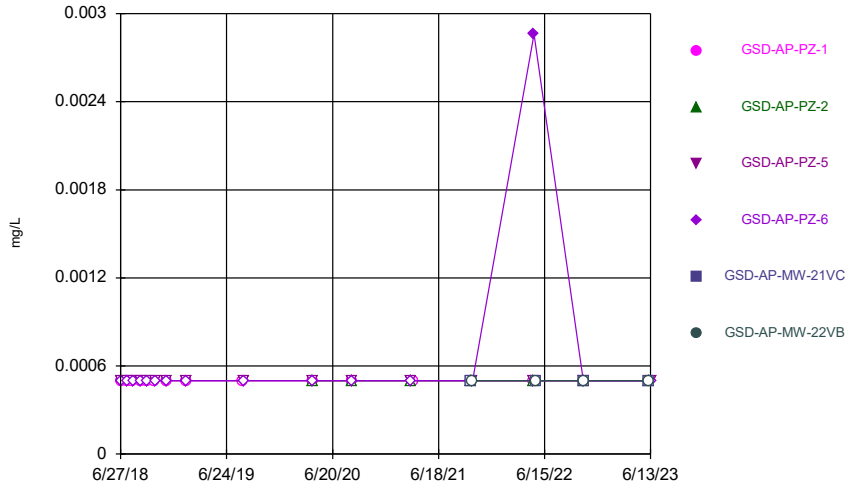
Time Series



Constituent: Mercury Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

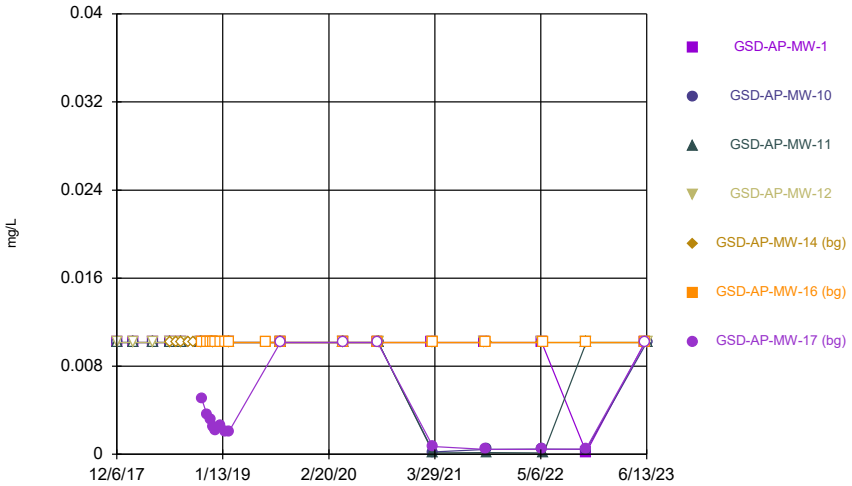
Time Series



Constituent: Mercury Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

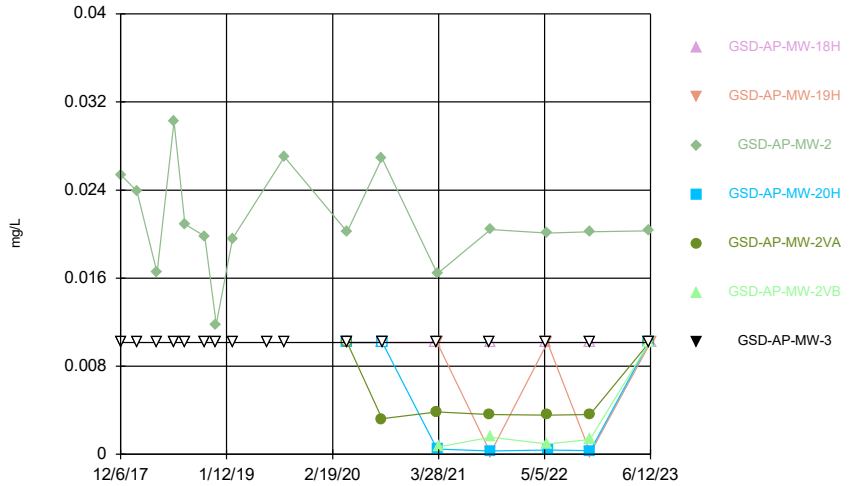
Time Series



Constituent: Molybdenum Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

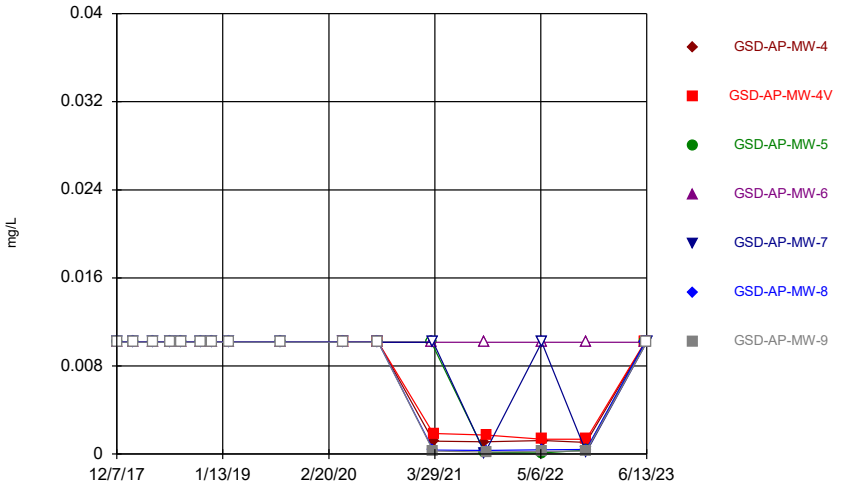
Time Series



Constituent: Molybdenum Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

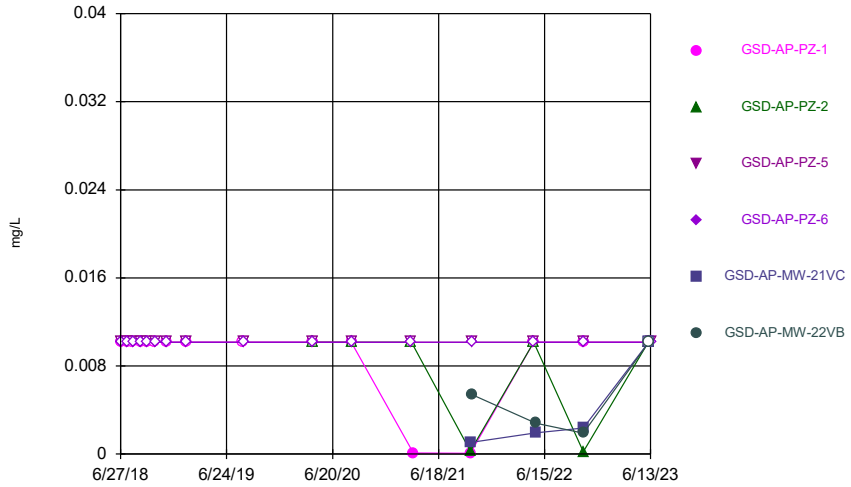
Time Series



Constituent: Molybdenum Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

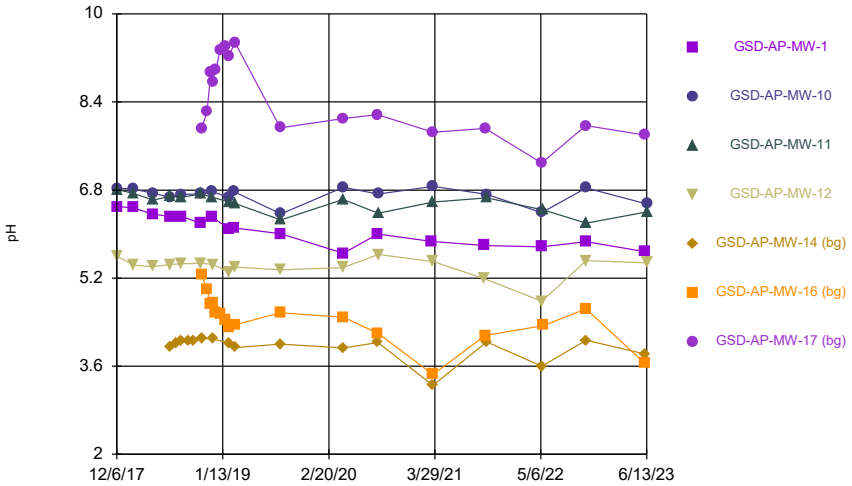
Time Series



Constituent: Molybdenum Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

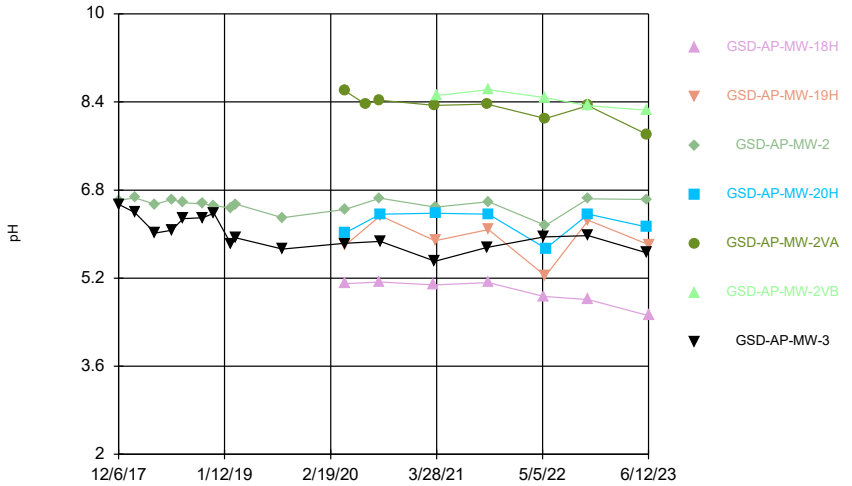


Constituent: pH Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

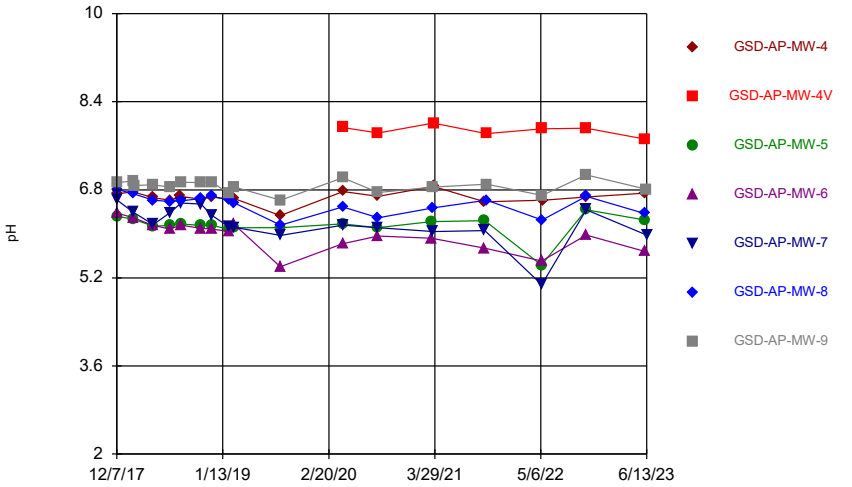


Constituent: pH Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

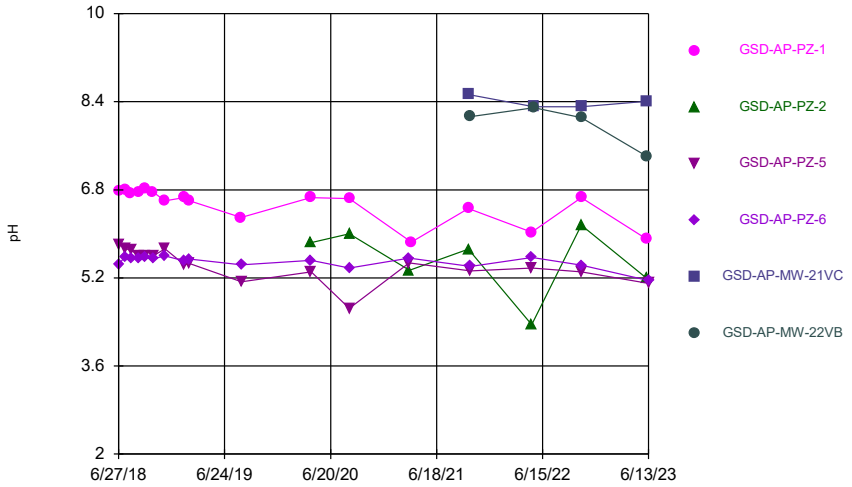


Constituent: pH Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

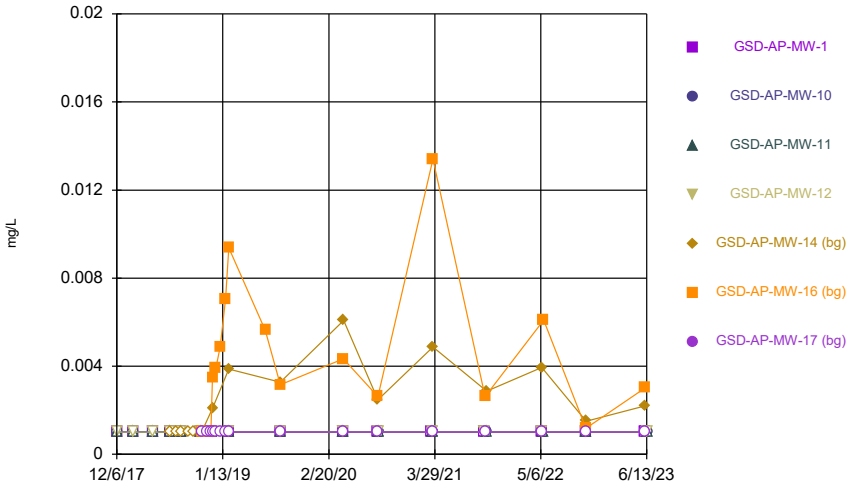


Constituent: pH Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

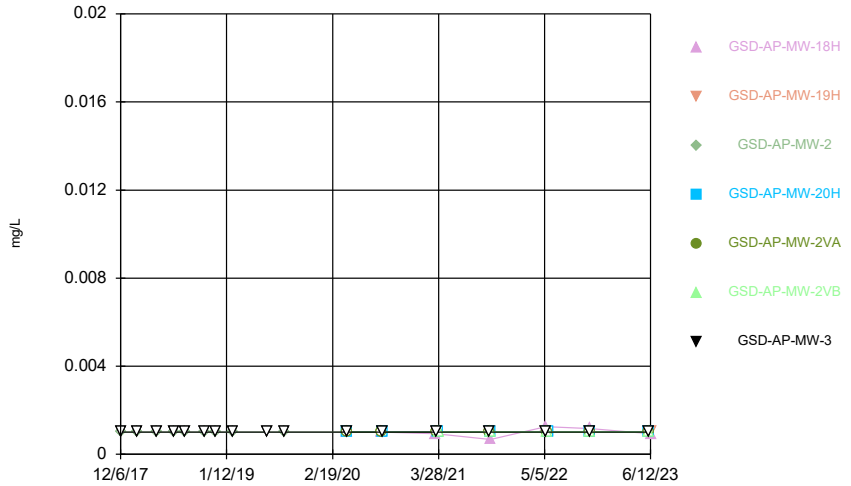
Time Series



Constituent: Selenium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

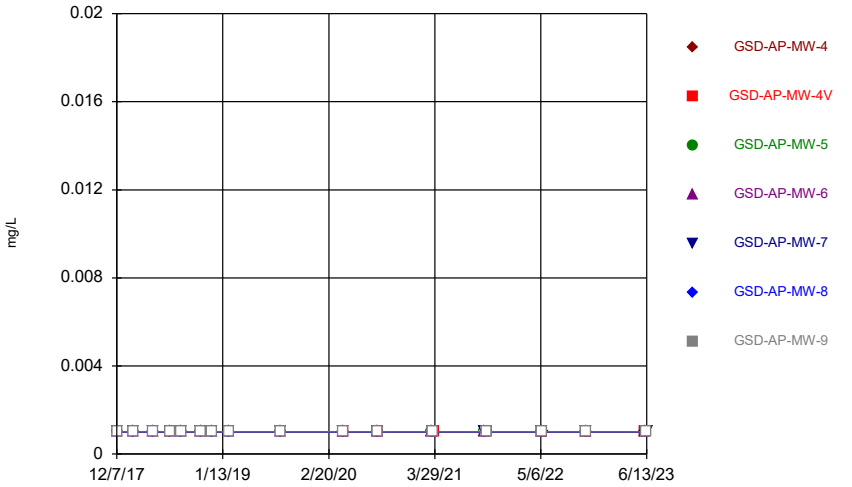
Time Series



Constituent: Selenium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

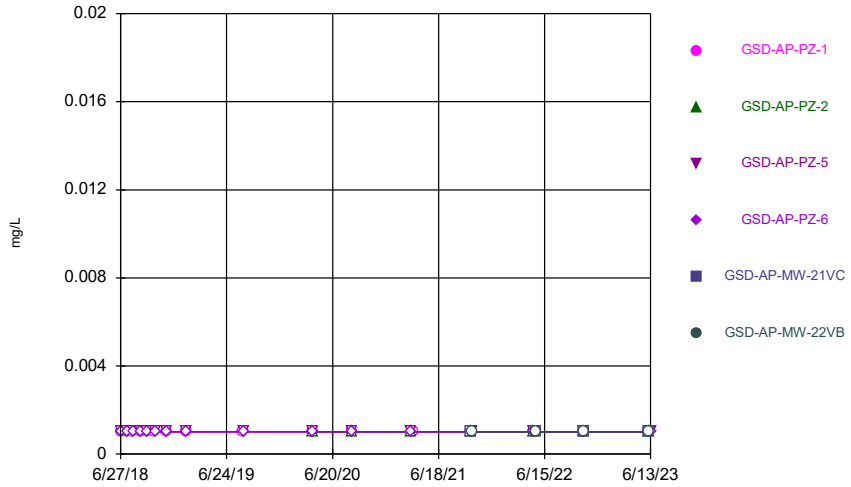
Time Series



Constituent: Selenium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

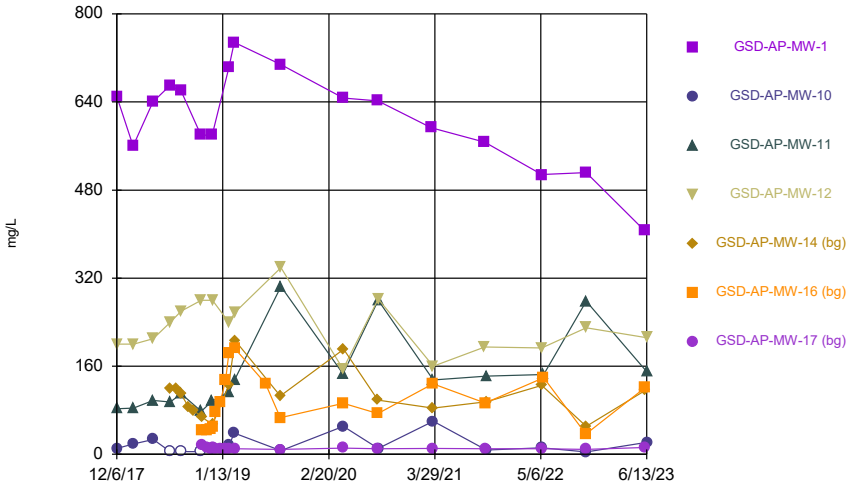
Time Series



Constituent: Selenium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

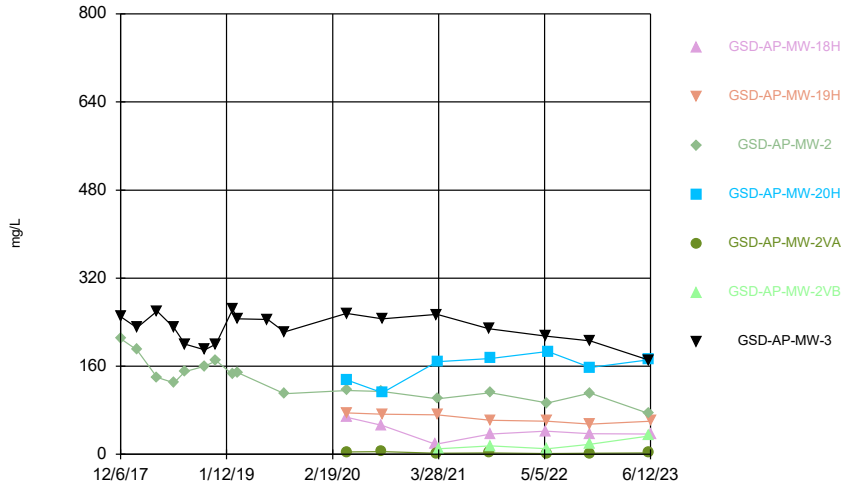
Time Series



Constituent: Sulfate Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

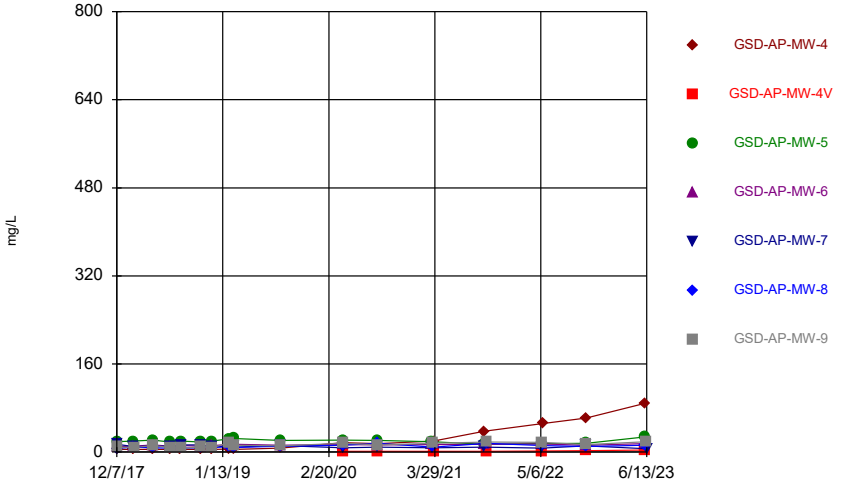
Time Series



Constituent: Sulfate Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

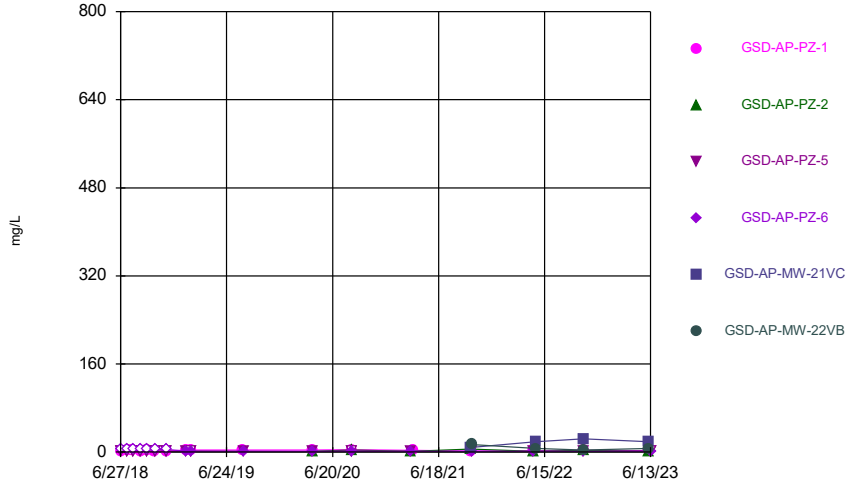
Time Series



Constituent: Sulfate Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

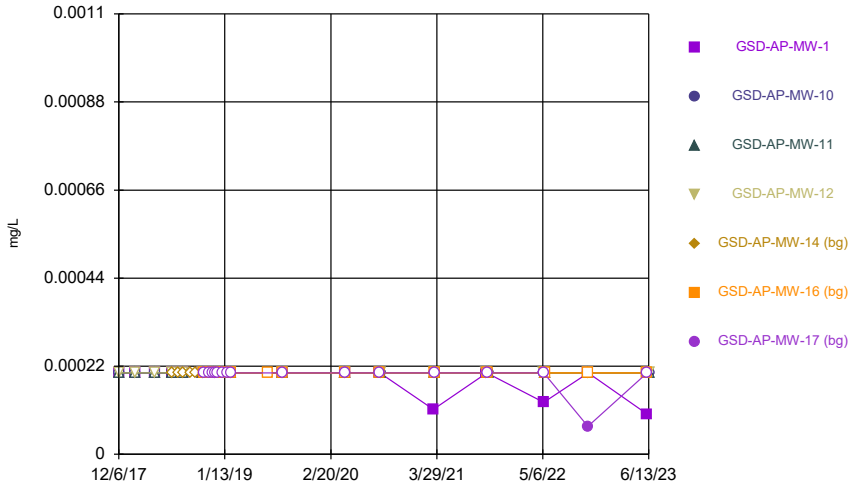
Time Series



Constituent: Sulfate Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

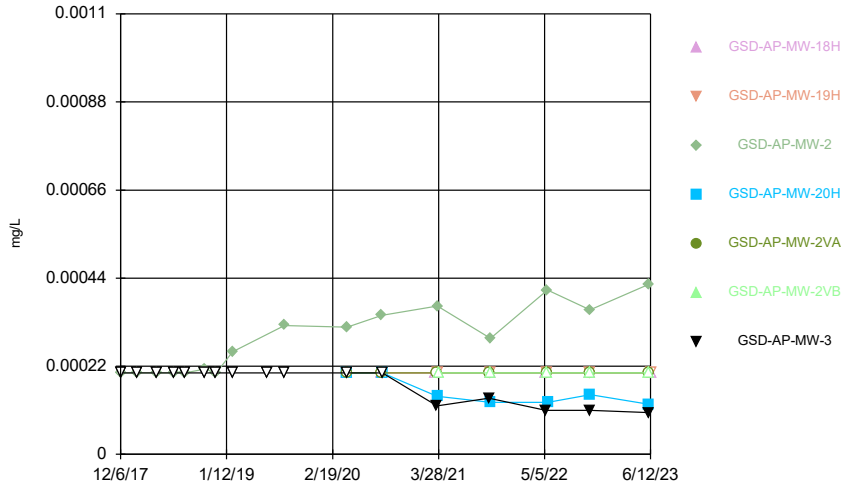
Time Series



Constituent: Thallium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

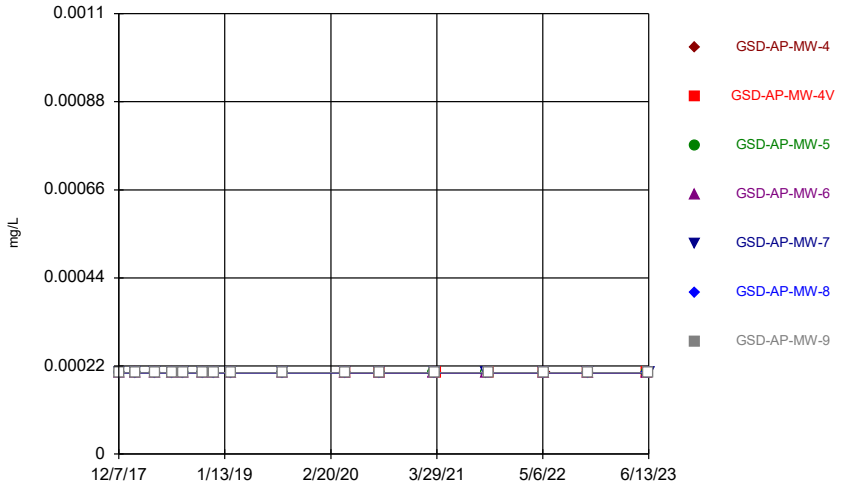
Time Series



Constituent: Thallium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

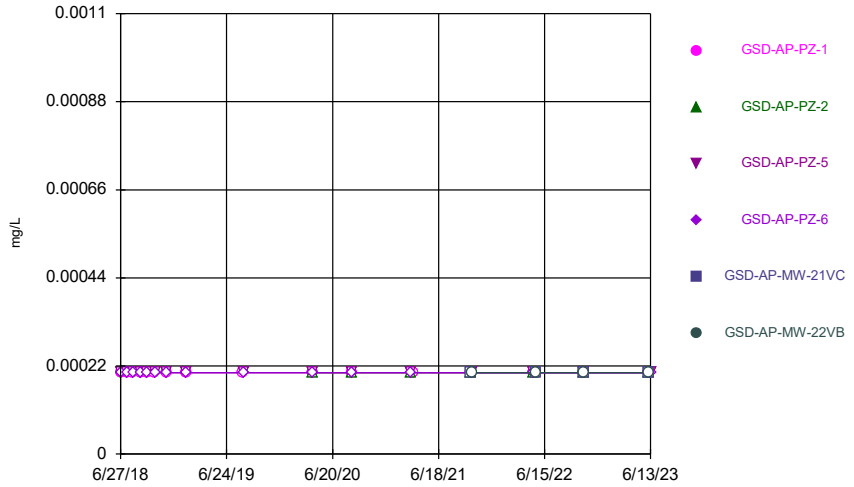
Time Series



Constituent: Thallium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

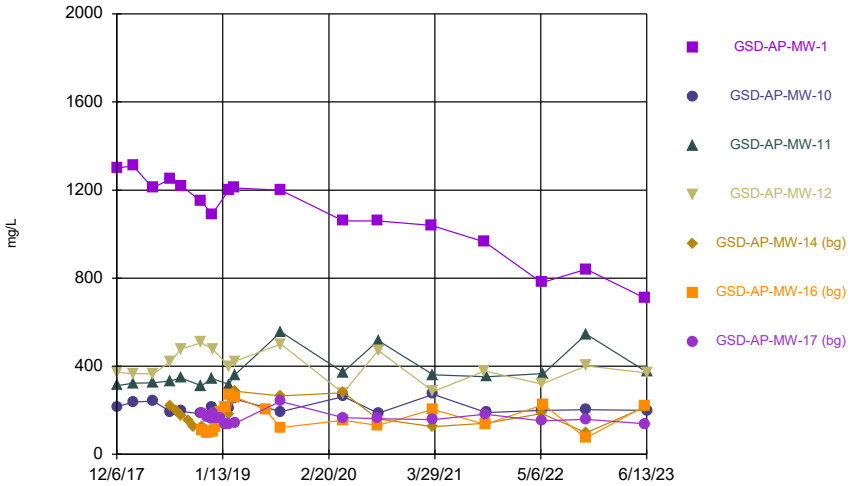
Time Series



Constituent: Thallium Analysis Run 7/20/2023 11:43 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

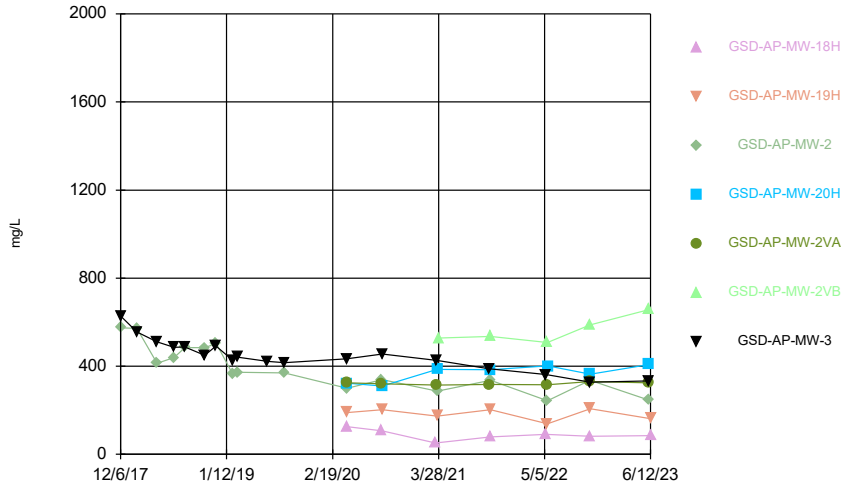


Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

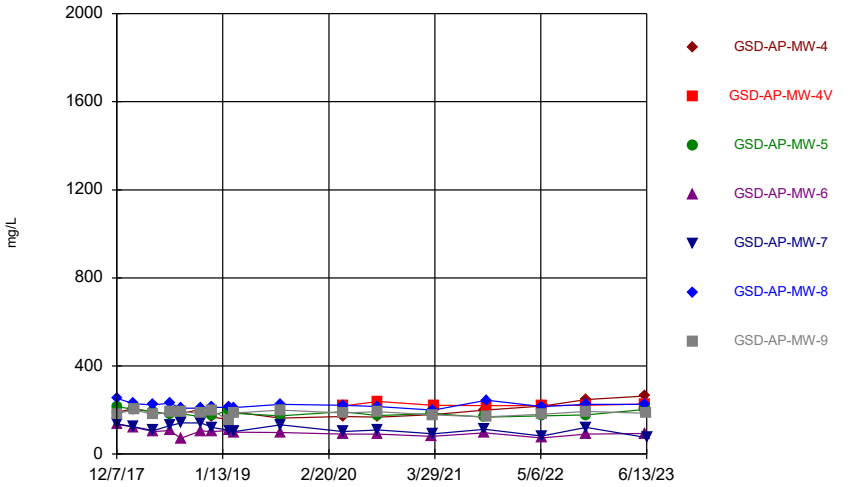


Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

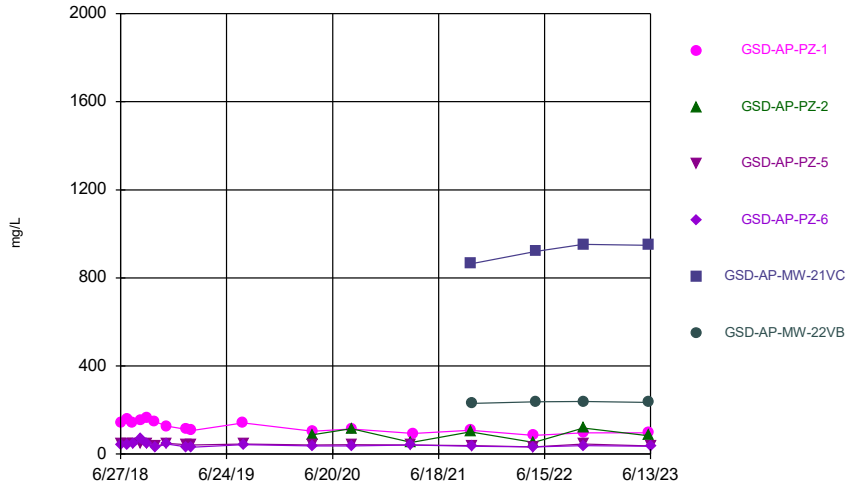


Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:43 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001015	<0.001015	<0.001015	<0.001015			
2/6/2018	<0.001015						
2/7/2018		<0.001015	<0.001015				
2/8/2018				<0.001015			
4/23/2018	<0.001015						
4/24/2018		<0.001015	<0.001015	<0.001015			
6/26/2018	<0.001015						
6/27/2018		<0.001015	<0.001015	<0.001015	<0.001015		
7/18/2018					<0.001015		
8/6/2018					<0.001015		
8/7/2018	<0.001015	<0.001015					
8/8/2018			<0.001015	<0.001015			
9/5/2018					<0.001015		
9/24/2018					<0.001015		
10/22/2018	<0.001015	<0.001015					
10/23/2018			<0.001015	<0.001015			
10/24/2018					<0.001015	<0.001015	<0.001015
11/14/2018						<0.001015	<0.001015
11/28/2018						<0.001015	<0.001015
12/4/2018	<0.001015	<0.001015	<0.001015				
12/5/2018				<0.001015	<0.001015	<0.001015	<0.001015
12/18/2018						<0.001015	<0.001015
1/3/2019						<0.001015	<0.001015
1/24/2019						0.000922 (J)	<0.001015
2/5/2019	<0.001015				<0.001015	<0.001015	<0.001015
2/6/2019		<0.001015	<0.001015	<0.001015			
6/24/2019						<0.001015	
8/19/2019						<0.001015	<0.001015
8/20/2019					<0.001015		
8/21/2019	<0.001015						
8/22/2019		<0.001015	<0.001015	<0.001015			
4/14/2020			<0.001015	<0.001015			
4/15/2020	<0.001015	<0.001015				<0.001015	
4/16/2020					<0.001015		<0.001015
8/24/2020							<0.001015
8/25/2020	<0.001015				<0.001015	<0.001015	
8/26/2020		<0.001015	<0.001015	<0.001015			
3/16/2021	<0.001015						
3/22/2021					<0.001015	<0.001015	<0.001015
3/23/2021		<0.001015	<0.001015	<0.001015			
10/5/2021	<0.001015			<0.001015			
10/6/2021						<0.001015	<0.001015
10/11/2021		<0.001015					
10/12/2021			<0.001015		<0.001015		
5/9/2022					<0.001015		<0.001015
5/10/2022	<0.001015	<0.001015		<0.001015			
5/17/2022			<0.001015			<0.001015	
10/25/2022						<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015		
6/5/2023	<0.001015						
6/6/2023					<0.001015	<0.001015	<0.001015
6/13/2023		<0.001015	<0.001015	<0.001015			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.001015				<0.001015
2/6/2018			<0.001015				<0.001015
4/23/2018			<0.001015				
4/24/2018							<0.001015
6/27/2018			<0.001015				<0.001015
8/7/2018			<0.001015				<0.001015
10/22/2018			<0.001015				<0.001015
12/3/2018							<0.001015
12/4/2018			<0.001015				
2/5/2019			<0.001015				<0.001015
6/18/2019							<0.001015
8/20/2019			<0.001015				<0.001015
4/13/2020							<0.001015
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.001015		<0.001015		<0.001015		
8/25/2020	<0.001015		<0.001015		<0.001015		
8/26/2020		<0.001015		<0.001015			<0.001015
3/16/2021	<0.001015						
3/22/2021					<0.001015		<0.001015
3/23/2021		<0.001015		<0.001015			
3/24/2021			<0.001015				
3/30/2021						<0.001015	
10/5/2021							<0.001015
10/6/2021					<0.001015		
10/11/2021		<0.001015	<0.001015	<0.001015			
10/12/2021	<0.001015					<0.001015	
5/10/2022	<0.001015						<0.001015
5/16/2022		<0.001015	<0.001015		<0.001015	<0.001015	
5/17/2022				<0.001015			
10/25/2022			0.000538 (J)		0.000539 (J)	<0.001015	
10/26/2022	<0.001015	<0.001015		<0.001015			<0.001015
6/5/2023				<0.001015			<0.001015
6/6/2023			<0.001015				
6/7/2023					<0.001015	<0.001015	
6/12/2023	<0.001015	<0.001015					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.001015	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.001015			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.001015			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.001015			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.001015			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.001015			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.001015			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
3/16/2021			<0.001015				
3/17/2021				<0.001015			
3/23/2021					<0.001015	<0.001015	<0.001015
3/24/2021	<0.001015	<0.001015					
10/5/2021	<0.001015		<0.001015	<0.001015	<0.001015		
10/11/2021		<0.001015					
10/12/2021						<0.001015	<0.001015
5/9/2022			<0.001015				
5/10/2022				<0.001015	<0.001015		
5/11/2022		<0.001015				<0.001015	<0.001015
5/16/2022	<0.001015						
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/5/2023		<0.001015		<0.001015			
6/6/2023	<0.001015						
6/7/2023			<0.001015			<0.001015	
6/12/2023							<0.001015
6/13/2023					<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.001015	<0.001015		
7/18/2018	<0.001015		<0.001015	<0.001015		
8/7/2018	<0.001015					
8/8/2018			<0.001015	<0.001015		
9/5/2018	<0.001015		<0.001015	<0.001015		
9/24/2018	<0.001015		<0.001015	<0.001015		
10/22/2018	<0.001015					
10/23/2018			<0.001015	<0.001015		
12/3/2018	<0.001015		<0.001015	<0.001015		
2/5/2019	<0.001015					
2/7/2019			0.00114 (J)	0.00181 (J)		
8/20/2019	<0.001015					
8/21/2019			<0.001015	<0.001015		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.001015	<0.001015		
8/24/2020	<0.001015	<0.001015	<0.001015	<0.001015		
3/16/2021			<0.001015	<0.001015		
3/17/2021		<0.001015				
3/24/2021	<0.001015					
10/5/2021	<0.001015	<0.001015				
10/6/2021					0.00051 (J)	
10/11/2021						0.00167
10/12/2021			<0.001015	<0.001015		
5/9/2022	<0.001015	<0.001015				
5/10/2022			<0.001015	<0.001015		
5/17/2022					0.00051 (J)	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	0.000695 (J)	<0.001015
6/5/2023		<0.001015				
6/6/2023					<0.001015	
6/7/2023	<0.001015					<0.001015
6/13/2023			<0.001015	<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00179 (J)	0.00247 (J)	0.00279 (J)	<0.000203			
2/6/2018	0.00191 (J)						
2/7/2018		0.00192 (J)	0.00252 (J)				
2/8/2018				<0.000203			
4/23/2018	0.0023 (J)						
4/24/2018		0.00218 (J)	0.00283 (J)	<0.000203			
6/26/2018	0.00306 (J)						
6/27/2018		0.00419 (J)	0.00289 (J)	<0.000203	0.00165 (J)		
7/18/2018					0.00117 (J)		
8/6/2018					<0.005		
8/7/2018	0.00336 (J)	0.00365 (J)					
8/8/2018			0.00265 (J)	<0.000203			
9/5/2018					<0.005		
9/24/2018					0.00148 (J)		
10/22/2018	0.00451 (J)	0.00404 (J)					
10/23/2018			0.00287 (J)	<0.000203			
10/24/2018					<0.005	<0.005	<0.005
11/14/2018						<0.005	<0.005
11/28/2018						0.00124 (J)	<0.005
12/4/2018	0.00471 (J)	0.00332 (J)	0.00271 (J)				
12/5/2018				<0.000203	<0.005	0.00113 (J)	<0.005
12/18/2018						0.00113 (J)	<0.005
1/3/2019						0.00175 (J)	<0.005
1/24/2019						0.00257 (J)	<0.005
2/5/2019	0.00365 (J)				0.00119 (J)	0.00355 (J)	<0.005
2/6/2019		0.00333 (J)	0.00272 (J)	<0.000203			
6/24/2019						0.00474 (J)	
8/19/2019						0.00228 (J)	<0.005
8/20/2019					0.00216 (J)		
8/21/2019	0.00444 (J)						
8/22/2019		0.00394 (J)	0.00229 (J)	<0.000203			
4/14/2020			0.00286 (J)	<0.000203			
4/15/2020	0.00309 (J)	0.00236 (J)				0.0034 (J)	
4/16/2020					0.00483 (J)		<0.005
8/24/2020							<0.005
8/25/2020	0.00435 (J)				0.002 (J)	0.00237 (J)	
8/26/2020		0.00422 (J)	0.00246 (J)	<0.000203			
3/16/2021	0.0029						
3/22/2021					0.00188	0.00614	0.00031
3/23/2021		0.00163	0.00275	<0.000203			
10/5/2021	0.00356			<0.000203			
10/6/2021						0.00207	0.00026
10/11/2021		0.0037					
10/12/2021			0.00272		0.00131		
5/9/2022					0.00274		0.00023
5/10/2022	0.00221	0.00361		<0.000203			
5/17/2022			0.00281			0.00457	
10/25/2022						0.00117	0.000572
10/26/2022	0.00223	0.00414	0.00215	0.000102 (J)	0.00107		
6/5/2023	0.00181						
6/6/2023					0.0016	0.00327	0.000296
6/13/2023		0.00397	0.00283	<0.000203			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.809				0.00101 (J)
2/6/2018			0.774				<0.000203
4/23/2018			0.643				
4/24/2018							<0.000203
6/27/2018			1.01				<0.000203
8/7/2018			0.988				<0.000203
10/22/2018			1.01				<0.000203
12/3/2018							<0.000203
12/4/2018			0.553				
2/5/2019			0.74				<0.000203
6/18/2019							<0.000203
8/20/2019			0.825				<0.000203
4/13/2020							<0.000203
4/14/2020		<0.005		0.00287 (J)			
4/15/2020	<0.005		0.709		<0.005		
8/25/2020	<0.005		0.727		0.00135 (J)		
8/26/2020		<0.005		0.00186 (J)			<0.000203
3/16/2021	0.000136 (J)						
3/22/2021					0.00145		0.0002 (J)
3/23/2021		0.000512		0.00226			
3/24/2021			0.489				
3/30/2021						0.000278	
10/5/2021							0.00021
10/6/2021					0.00139		
10/11/2021		0.00085	0.424	0.00191			
10/12/2021	0.00019 (J)					0.00043	
5/10/2022	0.00015 (J)						0.00016 (J)
5/16/2022		0.00018 (J)	0.569		0.00135	0.00039	
5/17/2022				0.002			
10/25/2022			0.555		0.00165	0.000907	
10/26/2022	0.000338	0.000583		0.00151			0.000311
6/5/2023				0.00144			<0.000203
6/6/2023			0.652				
6/7/2023					0.00165	0.0006	
6/12/2023	0.000133 (J)	0.000183 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.0132		<0.000203	<0.000203	<0.000203	0.00313 (J)	0.00112 (J)
2/6/2018	0.0105		<0.000203				
2/8/2018				<0.000203	<0.000203	0.00247 (J)	<0.005
4/24/2018	0.0124						
4/25/2018			<0.000203	<0.000203	<0.000203	0.00291 (J)	<0.005
6/26/2018	0.0132			<0.000203	<0.000203	0.00265 (J)	<0.005
6/27/2018			<0.000203				
8/6/2018	0.013						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	0.00203 (J)	<0.005
10/22/2018	0.0144						
10/23/2018			<0.000203	<0.000203	<0.000203	0.00246 (J)	<0.005
12/3/2018	0.0119			<0.000203			
12/4/2018					<0.000203	0.00328 (J)	
12/5/2018			<0.000203				0.00111 (J)
2/5/2019	0.0107		<0.000203	<0.000203			
2/6/2019					<0.000203	0.00325 (J)	<0.005
8/20/2019	0.0141		<0.000203	<0.000203			
8/21/2019					<0.000203	0.00302 (J)	<0.005
4/13/2020			<0.000203	<0.000203			
4/14/2020						0.00295 (J)	0.00118 (J)
4/15/2020	0.0121	<0.005			<0.000203		
8/24/2020			<0.000203				
8/26/2020	0.0133	<0.005		<0.000203	<0.000203	0.00304 (J)	<0.005
3/16/2021			8.17E-05 (J)				
3/17/2021				<0.000203			
3/23/2021					<0.000203	0.00282	0.00063
3/24/2021	0.011	0.00034					
10/5/2021	0.0147		0.00013 (J)	<0.000203	7E-05 (J)		
10/11/2021		0.00037					
10/12/2021						0.00287	0.00064
5/9/2022			8E-05 (J)				
5/10/2022				<0.000203	<0.000203		
5/11/2022		0.00031				0.00323	0.00055
5/16/2022	0.0132						
10/26/2022	0.0145	0.000446	0.00025	0.000151 (J)	0.000105 (J)	0.0033	0.000618
6/5/2023		0.000411		<0.000203			
6/6/2023	0.0128						
6/7/2023			<0.000203			0.00301	
6/12/2023							0.000545
6/13/2023					<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		<0.000203	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.000203				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.000203	<0.000203	<0.000203		
3/16/2021			8.08E-05 (J)	<0.000203		
3/17/2021		8.26E-05 (J)				
3/24/2021	<0.000203					
10/5/2021	<0.000203	9E-05 (J)				
10/6/2021					0.00162	
10/11/2021						0.00408
10/12/2021			<0.000203	<0.000203		
5/9/2022	<0.000203	0.0001 (J)				
5/10/2022			<0.000203	<0.000203		
5/17/2022					0.0014	0.00303
10/26/2022	0.000164 (J)	0.000188 (J)	<0.000203	0.00015 (J)	0.00122	0.00269
6/5/2023		<0.000203				
6/6/2023					0.000917	
6/7/2023	<0.000203					0.00215
6/13/2023			<0.000203	<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.0807	0.308	0.349	0.0501			
2/6/2018	0.0546						
2/7/2018		0.289	0.297				
2/8/2018				0.0375			
4/23/2018	0.0488						
4/24/2018		0.359	0.338	0.0405			
6/26/2018	0.0479						
6/27/2018		0.307	0.338	0.0466	0.0338		
7/18/2018					0.03		
8/6/2018					0.0274		
8/7/2018	0.0402	0.25					
8/8/2018			0.307	0.0448			
9/5/2018					0.0275		
9/24/2018					0.0264		
10/22/2018	0.0427	0.29					
10/23/2018			0.311	0.054			
10/24/2018					0.0276	0.0499	0.218
11/14/2018						0.0458	0.203
11/28/2018						0.0476	0.191
12/4/2018	0.0434	0.305	0.331				
12/5/2018				0.0493	0.0256	0.0475	0.209
12/18/2018						0.0461	0.199
1/3/2019						0.0426	0.176
1/24/2019						0.0485	0.206
2/5/2019	0.0439				0.0314	0.0354	0.168
2/6/2019		0.265	0.286	0.036			
6/24/2019						0.0294	
8/19/2019						0.0314	0.259
8/20/2019					0.0274		
8/21/2019	0.037						
8/22/2019		0.302	0.214	0.0455			
4/14/2020			0.168	0.0279			
4/15/2020	0.0329	0.35				0.028	
4/16/2020					0.0327		0.257
8/24/2020							0.312
8/25/2020	0.0358				0.0291	0.0261	
8/26/2020		0.322	0.165	0.0503			
3/16/2021	0.0331						
3/22/2021					0.0254	0.0278	0.29
3/23/2021		0.395	0.169	0.0315			
10/5/2021	0.0304			0.0417			
10/6/2021						0.0215	0.307
10/11/2021		0.292					
10/12/2021			0.17		0.0268		
5/9/2022					0.0365		0.309
5/10/2022	0.0275	0.318		0.0377			
5/17/2022			0.195			0.0288	
10/25/2022						0.029	0.292
10/26/2022	0.028	0.278	0.117	0.0376	0.0238		
6/5/2023	0.0272						
6/6/2023					0.0423	0.0315	0.278
6/13/2023		0.294	0.126	0.0356			

Time Series

Constituent: Barium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.0842				0.126
2/6/2018			0.0716				0.0721
4/23/2018			0.0518				
4/24/2018							0.0492
6/27/2018			0.0578				0.0453
8/7/2018			0.0566				0.0431
10/22/2018			0.0536				0.0541
12/3/2018							0.0545
12/4/2018			0.0589				
2/5/2019			0.0418				0.0363
6/18/2019							0.0369
8/20/2019			0.0685				0.0405
4/13/2020							0.0349
4/14/2020		0.153		0.189			
4/15/2020	0.0389		0.0607		0.2		
8/25/2020	0.0388		0.0812		0.135		
8/26/2020		0.201		0.197			0.0363
3/16/2021	0.0243						
3/22/2021					0.114		0.0354
3/23/2021		0.148		0.217			
3/24/2021			0.0676				
3/30/2021						0.313	
10/5/2021							0.0344
10/6/2021					0.12		
10/11/2021		0.17	0.0807	0.134			
10/12/2021	0.0298					0.242	
5/10/2022	0.0361						0.0287
5/16/2022		0.124	0.0974		0.132	0.322	
5/17/2022				0.115			
10/25/2022			0.0888		0.137	0.346	
10/26/2022	0.0349	0.159		0.0993			0.0306
6/5/2023				0.0865			0.0288
6/6/2023			0.115				
6/7/2023					0.154	0.385	
6/12/2023	0.0304	0.101					

Time Series

Constituent: Barium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.239		0.279	0.0809	0.083	0.244	0.187
2/6/2018	0.206		0.195				
2/8/2018				0.0566	0.0756	0.135	0.148
4/24/2018	0.217						
4/25/2018			0.26	0.0553	0.0764	0.224	0.158
6/26/2018	0.208			0.0604	0.0799	0.181	0.16
6/27/2018			0.249				
8/6/2018	0.189						
8/7/2018			0.216	0.0542			
8/8/2018					0.0791	0.134	0.161
10/22/2018	0.209						
10/23/2018			0.26	0.0608	0.0898	0.17	0.183
12/3/2018	0.214			0.0633			
12/4/2018					0.0789	0.189	
12/5/2018			0.245				0.186
2/5/2019	0.173		0.215	0.0551			
2/6/2019					0.0685	0.226	0.128
8/20/2019	0.188		0.238	0.0731			
8/21/2019					0.0946	0.194	0.183
4/13/2020			0.241	0.0635			
4/14/2020						0.262	0.186
4/15/2020	0.159	0.457			0.0653		
8/24/2020			0.238				
8/26/2020	0.181	0.534		0.0771	0.0845	0.235	0.202
3/16/2021			0.217				
3/17/2021				0.0656			
3/23/2021					0.0602	0.249	0.157
3/24/2021	0.171	0.477					
10/5/2021	0.202		0.221	0.0741	0.0716		
10/11/2021		0.483					
10/12/2021						0.203	0.147
5/9/2022			0.236				
5/10/2022				0.0762	0.0527		
5/11/2022		0.525				0.32	0.16
5/16/2022	0.23						
10/26/2022	0.239	0.474	0.231	0.0702	0.0852	0.224	0.154
6/5/2023		0.521		0.0809			
6/6/2023	0.254						
6/7/2023			0.226			0.303	
6/12/2023							0.146
6/13/2023					0.0544		

Time Series

Constituent: Barium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	0.115		0.154	0.0298		
7/18/2018	0.116		0.15	0.0312		
8/7/2018	0.0906					
8/8/2018			0.119	0.0265		
9/5/2018	0.116		0.123	0.0291		
9/24/2018	0.125		0.112	0.029		
10/22/2018	0.102					
10/23/2018			0.125	0.0298		
12/3/2018	0.0784		0.126	0.0307		
2/5/2019	0.0578					
2/7/2019			0.0602	0.028		
8/20/2019	0.097					
8/21/2019			0.085	0.0312		
4/13/2020	0.0529	0.0832				
4/15/2020			0.0535	0.0296		
8/24/2020	0.0733	0.132	0.0565	0.031		
3/16/2021			0.0553	0.0293		
3/17/2021		0.045				
3/24/2021	0.0525					
10/5/2021	0.0811	0.118				
10/6/2021					0.374	
10/11/2021						0.238
10/12/2021			0.0494	0.0303		
5/9/2022	0.057	0.0593				
5/10/2022			0.0497	0.0309		
5/17/2022					0.435	0.276
10/26/2022	0.0682	0.133	0.0474	0.0282	0.431	0.257
6/5/2023		0.0862				
6/6/2023					0.433	
6/7/2023	0.0635					0.253
6/13/2023			0.0456	0.0277		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001015	<0.001015	<0.001015	<0.001015			
2/6/2018	<0.001015						
2/7/2018		<0.001015	<0.001015				
2/8/2018				<0.001015			
4/23/2018	<0.001015						
4/24/2018		<0.001015	<0.001015	<0.001015			
6/26/2018	<0.001015						
6/27/2018		<0.001015	<0.001015	<0.001015	0.00134 (J)		
7/18/2018					0.00133 (J)		
8/6/2018					0.00129 (J)		
8/7/2018	<0.001015	<0.001015					
8/8/2018			<0.001015	<0.001015			
9/5/2018					0.00106 (J)		
9/24/2018					0.000991 (J)		
10/22/2018	<0.001015	<0.001015					
10/23/2018			<0.001015	<0.001015			
10/24/2018					0.00082 (J)	<0.001015	<0.001015
11/14/2018						<0.001015	<0.001015
11/28/2018						0.00133 (J)	<0.001015
12/4/2018	<0.001015	<0.001015	<0.001015				
12/5/2018				<0.001015	0.00141 (J)	<0.001015	<0.001015
12/18/2018						0.000761 (J)	<0.001015
1/3/2019						0.000677 (J)	<0.001015
1/24/2019						0.000703 (J)	<0.001015
2/5/2019	<0.001015				0.0011 (J)	0.000711 (J)	<0.001015
2/6/2019		<0.001015	<0.001015	<0.001015			
6/24/2019						0.000605 (J)	
8/19/2019						<0.001015	<0.001015
8/20/2019					0.00129 (J)		
8/21/2019	<0.001015						
8/22/2019		<0.001015	<0.001015	<0.001015			
4/14/2020			<0.001015	<0.001015			
4/15/2020	<0.001015	<0.001015				<0.001015	
4/16/2020					0.00157 (J)		<0.001015
8/24/2020							<0.001015
8/25/2020	<0.001015				0.00117 (J)	<0.001015	
8/26/2020		<0.001015	<0.001015	<0.001015			
3/16/2021	<0.001015						
3/22/2021					0.000918 (J)	0.000537 (J)	<0.001015
3/23/2021		<0.001015	<0.001015	<0.001015			
10/5/2021	<0.001015			<0.001015			
10/6/2021						0.00049 (J)	<0.001015
10/11/2021		<0.001015					
10/12/2021			<0.001015		0.00115		
5/9/2022					0.00126		<0.001015
5/10/2022	<0.001015	<0.001015		<0.001015			
5/17/2022			<0.001015			0.00061 (J)	
10/25/2022						<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	0.000798 (J)		
6/5/2023	<0.001015						
6/6/2023					0.00139	0.000707 (J)	0.000473 (J)
6/13/2023		<0.001015	<0.001015	<0.001015			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.001015				<0.001015
2/6/2018			<0.001015				<0.001015
4/23/2018			<0.001015				
4/24/2018							<0.001015
6/27/2018			<0.001015				<0.001015
8/7/2018			<0.001015				<0.001015
10/22/2018			<0.001015				<0.001015
12/3/2018							<0.001015
12/4/2018			<0.001015				
2/5/2019			<0.001015				<0.001015
6/18/2019							<0.001015
8/20/2019			<0.001015				<0.001015
4/13/2020							<0.001015
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.001015		<0.001015		<0.001015		
8/25/2020	<0.001015		<0.001015		<0.001015		
8/26/2020		<0.001015		<0.001015			<0.001015
3/16/2021	<0.001015						
3/22/2021					<0.001015		<0.001015
3/23/2021		<0.001015		<0.001015			
3/24/2021			<0.001015				
3/30/2021						<0.001015	
10/5/2021							<0.001015
10/6/2021					<0.001015		
10/11/2021		<0.001015	<0.001015	<0.001015			
10/12/2021	<0.001015					<0.001015	
5/10/2022	<0.001015						<0.001015
5/16/2022		<0.001015	<0.001015		<0.001015	<0.001015	
5/17/2022				<0.001015			
10/25/2022			<0.001015		<0.001015	<0.001015	
10/26/2022	<0.001015	<0.001015		<0.001015			<0.001015
6/5/2023				<0.001015			<0.001015
6/6/2023			<0.001015				
6/7/2023					<0.001015	<0.001015	
6/12/2023	<0.001015	<0.001015					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.001015	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.001015			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.001015			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.001015			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.001015			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.001015			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.001015			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
3/16/2021			<0.001015				
3/17/2021				<0.001015			
3/23/2021					<0.001015	<0.001015	<0.001015
3/24/2021	<0.001015	<0.001015					
10/5/2021	<0.001015		<0.001015	<0.001015	<0.001015		
10/11/2021		<0.001015					
10/12/2021						<0.001015	<0.001015
5/9/2022			<0.001015				
5/10/2022				<0.001015	<0.001015		
5/11/2022		<0.001015				<0.001015	<0.001015
5/16/2022	<0.001015						
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/5/2023		<0.001015		<0.001015			
6/6/2023	<0.001015						
6/7/2023			<0.001015			<0.001015	
6/12/2023							<0.001015
6/13/2023					<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.001015	<0.001015		
7/18/2018	<0.001015		<0.001015	<0.001015		
8/7/2018	<0.001015					
8/8/2018			<0.001015	<0.001015		
9/5/2018	<0.001015		<0.001015	<0.001015		
9/24/2018	<0.001015		<0.001015	<0.001015		
10/22/2018	<0.001015					
10/23/2018			<0.001015	<0.001015		
12/3/2018	<0.001015		<0.001015	<0.001015		
2/5/2019	<0.001015					
2/7/2019			<0.001015	<0.001015		
8/20/2019	<0.001015					
8/21/2019			<0.001015	<0.001015		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.001015	<0.001015		
8/24/2020	<0.001015	<0.001015	<0.001015	<0.001015		
3/16/2021			<0.001015	<0.001015		
3/17/2021		<0.001015				
3/24/2021	<0.001015					
10/5/2021	<0.001015	<0.001015				
10/6/2021					<0.001015	
10/11/2021						<0.001015
10/12/2021			<0.001015	<0.001015		
5/9/2022	<0.001015	<0.001015				
5/10/2022			<0.001015	<0.001015		
5/17/2022					<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/5/2023		<0.001015				
6/6/2023					<0.001015	
6/7/2023	<0.001015					<0.001015
6/13/2023			<0.001015	<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1.28	0.135	0.12	0.0605 (J)			
2/6/2018	1.29						
2/7/2018		0.12	0.109				
2/8/2018				0.0527 (J)			
4/23/2018	1.21						
4/24/2018		0.144	0.124	0.0476 (J)			
6/26/2018	1.25						
6/27/2018		0.0903 (J)	0.111	0.0539 (J)	<0.1015		
7/18/2018					<0.1015		
8/6/2018					<0.1015		
8/7/2018	1.21	0.106					
8/8/2018			0.135	0.0637 (J)			
9/5/2018					<0.1015		
9/24/2018					<0.1015		
10/22/2018	1.22	0.107					
10/23/2018			0.114	0.0696 (J)			
10/24/2018					<0.1015	0.0261 (J)	0.0357 (J)
11/14/2018						0.0209 (J)	0.0348 (J)
11/28/2018						0.0239 (J)	0.0313 (J)
12/4/2018	1.08	0.103	0.124				
12/5/2018				0.0652 (J)	<0.1015	<0.1015	0.0363 (J)
12/18/2018						<0.1015	0.033 (J)
1/3/2019						0.0209 (J)	0.036 (J)
1/24/2019						0.0271 (J)	0.0307 (J)
2/5/2019	1.2				<0.1015	0.0245 (J)	0.0306 (J)
2/6/2019		0.105	0.112	0.0511 (J)			
2/26/2019	1.15	0.146					
2/27/2019			0.14	0.0494 (J)			
2/28/2019					<0.1015	<0.1015	0.0206 (J)
6/24/2019						<0.1015	
8/19/2019						<0.1015	0.0341 (J)
8/20/2019					<0.1015		
8/21/2019	1.24						
8/22/2019		0.0951 (J)	0.272	0.0625 (J)			
4/14/2020			0.154	0.0377 (J)			
4/15/2020	1.13	0.164				<0.1015	
4/16/2020					<0.1015		0.0331 (J)
8/24/2020							0.0303 (J)
8/25/2020	1.11				<0.1015	<0.1015	
8/26/2020		0.108	0.257	0.0698 (J)			
3/16/2021	1.08						
3/22/2021					<0.1015	<0.1015	0.0333 (J)
3/23/2021		0.188	0.142	0.0452 (J)			
10/5/2021	1.02			0.0661 (J)			
10/6/2021						<0.1015	0.0305 (J)
10/11/2021		0.09 (J)					
10/12/2021			0.125		<0.1015		
5/9/2022					<0.1015		0.0347 (J)
5/10/2022	0.954	0.097 (J)		0.066 (J)			
5/17/2022			0.139			<0.1015	
10/25/2022						<0.1015	0.0308 (J)
10/26/2022	0.977	0.0868 (J)	0.306	0.0995 (J)	<0.1015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
6/5/2023	0.88						
6/6/2023					<0.1015	<0.1015	<0.1015
6/13/2023		0.0864 (J)	0.143	0.0902 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.758				0.959
2/6/2018			0.733				1.04
4/23/2018			0.608				
4/24/2018							0.979
6/27/2018			0.619				0.982
8/7/2018			0.697				1
10/22/2018			0.754				1.08
12/3/2018							1.05
12/4/2018			0.737				
2/5/2019			0.575				1.01
2/25/2019							1.08
2/26/2019			0.566				
6/18/2019							1.09
8/20/2019			0.566				1.06
4/13/2020							1.19
4/14/2020		0.448		0.308			
4/15/2020	0.124		0.461		0.587		
8/25/2020	0.105		0.528		0.552		
8/26/2020		0.39		0.308			1.16
3/16/2021	0.0545 (J)						
3/22/2021					0.537		1.13
3/23/2021		0.41		0.419			
3/24/2021			0.437				
3/30/2021						0.605	
10/5/2021							1.01
10/6/2021					0.54		
10/11/2021		0.328	0.459	0.504			
10/12/2021	0.0717 (J)					0.617	
5/10/2022	0.0883 (J)						0.998
5/16/2022		0.336	0.381		0.556	0.622	
5/17/2022				0.632			
10/25/2022			0.5		0.555	0.628	
10/26/2022	0.0784 (J)	0.327		0.584			0.85
6/5/2023				0.771			0.858
6/6/2023			0.367				
6/7/2023					0.576	0.651	
6/12/2023	0.0772 (J)	0.34					

Time Series

Constituent: Boron (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.515		0.566	0.063 (J)	0.102	0.0828 (J)	0.0614 (J)
2/6/2018	0.541		0.614				
2/8/2018				0.0508 (J)	0.0787 (J)	0.0691 (J)	0.0531 (J)
4/24/2018	0.475						
4/25/2018			0.498	0.0548 (J)	0.0734 (J)	0.0571 (J)	0.0551 (J)
6/26/2018	0.444			0.0571 (J)	0.094 (J)	0.0634 (J)	0.0568 (J)
6/27/2018			0.446				
8/6/2018	0.474						
8/7/2018			0.442	0.0571 (J)			
8/8/2018					0.103	0.0659 (J)	0.0524 (J)
10/22/2018	0.496						
10/23/2018			0.436	0.0636 (J)	0.106	0.0666 (J)	0.0576 (J)
12/3/2018	0.51			0.0568 (J)			
12/4/2018					0.085 (J)	0.0617 (J)	
12/5/2018			0.456				0.0561 (J)
2/5/2019	0.43		0.453	0.0509 (J)			
2/6/2019					0.0733 (J)	0.0586 (J)	0.0627 (J)
2/26/2019	0.411			0.0527 (J)			
2/27/2019			0.457		0.0548 (J)	0.0428 (J)	0.0474 (J)
8/20/2019	0.399		0.378	0.0608 (J)			
8/21/2019					0.091 (J)	0.0569 (J)	0.0524 (J)
4/13/2020			0.359	0.0561 (J)			
4/14/2020						0.0474 (J)	0.0562 (J)
4/15/2020	0.344	0.0634 (J)			0.0534 (J)		
8/24/2020			0.329				
8/26/2020	0.398	0.0611 (J)		0.0633 (J)	0.0665 (J)	0.0501 (J)	0.0565 (J)
3/16/2021			0.328				
3/17/2021				0.0563 (J)			
3/23/2021					0.0587 (J)	0.0476 (J)	0.0609 (J)
3/24/2021	0.326	0.0618 (J)					
10/5/2021	0.344		0.26	0.0649 (J)	0.0673 (J)		
10/11/2021		0.0596 (J)					
10/12/2021						0.0462 (J)	0.0632 (J)
5/9/2022			0.261				
5/10/2022				0.0681 (J)	0.0465 (J)		
5/11/2022		0.062 (J)				0.037 (J)	0.0636 (J)
5/16/2022	0.342						
10/26/2022	0.371	0.0618 (J)	0.23	0.0788 (J)	0.0839 (J)	0.0526 (J)	0.0595 (J)
6/5/2023		0.0624 (J)		0.0776 (J)			
6/6/2023	0.415						
6/7/2023			0.234			0.0355 (J)	
6/12/2023							0.062 (J)
6/13/2023					0.0428 (J)		

Time Series

Constituent: Boron (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.1015		<0.1015	<0.1015		
7/18/2018	<0.1015		<0.1015	<0.1015		
8/7/2018	<0.1015					
8/8/2018			<0.1015	<0.1015		
9/5/2018	<0.1015		<0.1015	<0.1015		
9/24/2018	<0.1015		<0.1015	<0.1015		
10/22/2018	<0.1015					
10/23/2018			<0.1015	<0.1015		
12/3/2018	<0.1015		<0.1015	<0.1015		
2/5/2019	<0.1015					
2/7/2019			<0.1015	<0.1015		
2/25/2019	<0.1015		<0.1015	<0.1015		
8/20/2019	<0.1015					
8/21/2019			<0.1015	<0.1015		
4/13/2020	<0.1015	<0.1015				
4/15/2020			<0.1015	<0.1015		
8/24/2020	<0.1015	<0.1015	<0.1015	<0.1015		
3/16/2021			<0.1015	<0.1015		
3/17/2021		<0.1015				
3/24/2021	<0.1015					
10/5/2021	<0.1015	<0.1015				
10/6/2021					0.532	
10/11/2021						0.378
10/12/2021			<0.1015	<0.1015		
5/9/2022	<0.1015	<0.1015				
5/10/2022			<0.1015	<0.1015		
5/17/2022					0.548	0.385
10/26/2022	<0.1015	<0.1015	<0.1015	<0.1015	0.559	0.4
6/5/2023		<0.1015				
6/6/2023					0.569	
6/7/2023	<0.1015					0.361
6/13/2023			<0.1015	<0.1015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.000203	<0.000203	<0.000203	0.000596 (J)			
2/6/2018	<0.000203						
2/7/2018		<0.000203	<0.000203				
2/8/2018				0.00064 (J)			
4/23/2018	<0.000203						
4/24/2018		<0.000203	<0.000203	0.000702 (J)			
6/26/2018	<0.000203						
6/27/2018		<0.000203	<0.000203	0.000732 (J)	0.00064 (J)		
7/18/2018					0.000679 (J)		
8/6/2018					0.000536 (J)		
8/7/2018	<0.000203	<0.000203					
8/8/2018			<0.000203	0.000587 (J)			
9/5/2018					0.000479 (J)		
9/24/2018					0.00039 (J)		
10/22/2018	<0.000203	<0.000203					
10/23/2018			<0.000203	0.000552 (J)			
10/24/2018					0.000436 (J)	0.000307 (J)	<0.000203
11/14/2018						0.000417 (J)	<0.000203
11/28/2018						0.000387 (J)	<0.000203
12/4/2018	<0.000203	<0.000203	<0.000203				
12/5/2018				0.000661 (J)	0.000307 (J)	0.000317 (J)	<0.000203
12/18/2018						0.000438 (J)	<0.000203
1/3/2019						0.000703 (J)	<0.000203
1/24/2019						0.000736 (J)	<0.000203
2/5/2019	<0.000203				0.000515 (J)	0.00101	<0.000203
2/6/2019		<0.000203	<0.000203	0.000583 (J)			
6/24/2019						0.000686 (J)	
8/19/2019						0.000499 (J)	<0.000203
8/20/2019					0.000622 (J)		
8/21/2019	<0.000203						
8/22/2019		<0.000203	<0.000203	0.000755 (J)			
4/14/2020			<0.000203	0.000425 (J)			
4/15/2020	<0.000203	<0.000203				0.000697 (J)	
4/16/2020					0.00101		<0.000203
8/24/2020							<0.000203
8/25/2020	<0.000203				0.000584 (J)	0.000507 (J)	
8/26/2020		<0.000203	<0.000203	0.000618 (J)			
3/16/2021	0.000102 (J)						
3/22/2021					0.000407	0.000852	<0.000203
3/23/2021		<0.000203	<0.000203	0.000405			
10/5/2021	0.0001 (J)			0.00037			
10/6/2021						0.00068	<0.000203
10/11/2021		<0.000203					
10/12/2021			<0.000203		0.00059		
5/9/2022					0.00063		<0.000203
5/10/2022	0.00022	<0.000203		0.00033			
5/17/2022			<0.000203			0.00108	
10/25/2022						0.000203 (J)	0.000132 (J)
10/26/2022	0.00013 (J)	<0.000203	<0.000203	0.000299	0.000245		
6/5/2023	0.000275						
6/6/2023					0.00062	0.000937	<0.000203
6/13/2023		<0.000203	<0.000203	0.000334			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.000203				<0.000203
2/6/2018			<0.000203				<0.000203
4/23/2018			<0.000203				
4/24/2018							<0.000203
6/27/2018			<0.000203				<0.000203
8/7/2018			<0.000203				<0.000203
10/22/2018			<0.000203				<0.000203
12/3/2018							<0.000203
12/4/2018			<0.000203				
2/5/2019			<0.000203				<0.000203
6/18/2019							<0.000203
8/20/2019			<0.000203				<0.000203
4/13/2020							0.000438 (J)
4/14/2020		<0.000203		<0.000203			
4/15/2020	<0.000203		<0.000203		<0.000203		
8/25/2020	<0.000203		<0.000203		<0.000203		
8/26/2020		<0.000203		<0.000203			<0.000203
3/16/2021	<0.000203						
3/22/2021					<0.000203		0.00039
3/23/2021		<0.000203		<0.000203			
3/24/2021			6.88E-05 (J)				
3/30/2021						<0.000203	
10/5/2021							0.00021
10/6/2021					<0.000203		
10/11/2021		0.00012 (J)	<0.000203	<0.000203			
10/12/2021	<0.000203					<0.000203	
5/10/2022	<0.000203						0.00035
5/16/2022		0.00015 (J)	<0.000203		<0.000203	<0.000203	
5/17/2022				<0.000203			
10/25/2022			<0.000203		<0.000203	<0.000203	
10/26/2022	<0.000203	<0.000203		<0.000203			0.000147 (J)
6/5/2023				<0.000203			0.00035
6/6/2023			<0.000203				
6/7/2023					<0.000203	<0.000203	
6/12/2023	<0.000203	8.4E-05 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/6/2018	<0.000203		<0.000203				
2/8/2018				<0.000203	<0.000203	<0.000203	<0.000203
4/24/2018	<0.000203						
4/25/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/26/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
6/27/2018			<0.000203				
8/6/2018	<0.000203						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	<0.000203	<0.000203
10/22/2018	<0.000203						
10/23/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018	<0.000203			<0.000203			
12/4/2018					<0.000203	<0.000203	
12/5/2018			<0.000203				<0.000203
2/5/2019	<0.000203		<0.000203	<0.000203			
2/6/2019					<0.000203	<0.000203	<0.000203
8/20/2019	<0.000203		<0.000203	<0.000203			
8/21/2019					<0.000203	<0.000203	<0.000203
4/13/2020			<0.000203	<0.000203			
4/14/2020						<0.000203	<0.000203
4/15/2020	<0.000203	<0.000203			<0.000203		
8/24/2020			<0.000203				
8/26/2020	<0.000203	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203
3/16/2021			<0.000203				
3/17/2021				<0.000203			
3/23/2021					9.7E-05 (J)	8.32E-05 (J)	<0.000203
3/24/2021	<0.000203	<0.000203					
10/5/2021	<0.000203		<0.000203	<0.000203	<0.000203		
10/11/2021		<0.000203					
10/12/2021						<0.000203	<0.000203
5/9/2022			<0.000203				
5/10/2022				<0.000203	<0.000203		
5/11/2022		<0.000203				7E-05 (J)	<0.000203
5/16/2022	<0.000203						
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/5/2023		<0.000203		<0.000203			
6/6/2023	<0.000203						
6/7/2023			<0.000203			<0.000203	
6/12/2023							<0.000203
6/13/2023					0.000189 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		0.000304 (J)	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.000203				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.000203	<0.000203	<0.000203		
3/16/2021			<0.000203	<0.000203		
3/17/2021		<0.000203				
3/24/2021	<0.000203					
10/5/2021	<0.000203	<0.000203				
10/6/2021					<0.000203	
10/11/2021						<0.000203
10/12/2021			8E-05 (J)	<0.000203		
5/9/2022	<0.000203	<0.000203				
5/10/2022			<0.000203	<0.000203		
5/17/2022					<0.000203	<0.000203
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/5/2023		<0.000203				
6/6/2023					<0.000203	
6/7/2023	<0.000203					<0.000203
6/13/2023			<0.000203	<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	271	42	70	49			
2/6/2018	275						
2/7/2018		47.6	72.4				
2/8/2018				50			
4/23/2018	269						
4/24/2018		50.1	72.3	50.5			
6/26/2018	268						
6/27/2018		37.1	73.1	56.3	16.6		
7/18/2018					15.3		
8/6/2018					13.8		
8/7/2018	259	37.4					
8/8/2018			76	65.7			
9/5/2018					12.1		
9/24/2018					11.8		
10/22/2018	240	36.3					
10/23/2018			70.2	68.3			
10/24/2018					10.2	18	28.3
11/14/2018						14.9	27.5
11/28/2018						14.8	20.7
12/4/2018	254	42.1	74				
12/5/2018				64.3	9.14	14.8	25.3
12/18/2018						16.4	20.9
1/3/2019						19.7	18.5
1/24/2019						19.6	17
2/5/2019	292				15.1	20.8	17.1
2/6/2019		41.3	73.1	52.2			
2/26/2019	254	53.3					
2/27/2019			82.2	60.2			
2/28/2019					21.4	21.5	18.6
6/24/2019						18.4	
8/19/2019						12.8	25.3
8/20/2019					14.4		
8/21/2019	272						
8/22/2019		38.5	133	89.4			
4/14/2020			82.4	40			
4/15/2020	231	54.1				13.1	
4/16/2020					20.1		30.7
8/24/2020							30.8
8/25/2020	218				13.1	12.2	
8/26/2020		37.8	111	68.4			
3/16/2021	218						
3/22/2021					12.2	18.4	31
3/23/2021		57	75.9	42			
10/5/2021	198			55.8			
10/6/2021						13.4	31
10/11/2021		38.2					
10/12/2021			78.6		11.8		
5/9/2022					14.5		28.4
5/10/2022	166	42.2		48.2			
5/17/2022			80.6			19.7	
10/25/2022						8.46	30.700001
10/26/2022	200	39.5	129	60.200001	8.97		

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
6/5/2023	166						
6/6/2023					14.9	17.200001	23
6/13/2023		36.400002	94.5	53.200001			

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			128				125
2/6/2018			130				110
4/23/2018			95.9				
4/24/2018							88.8
6/27/2018			99.4				80.8
8/7/2018			107				88.5
10/22/2018			107				92.7
12/3/2018							105
12/4/2018			120				
2/5/2019			80.6				68.6
2/25/2019							70.6
2/26/2019			79.6				
6/18/2019							80.5
8/20/2019			92.3				74.1
4/13/2020							69.5
4/14/2020		32.9		51.5			
4/15/2020	19.1		69.2		5		
8/25/2020	14.9		80.5		4.97		
8/26/2020		39.3		47.6			75.7
3/16/2021	5.77						
3/22/2021					5.71		64.9
3/23/2021		31.7		57.6			
3/24/2021			61.5				
3/30/2021						3.71	
10/5/2021							65.9
10/6/2021					5.38		
10/11/2021		40	87.1	63.4			
10/12/2021	10.3					3.96	
5/10/2022	12.4						58.5
5/16/2022		26.9	58.2		5.22	3.81	
5/17/2022				74.7			
10/25/2022			86.900002		5.52	4.99	
10/26/2022	10	51.599998		76.300003			55.299999
6/5/2023				70.5			55.400002
6/6/2023			60.700001				
6/7/2023					5.05	6.41	
6/12/2023	10.9	28					

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	30.1		48.2	29.8	23.4	66.1	38.7
2/6/2018	30.6		47.8				
2/8/2018				24.3	20.1	58	38.8
4/24/2018	27.8						
4/25/2018			41.8	19.8	17.4	56.3	40.3
6/26/2018	26.2			17.8	21.8	57.7	39.9
6/27/2018			36.9				
8/6/2018	27.5						
8/7/2018			37.6	18.3			
8/8/2018					25.4	51.2	42.3
10/22/2018	27.7						
10/23/2018			35.3	18.1	25.6	50.9	39.8
12/3/2018	32.3			16.6			
12/4/2018					19	51.9	
12/5/2018			36.3				43.8
2/5/2019	25.5		36.6	14.5			
2/6/2019					16.4	55	34.9
2/26/2019	26.4			16			
2/27/2019			39.6		15.6	53.4	42.5
8/20/2019	23.5		33.7	15.1			
8/21/2019					23.5	71.5	50.9
4/13/2020			43	12.5			
4/14/2020						56.2	43.6
4/15/2020	22	23.9			14		
8/24/2020			35.5				
8/26/2020	22.8	23.5		12.9	16.7	55.5	43.2
3/16/2021			38.1				
3/17/2021				11.3			
3/23/2021					12.5	48.9	38.1
3/24/2021	23.1	22.9					
10/5/2021	27.4		36	11.4	15.9		
10/11/2021		23					
10/12/2021						66.3	35.4
5/9/2022			38.4				
5/10/2022				10.8	9.95		
5/11/2022		22.6				61.9	36.9
5/16/2022	30.7						
10/26/2022	33.599998	23	39.599998	12.2	21.4	63.700001	47.700001
6/5/2023		23		10.6			
6/6/2023	39.799999						
6/7/2023			46.5			56.299999	
6/12/2023							37.799999
6/13/2023					8.71		

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	39.4		4.56	3.89		
7/18/2018	38.4		3.92	3.8		
8/7/2018	36.7					
8/8/2018			3.74	3.89		
9/5/2018	43.6		3.38	3.78		
9/24/2018	44.5		3.25	3.73		
10/22/2018	45					
10/23/2018			3.37	3.79		
12/3/2018	33.7		3.67	3.79		
2/5/2019	30.1					
2/7/2019			2.89	3.75		
2/25/2019	25.6		2.95	3.81		
8/20/2019	38.3					
8/21/2019			3.04	3.71		
4/13/2020	25.9	16.1				
4/15/2020			2.93	3.56		
8/24/2020	29	24.8	2.94	3.45		
3/16/2021			2.9	3.44		
3/17/2021		5.21				
3/24/2021	22.2					
10/5/2021	25.4	17.6				
10/6/2021					3.46	
10/11/2021						9.35
10/12/2021			2.94	3.29		
5/9/2022	18.9	7.02				
5/10/2022			2.87	3.24		
5/17/2022					3.3	9.99
10/26/2022	23.1	27.5	3.09	3.42	3.6	9.75
6/5/2023		13.4				
6/6/2023					3.22	
6/7/2023	20.9					10
6/13/2023			2.82	3.14		

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.2	6.9	6.3	6.2			
2/6/2018	5.9						
2/7/2018		6.1	5.4				
2/8/2018				6.1			
4/23/2018	5.9						
4/24/2018		6.9	5.7	5.9			
6/26/2018	5.7						
6/27/2018		5.6	5.4	5.5	3.1		
7/18/2018					3.4		
8/6/2018					2.8		
8/7/2018	5.3	5.1					
8/8/2018			5.2	5.3			
9/5/2018					2.8		
9/24/2018					3.1		
10/22/2018	5.6	5.5					
10/23/2018			5.4	5.8			
10/24/2018					2.8	3.3	4
11/14/2018						3.6	3.6
11/28/2018						3.5	3.5
12/4/2018	5.8	5.6	5.3				
12/5/2018				6	2.2	3.3	3.2
12/18/2018						3.6	3.4
1/3/2019						3.4	3.2
1/24/2019						3.91	3.15
2/5/2019	5.8				3.12	3.94	2.98
2/6/2019		6.24	5.89	5.95			
2/26/2019	5.92	8.28					
2/27/2019			6.2	5.88			
2/28/2019					3.45	4.15	3.05
6/24/2019						3.36 (D)	
8/19/2019						3.42	2.8
8/20/2019					3.27		
8/21/2019	5.26						
8/22/2019		5.66	4.64	6.31			
4/14/2020			5.46	5.74			
4/15/2020	5.5	6.49				3.39	
4/16/2020					3.74		2.93
8/24/2020							2.82
8/25/2020	5.59				3.03	2.94	
8/26/2020		5.39	4.74	5.91			
3/16/2021	6.2						
3/22/2021					3.15	3.61	2.94
3/23/2021		7.14	5.54	6.3			
10/5/2021	6.1			6.26			
10/6/2021						3.17	2.98
10/11/2021		5.72					
10/12/2021			5.8		2.87		
5/9/2022					3		3.01
5/10/2022	5.97	5.72		5.64			
5/17/2022			5.92			3.58	
10/25/2022						3.24	2.88
10/26/2022	6.02	5.87	4.98	5.76	2.56		

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
6/5/2023	6.12						
6/6/2023					3.2	3.31	2.93
6/13/2023		5.45	5.51	5.18			

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			4.1				7.6
2/6/2018			3.1				7.6
4/23/2018			3.7				
4/24/2018							7.5
6/27/2018			2.2				7.3
8/7/2018			2.6				7.6
10/22/2018			2.8				6.9
12/3/2018							6.8
12/4/2018			4.1				
2/5/2019			2.56				6.95
2/25/2019							6.55
2/26/2019			3.03				
6/18/2019							6.62
8/20/2019			2.24				6.07
4/13/2020							5.95
4/14/2020		7.35		6.64			
4/15/2020	6		2.16		6.47		
8/25/2020	5.79		2		6.4		
8/26/2020		7.03		6.73			5.89
3/16/2021	3.85						
3/22/2021					6.65		5.26
3/23/2021		7.11		6.33			
3/24/2021			2.29				
3/30/2021						32	
10/5/2021							5.09
10/6/2021					6.82		
10/11/2021		7.04	2.43	6.37			
10/12/2021	4.59					38	
5/10/2022	6.38						4.59
5/16/2022		7.23	2.18		6.86	43.4	
5/17/2022				6.22			
10/25/2022			2.45		6.86	49	
10/26/2022	5.44	7.04		5.91			4.38
6/5/2023				5.58			4.57
6/6/2023			2.02				
6/7/2023					6.98	65.300003	
6/12/2023	5.72	6.98					

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	8.5		8.7	10	7.9	5.2	7
2/6/2018	8.8		8.5				
2/8/2018				9.5	6.7	4.1	
2/12/2018							6.6
4/24/2018	8.4						
4/25/2018			7.6	9.1	7	5.3	7.1
6/26/2018	8.7			9.5	7.4	5	6.4
6/27/2018			7.1				
8/6/2018	11						
8/7/2018			6.9	9			
8/8/2018					7.7	4.8	5.5
10/22/2018	8.6						
10/23/2018			6.7	9.9	8	4.4	6.7
12/3/2018	9.1			8.7			
12/4/2018					6.7	4.2	
12/5/2018			6.7				5.9
2/5/2019	9.81		7.24	8.73			
2/6/2019					6.84	5.84	7.26
2/26/2019	13			8.66			
2/27/2019			7.38		6.21	6.52	6.77
8/20/2019	9.62		6.53	9.55			
8/21/2019					7.35	5.89	6.16
4/13/2020			6.48	8.6			
4/14/2020						5.21	7.27
4/15/2020	9.27	5.16			4.99		
8/24/2020			6.64				
8/26/2020	8.96	5.37		9.21	6.19	5.16	6.57
3/16/2021			7.14				
3/17/2021				8.59			
3/23/2021					4.87	5.3	7.42
3/24/2021	8.61	5.55					
10/5/2021	9.3		6.78	9.09	6.43		
10/11/2021		5.65					
10/12/2021						5.6	7.78
5/9/2022			6.81				
5/10/2022				8.87	3.96		
5/11/2022		5.48				5.13	7.2
5/16/2022	8.07						
10/26/2022	7.88	5.53	6.4	9.4	7.09	5.72	6.99
6/5/2023		5.72		10.9			
6/6/2023	6.68						
6/7/2023			6.81			5.02	
6/12/2023							7.07
6/13/2023					3.43		

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	3.6		4.2	4.1		
7/18/2018	3.8		4.1	4.3		
8/7/2018	3.3					
8/8/2018			3.3	3.8		
9/5/2018	3.4		3.7	3.9		
9/24/2018	3.8		3.9	4.2		
10/22/2018	3.3					
10/23/2018			4	4.1		
12/3/2018	3.2		3.6	3.8		
2/5/2019	3.78					
2/7/2019			3.72	4.15		
2/25/2019	3.66		3.95	4.2		
8/20/2019	3.52					
8/21/2019			3.85	4		
4/13/2020	3.36	5.42				
4/15/2020			3.83	3.71		
8/24/2020	3.35	5.46	3.96	3.59		
3/16/2021			3.98	3.66		
3/17/2021		5.53				
3/24/2021	3.45					
10/5/2021	3.23	5.79				
10/6/2021					166	
10/11/2021						1.72
10/12/2021			4.07	3.68		
5/9/2022	3.46	5.51				
5/10/2022			4.12	3.68		
5/17/2022					188	1.69
10/26/2022	3.39	5.09	4.03	3.5	181	1.56
6/5/2023		5.7				
6/6/2023					163	
6/7/2023	3.37					2.05
6/13/2023			3.88	3.38		

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001015	<0.001015	<0.001015	<0.001015			
2/6/2018	<0.001015						
2/7/2018		<0.001015	<0.001015				
2/8/2018				<0.001015			
4/23/2018	<0.001015						
4/24/2018		<0.001015	<0.001015	<0.001015			
6/26/2018	<0.001015						
6/27/2018		<0.001015	<0.001015	<0.001015	<0.001015		
7/18/2018					<0.001015		
8/6/2018					<0.001015		
8/7/2018	<0.001015	<0.001015					
8/8/2018			<0.001015	<0.001015			
9/5/2018					<0.001015		
9/24/2018					<0.001015		
10/22/2018	<0.001015	<0.001015					
10/23/2018			<0.001015	<0.001015			
10/24/2018					<0.001015	<0.001015	<0.001015
11/14/2018						<0.001015	<0.001015
11/28/2018						<0.001015	<0.001015
12/4/2018	<0.001015	<0.001015	<0.001015				
12/5/2018				<0.001015	<0.001015	<0.001015	<0.001015
12/18/2018						<0.001015	<0.001015
1/3/2019						<0.001015	<0.001015
1/24/2019						<0.001015	<0.001015
2/5/2019	<0.001015				<0.001015	<0.001015	<0.001015
2/6/2019		<0.001015	<0.001015	<0.001015			
6/24/2019						0.00325 (J)	
8/19/2019						<0.001015	<0.001015
8/20/2019					<0.001015		
8/21/2019	<0.001015						
8/22/2019		<0.001015	<0.001015	<0.001015			
4/14/2020			<0.001015	<0.001015			
4/15/2020	<0.001015	<0.001015				<0.001015	
4/16/2020					<0.001015		0.00267 (J)
8/24/2020							<0.001015
8/25/2020	<0.001015				<0.001015	<0.001015	
8/26/2020		<0.001015	<0.001015	<0.001015			
3/16/2021	0.000376 (J)						
3/22/2021					0.000771 (J)	0.000546 (J)	0.000509 (J)
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)			
10/5/2021	0.00023 (J)			0.00034 (J)			
10/6/2021						0.00046 (J)	0.00027 (J)
10/11/2021		0.00028 (J)					
10/12/2021			0.00027 (J)		0.00059 (J)		
5/9/2022					0.00087 (J)		0.00026 (J)
5/10/2022	0.00025 (J)	0.0003 (J)		0.00041 (J)			
5/17/2022			0.00038 (J)			0.00059 (J)	
10/25/2022						0.000275 (J)	0.000357 (J)
10/26/2022	0.000321 (J)	0.000207 (J)	0.000318 (J)	0.000276 (J)	0.000428 (J)		
6/5/2023	0.000271 (J)						
6/6/2023					0.000838 (J)	0.00053 (J)	0.000529 (J)
6/13/2023		0.000348 (J)	0.000426 (J)	0.000484 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.001015				<0.001015
2/6/2018			<0.001015				<0.001015
4/23/2018			<0.001015				
4/24/2018							<0.001015
6/27/2018			<0.001015				<0.001015
8/7/2018			<0.001015				<0.001015
10/22/2018			<0.001015				<0.001015
12/3/2018							<0.001015
12/4/2018			<0.001015				
2/5/2019			<0.001015				<0.001015
6/18/2019							0.00285 (J)
8/20/2019			<0.001015				<0.001015
4/13/2020							<0.001015
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.001015		<0.001015		<0.001015		
8/25/2020	<0.001015		<0.001015		<0.001015		
8/26/2020		<0.001015		<0.001015			<0.001015
3/16/2021	0.000363 (J)						
3/22/2021					0.000433 (J)		0.000293 (J)
3/23/2021		0.000404 (J)		0.000417 (J)			
3/24/2021			0.00047 (J)				
3/30/2021						0.00112	
10/5/2021							0.00023 (J)
10/6/2021					0.00025 (J)		
10/11/2021		0.00048 (J)	0.00048 (J)	0.00025 (J)			
10/12/2021	0.00021 (J)					0.00035 (J)	
5/10/2022	0.00025 (J)						0.00029 (J)
5/16/2022		0.00028 (J)	0.00034 (J)		0.00029 (J)	0.00026 (J)	
5/17/2022				0.00021 (J)			
10/25/2022			0.00022 (J)		<0.001015	<0.001015	
10/26/2022	<0.001015	<0.001015		<0.001015			0.000276 (J)
6/5/2023				0.000265 (J)			0.000263 (J)
6/6/2023			0.000313 (J)				
6/7/2023					0.000262 (J)	0.000284 (J)	
6/12/2023	0.000457 (J)	0.000381 (J)					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.001015	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.001015			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.001015			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.001015			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.001015			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.001015			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.001015			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
3/16/2021			0.000397 (J)				
3/17/2021				0.000338 (J)			
3/23/2021					0.000406 (J)	0.0003 (J)	0.000422 (J)
3/24/2021	0.000323 (J)	0.000402 (J)					
10/5/2021	<0.001015		0.00028 (J)	0.00025 (J)	0.00025 (J)		
10/11/2021		0.00031 (J)					
10/12/2021						<0.001015	0.00031 (J)
5/9/2022			0.00053 (J)				
5/10/2022				<0.001015	0.00025 (J)		
5/11/2022		0.00024 (J)				0.00022 (J)	0.00021 (J)
5/16/2022	0.00023 (J)						
10/26/2022	<0.001015	0.000214 (J)	<0.001015	0.000222 (J)	<0.001015	<0.001015	<0.001015
6/5/2023		0.000367 (J)		0.000252 (J)			
6/6/2023	0.000206 (J)						
6/7/2023			0.000272 (J)			0.000245 (J)	
6/12/2023							0.000345 (J)
6/13/2023					0.000328 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.001015	<0.001015		
7/18/2018	<0.001015		<0.001015	<0.001015		
8/7/2018	<0.001015					
8/8/2018			<0.001015	<0.001015		
9/5/2018	<0.001015		<0.001015	<0.001015		
9/24/2018	<0.001015		<0.001015	<0.001015		
10/22/2018	<0.001015					
10/23/2018			<0.001015	<0.001015		
12/3/2018	<0.001015		<0.001015	<0.001015		
2/5/2019	<0.001015					
2/7/2019			<0.001015	<0.001015		
8/20/2019	<0.001015					
8/21/2019			<0.001015	<0.001015		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.001015	<0.001015		
8/24/2020	<0.001015	<0.001015	<0.001015	<0.001015		
3/16/2021			0.000534 (J)	0.000534 (J)		
3/17/2021		0.000764 (J)				
3/24/2021	0.000442 (J)					
10/5/2021	0.00035 (J)	0.00035 (J)				
10/6/2021					0.00111	
10/11/2021						0.00041 (J)
10/12/2021			0.00034 (J)	0.00031 (J)		
5/9/2022	0.00027 (J)	0.00062 (J)				
5/10/2022			0.00037 (J)	0.00037 (J)		
5/17/2022					0.00104	0.00032 (J)
10/26/2022	<0.001015	<0.001015	0.000251 (J)	0.000224 (J)	<0.001015	<0.001015
6/5/2023		0.00029 (J)				
6/6/2023					0.000256 (J)	
6/7/2023	0.00033 (J)					0.000364 (J)
6/13/2023			0.000463 (J)	0.000291 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00818 (J)	<0.000203	<0.000203	0.00221 (J)			
2/6/2018	0.0123						
2/7/2018		<0.000203	<0.000203				
2/8/2018				0.00221 (J)			
4/23/2018	0.0204						
4/24/2018		<0.000203	<0.000203	0.00257 (J)			
6/26/2018	0.0224						
6/27/2018		<0.000203	<0.000203	0.00266 (J)	0.0382		
7/18/2018					0.0366		
8/6/2018					0.0308		
8/7/2018	0.0193	<0.000203					
8/8/2018			<0.000203	0.00251 (J)			
9/5/2018					0.0291		
9/24/2018					0.0286		
10/22/2018	0.0243	<0.000203					
10/23/2018			<0.000203	0.00399 (J)			
10/24/2018					0.0269	0.0129	<0.000203
11/14/2018						0.0114	<0.000203
11/28/2018						0.0168	<0.000203
12/4/2018	0.0166	<0.000203	<0.000203				
12/5/2018				0.00466 (J)	0.0215	0.0161	<0.000203
12/18/2018						0.0234	<0.000203
1/3/2019						0.038	<0.000203
1/24/2019						0.04	<0.000203
2/5/2019	0.0264				0.0359	0.0538	<0.000203
2/6/2019		<0.000203	<0.000203	0.00485 (J)			
6/24/2019						0.041	
8/19/2019						0.0247	<0.000203
8/20/2019					0.0391		
8/21/2019	0.0242						
8/22/2019		<0.000203	0.00756	0.00658			
4/14/2020			<0.000203	0.0035 (J)			
4/15/2020	0.0178	<0.000203				0.0373	
4/16/2020					0.056		<0.000203
8/24/2020							<0.000203
8/25/2020	0.0193				0.0365	0.0294	
8/26/2020		<0.000203	0.00599	0.00547			
3/16/2021	0.0184						
3/22/2021					0.0262	0.0469	0.000133 (J)
3/23/2021		0.00037	0.000388	0.00378			
10/5/2021	0.0169			0.00448			
10/6/2021						0.0321	0.00013 (J)
10/11/2021		0.00089					
10/12/2021			0.00027		0.0291		
5/9/2022					0.0416		0.00011 (J)
5/10/2022	0.0136	0.00091		0.0049			
5/17/2022			0.00044			0.0563	
10/25/2022						0.013	0.000311
10/26/2022	0.0152	0.000907	0.009	0.00603	0.0201		
6/5/2023	0.0118						
6/6/2023					0.0432	0.0511	<0.000203
6/13/2023		0.000866	0.000517	0.0058			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.0246				0.0302
2/6/2018			0.0243				0.0371
4/23/2018			0.0258				
4/24/2018							0.0251
6/27/2018			0.0362				0.0234
8/7/2018			0.0332				0.0223
10/22/2018			0.0438				0.03
12/3/2018							0.0238
12/4/2018			0.0252				
2/5/2019			0.0362				0.0232
6/18/2019							0.0263
8/20/2019			0.0366				0.0257
4/13/2020							0.0209
4/14/2020		0.00886		0.0122			
4/15/2020	<0.000203		0.0324		<0.000203		
8/25/2020	<0.000203		0.0298		<0.000203		
8/26/2020		0.0101		0.0104			0.0191
3/16/2021	0.000577						
3/22/2021					<0.000203		0.0183
3/23/2021		0.00674		0.0125			
3/24/2021			0.0316				
3/30/2021						0.000116 (J)	
10/5/2021							0.016
10/6/2021					<0.000203		
10/11/2021		0.00579	0.0165	0.00995			
10/12/2021	0.00062					<0.000203	
5/10/2022	0.0003						0.0147
5/16/2022		0.00485	0.0366		<0.000203	<0.000203	
5/17/2022				0.0102			
10/25/2022			0.0302		<0.000203	<0.000203	
10/26/2022	0.000452	0.00294		0.00924			0.0132
6/5/2023				0.0089			0.0118
6/6/2023			0.04				
6/7/2023					<0.000203	<0.000203	
6/12/2023	0.000225	0.00377					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.0252		0.00331 (J)	0.00592 (J)	<0.000203	0.00212 (J)	<0.000203
2/6/2018	0.0243		0.00323 (J)				
2/8/2018				0.00297 (J)	<0.000203	<0.000203	<0.000203
4/24/2018	0.027						
4/25/2018			0.00258 (J)	<0.000203	<0.000203	0.00204 (J)	<0.000203
6/26/2018	0.0242			<0.000203	<0.000203	<0.000203	<0.000203
6/27/2018			0.00218 (J)				
8/6/2018	0.0205						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	<0.000203	<0.000203
10/22/2018	0.0259						
10/23/2018			0.0023 (J)	<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018	0.0228			<0.000203			
12/4/2018					<0.000203	<0.000203	
12/5/2018			0.00233 (J)				<0.000203
2/5/2019	0.0263		0.0021 (J)	<0.000203			
2/6/2019					<0.000203	0.00232 (J)	<0.000203
8/20/2019	0.0293		0.00223 (J)	<0.000203			
8/21/2019					<0.000203	0.00303 (J)	<0.000203
4/13/2020			<0.000203	<0.000203			
4/14/2020						0.00385 (J)	<0.000203
4/15/2020	0.0252	<0.000203			<0.000203		
8/24/2020			0.00222 (J)				
8/26/2020	0.0231	<0.000203		<0.000203	<0.000203	0.00388 (J)	<0.000203
3/16/2021			0.00136				
3/17/2021				0.00102			
3/23/2021					0.00102	0.003	0.00103
3/24/2021	0.0268	8.16E-05 (J)					
10/5/2021	0.0238		0.00116	0.00104	0.00018 (J)		
10/11/2021		<0.000203					
10/12/2021						0.00298	0.00113
5/9/2022			0.00101				
5/10/2022				0.00114	0.0004		
5/11/2022		<0.000203				0.00461	0.00091
5/16/2022	0.0289						
10/26/2022	0.0289	<0.000203	0.000936	0.0012	0.00016 (J)	0.00266	0.000812
6/5/2023		7E-05 (J)		0.00113			
6/6/2023	0.0297						
6/7/2023			0.000715			0.00299	
6/12/2023							0.000874
6/13/2023					0.00463		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		0.00341 (J)	<0.000203		
7/18/2018	<0.000203		0.00341 (J)	<0.000203		
8/7/2018	<0.000203					
8/8/2018			0.00221 (J)	<0.000203		
9/5/2018	<0.000203		0.00202 (J)	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		0.00227 (J)	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			0.00225 (J)	<0.000203		
4/13/2020	<0.000203	0.00489 (J)				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	0.00237 (J)	<0.000203	<0.000203		
3/16/2021			0.000384	0.000108 (J)		
3/17/2021		0.00616				
3/24/2021	<0.000203					
10/5/2021	0.00044	0.00287				
10/6/2021					0.00021	
10/11/2021						<0.000203
10/12/2021			8E-05 (J)	0.00014 (J)		
5/9/2022	0.00014 (J)	0.00691				
5/10/2022			0.00015 (J)	0.00012 (J)		
5/17/2022					0.00019 (J)	8E-05 (J)
10/26/2022	<0.000203	0.0021	<0.000203	7.8E-05 (J)	<0.000203	<0.000203
6/5/2023		0.00444				
6/6/2023					<0.000203	
6/7/2023	<0.000203					<0.000203
6/13/2023			0.000155 (J)	8.4E-05 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.694	0.585	0.891	0.435 (U)			
2/6/2018	0.641						
2/7/2018		0.474	0.786				
2/8/2018				0.477			
4/23/2018	-0.0527 (U)						
4/24/2018		0.463 (U)	0.935	0.695			
6/26/2018	0.162 (U)						
6/27/2018		0.678	0.537	0.183 (U)	0.616		
7/18/2018					0.859		
8/6/2018					0.654		
8/7/2018	0.87	0.495 (U)					
8/8/2018			1.28	0.817			
9/5/2018					0.855		
9/24/2018					0.787		
10/22/2018	0.691	0.36 (U)					
10/23/2018			1.3	0.796			
10/24/2018					1.14	0.564	0.694
11/14/2018						-0.0027 (U)	0.398 (U)
11/28/2018						0.222 (U)	0.428 (U)
12/4/2018	0.213 (U)	0.407 (U)	1.05				
12/5/2018				0.498 (U)	0.64	0.288 (U)	0.302 (U)
2/5/2019	0.637				0.873	0.431 (U)	0.307 (U)
2/6/2019		0.537	0.779	-0.0241 (U)			
8/19/2019						0.377 (U)	0.683
8/20/2019					0.774		
8/21/2019	0.643 (U)						
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)			
4/14/2020			0.922 (U)	0.643 (U)			
4/15/2020	0.538 (U)	0.64 (U)				0.449 (U)	
4/16/2020					0.865		0.603
8/24/2020							0.404 (U)
8/25/2020	0.502 (U)				0.976	0.851	
8/26/2020		0.221 (U)	1.28	1.31			
3/16/2021	0.722 (U)						
3/22/2021					1.04	0.942 (U)	0.497 (U)
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)			
10/5/2021	1.21			1.48			
10/6/2021						1.16 (U)	2.01
10/11/2021		6.52					
10/12/2021			1.02 (U)		1.61		
5/9/2022					1.31		0.56 (U)
5/10/2022	0.761 (U)	0.421 (U)		0.531 (U)			
5/17/2022			1.01 (U)			1.01	
10/25/2022						0.406 (U)	0.776 (U)
10/26/2022	0.38 (U)	0.42 (U)	0.505 (U)	0.446 (U)	0.457 (U)		
6/5/2023	1.09 (U)						
6/6/2023					1.35	0.85 (U)	0.524 (U)
6/13/2023		1.38	1.1 (U)	0.515 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.772				0.643
2/6/2018			0.679				0.209 (U)
4/23/2018			0.447 (U)				
4/24/2018							0.596
6/27/2018			0.117 (U)				0.363 (U)
8/7/2018			1.22				0.788
10/22/2018			0.996				0.749
12/3/2018							0.749
12/4/2018			0.739				
2/5/2019			1.09				0.299 (U)
8/20/2019			0.553 (U)				0.709 (U)
4/13/2020							0.942 (U)
4/14/2020		42.6		0.0962 (U)			
4/15/2020	0.419 (U)		0.182 (U)		0.231 (U)		
6/1/2020		0.215 (U)					
8/25/2020	1.45		0.43 (U)		0.807		
8/26/2020		0.265 (U)		0.413 (U)			0.177 (U)
3/16/2021	0.405 (U)						
3/22/2021					0.58 (U)		0.263 (U)
3/23/2021		0.562 (U)		0.847 (U)			
3/24/2021			0.769 (U)				
3/30/2021						0.185 (U)	
10/5/2021							3.21
10/6/2021					0.746 (U)		
10/11/2021		0.202 (U)	2.38	1.09 (U)			
10/12/2021	0.383 (U)					0.323 (U)	
5/10/2022	0.576 (U)						0.189 (U)
5/16/2022		0.471 (U)	1.06		0.285 (U)	0.253 (U)	
5/17/2022				0.551 (U)			
10/25/2022			0.683 (U)		0.849	0.529 (U)	
10/26/2022	0.165 (U)	0.401 (U)		0.958 (U)			0.551 (U)
6/5/2023				0.624 (U)			0.422 (U)
6/6/2023			0.907 (U)				
6/7/2023					0.449 (U)	0.758 (U)	
6/12/2023	0.564 (U)	0.973 (U)					

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	1.04		0.885	0.394 (U)	0.895	7.45 (o)	0.226 (U)
2/6/2018	0.989		0.524				
2/8/2018				0.489	0.322 (U)	0.549	0.071 (U)
4/24/2018	0.405 (U)						
4/25/2018			0.341 (U)	-0.0902 (U)	0.0097 (U)	0.65	0.569
6/26/2018	1.03			0.245 (U)	0.587	0.436 (U)	0.43 (U)
6/27/2018			0.546				
8/6/2018	0.622						
8/7/2018			1.09	0.439 (U)			
8/8/2018					0.364 (U)	0.486 (U)	0.656
10/22/2018	1.06						
10/23/2018			1.01	0.243 (U)	0.703	0.319 (U)	0.395 (U)
12/3/2018	0.697			0.304 (U)			
12/4/2018					0.325 (U)	0.875	
12/5/2018			0.876				0.52 (U)
2/5/2019	0.467 (U)		0.551 (U)	0.196 (U)			
2/6/2019					0.0774 (U)	0.378 (U)	0.244 (U)
8/20/2019	0.814		0.206 (U)	-0.086 (U)			
8/21/2019					-0.0134 (U)	0.552 (U)	1.53 (U)
4/13/2020			1.19	0.0901 (U)			
4/14/2020						0.641 (U)	0.119 (U)
4/15/2020	-0.0841 (U)	0.329 (U)			0.526 (U)		
8/24/2020			0.482 (U)				
8/26/2020	0.26 (U)	0.839		0.416 (U)	0.691 (U)	0.339 (U)	1.18
3/16/2021			0.709 (U)				
3/17/2021				0.539 (U)			
3/23/2021					0.45 (U)	0.662 (U)	0.694 (U)
3/24/2021	0.664 (U)	0.725 (U)					
10/5/2021	1.75		1.44	1.36	1.27		
10/11/2021		1.58					
10/12/2021						0.291 (U)	0.311 (U)
5/9/2022			1.16				
5/10/2022				0.0979 (U)	0.599 (U)		
5/11/2022		0.576 (U)				0.475 (U)	0.605 (U)
5/16/2022	0.978						
10/26/2022	0.609 (U)	0.725 (U)	0.643 (U)	0.432 (U)	0.559 (U)	0.528 (U)	0.572 (U)
6/5/2023		0.433 (U)		0.704 (U)			
6/6/2023	1.17 (U)						
6/7/2023			1.06 (U)			0.682 (U)	
6/12/2023							0.395 (U)
6/13/2023					1.08		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	0.188 (U)		0.259 (U)	0.231 (U)		
7/18/2018	0.314 (U)		0.434	0.676		
8/7/2018	0.279 (U)					
8/8/2018			0.763	0.496		
9/5/2018	0.589		0.631	0.62		
9/24/2018	0.772		0.588	-0.12 (U)		
10/22/2018	0.621					
10/23/2018			0.383 (U)	0.352 (U)		
12/3/2018	0.188 (U)		0.736	0.238 (U)		
2/5/2019	0.274 (U)					
2/7/2019			0.0202 (U)	0.395 (U)		
8/20/2019	0.663					
8/21/2019			0.442 (U)	-0.00256 (U)		
4/13/2020	-0.129 (U)	0.472 (U)				
4/15/2020			0.432 (U)	0.000738 (U)		
8/24/2020	0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)		
3/16/2021			0.32 (U)	0.589 (U)		
3/17/2021		0.756 (U)				
3/24/2021	0.245 (U)					
10/5/2021	2.07	1.13				
10/6/2021					1.78	
10/11/2021						1.29
10/12/2021			0.963 (U)	1.57		
5/9/2022	0.784 (U)	0.352 (U)				
5/10/2022			0.659 (U)	0.468 (U)		
5/17/2022					0.4 (U)	0.306 (U)
10/26/2022	0.561 (U)	0.391 (U)	1.08	0.283 (U)	0.755 (U)	0.426 (U)
6/5/2023		0.662 (U)				
6/6/2023					0.476 (U)	
6/7/2023	1.09 (U)					0.444 (U)
6/13/2023			0.739 (U)	0.33 (U)		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.1	0.09 (J)	0.06 (J)	<0.125			
2/6/2018	0.08 (J)						
2/7/2018		0.08 (J)	0.05 (J)				
2/8/2018				<0.125			
4/23/2018	0.07 (J)						
4/24/2018		0.08 (J)	0.05 (J)	<0.125			
6/26/2018	0.08 (J)						
6/27/2018		0.09 (J)	0.06 (J)	<0.125	0.18		
7/18/2018					0.23		
8/6/2018					0.23		
8/7/2018	0.07 (J)	0.04 (J)					
8/8/2018			0.06 (J)	<0.125			
9/5/2018					0.22		
9/24/2018					0.2		
10/22/2018	0.07 (J)	0.1					
10/23/2018			0.06 (J)	0.04 (J)			
10/24/2018					0.14	0.11	0.23
11/14/2018						0.1	0.2
11/28/2018						0.1	0.19
12/4/2018	0.04 (J)	0.07 (J)	<0.125				
12/5/2018				<0.125	0.07 (J)	0.11	0.19
12/18/2018						0.14	0.15
1/3/2019						0.16	0.19
1/24/2019						<0.125	0.168
2/5/2019	0.0525 (J)				<0.125	<0.125	0.192
2/6/2019		0.107	0.0678 (J)	<0.125			
2/26/2019	<0.125	0.0813 (J)					
2/27/2019			0.0985 (J)	<0.125			
2/28/2019					<0.125	<0.125	0.182
6/24/2019						<0.125 (D)	
8/19/2019						<0.125	0.187
8/20/2019					<0.125		
8/21/2019	<0.125						
8/22/2019		0.084 (J)	<0.125	<0.125			
4/14/2020			0.0878 (J)	<0.125			
4/15/2020	<0.125	0.112				<0.125	
4/16/2020					<0.125		0.166
8/24/2020							0.163
8/25/2020	<0.125				<0.125	0.0863 (J)	
8/26/2020		0.0997 (J)	<0.125	<0.125			
3/16/2021	<0.125						
3/22/2021					<0.125	<0.125	0.18
3/23/2021		0.101	0.0819 (J)	<0.125			
10/5/2021	0.0601 (J)			<0.125			
10/6/2021						<0.125	0.175
10/11/2021		0.201					
10/12/2021			0.134		<0.125		
5/9/2022					<0.125		0.191
5/10/2022	<0.125	0.0918 (J)		<0.125			
5/17/2022			<0.125			<0.125	
10/25/2022						<0.125	0.15
10/26/2022	<0.125	0.0929 (J)	0.069 (J)	<0.125	<0.125		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
6/5/2023	<0.125						
6/6/2023					<0.125	<0.125	0.113 (J)
6/13/2023		0.0805 (J)	0.105 (J)	0.0795 (J)			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.3				0.13
2/6/2018			0.27				0.08 (J)
4/23/2018			0.19				
4/24/2018							0.05 (J)
6/27/2018			0.28				0.07 (J)
8/7/2018			0.24				0.09 (J)
10/22/2018			0.24				0.11
12/3/2018							0.08 (J)
12/4/2018			0.15				
2/5/2019			0.207				0.064 (J)
2/25/2019							<0.125
2/26/2019			0.264				
6/18/2019							0.0664 (J)
8/20/2019			0.252				0.0592 (J)
4/13/2020							<0.125
4/14/2020		<0.125		0.125			
4/15/2020	<0.125		0.21		2.51		
8/25/2020	<0.125		0.273		2.4		
8/26/2020		<0.125		0.103			<0.125
3/16/2021	<0.125						
3/22/2021					2.33		<0.125
3/23/2021		<0.125		0.108			
3/24/2021			0.194				
3/30/2021						6.09	
10/5/2021							<0.125
10/6/2021					2.56		
10/11/2021		0.0779 (J)	0.283	0.127			
10/12/2021	<0.125					5.97	
5/10/2022	<0.125						0.0714 (J)
5/16/2022		<0.125	0.264		2.59	6.14	
5/17/2022				<0.125			
10/25/2022			0.271		2.41	5.77	
10/26/2022	<0.125	<0.125		0.121 (J)			<0.125
6/5/2023				0.112 (J)			<0.125
6/6/2023			0.204				
6/7/2023					2.51	5.43	
6/12/2023	<0.125	<0.125					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.25		0.06 (J)	0.06 (J)	0.09 (J)	0.14	0.12
2/6/2018	0.24		0.05 (J)				
2/8/2018				0.04 (J)	0.07 (J)	0.11	
2/12/2018							0.11
4/24/2018	0.2						
4/25/2018			0.05 (J)	0.04 (J)	0.07 (J)	0.09 (J)	0.12
6/26/2018	0.22			0.05 (J)	0.09 (J)	0.1	0.13
6/27/2018			0.06 (J)				
8/6/2018	0.22						
8/7/2018			0.06 (J)	0.05 (J)			
8/8/2018					0.1	0.1	0.12
10/22/2018	0.24						
10/23/2018			0.07 (J)	0.06 (J)	0.1	0.11	0.13
12/3/2018	0.22			<0.125			
12/4/2018					0.06 (J)	0.08 (J)	
12/5/2018			0.04 (J)				0.04 (J)
2/5/2019	0.259		0.0651 (J)	0.0581 (J)			
2/6/2019					<0.125	<0.1	<0.1
2/26/2019	0.246			0.0816 (J)			
2/27/2019			0.0578 (J)		0.0824 (J)	0.108	0.147
8/20/2019	0.197		0.0567 (J)	<0.125			
8/21/2019					0.068 (J)	0.0648 (J)	0.0984 (J)
4/13/2020			0.0688 (J)	<0.125			
4/14/2020						0.0845 (J)	0.133
4/15/2020	0.238	0.218			0.0775 (J)		
8/24/2020			0.0607 (J)				
8/26/2020	0.251	0.217		<0.125	<0.125	0.0732 (J)	0.13
3/16/2021			0.065 (J)				
3/17/2021				<0.125			
3/23/2021					<0.125	0.0802 (J)	0.132
3/24/2021	0.227	0.212					
10/5/2021	0.214		0.122	<0.125	0.0933 (J)		
10/11/2021		0.23					
10/12/2021						0.123	0.147
5/9/2022			0.0682 (J)				
5/10/2022				<0.125	0.0627 (J)		
5/11/2022		0.175				0.0695 (J)	0.108 (J)
5/16/2022	0.17						
10/26/2022	0.283	0.164	0.0845 (J)	<0.125	0.128	0.0911 (J)	0.119 (J)
6/5/2023		0.206		<0.125			
6/6/2023	0.225						
6/7/2023			<0.125			0.128	
6/12/2023							0.13
6/13/2023					<0.125		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	0.13		0.05 (J)	0.04 (J)		
7/18/2018	0.11		0.04 (J)	0.04 (J)		
8/7/2018	0.11					
8/8/2018			0.04 (J)	0.04 (J)		
9/5/2018	0.13		0.04 (J)	0.04 (J)		
9/24/2018	0.13		0.04 (J)	0.04 (J)		
10/22/2018	0.13					
10/23/2018			0.04 (J)	0.04 (J)		
12/3/2018	0.08 (J)		<0.125	<0.125		
2/5/2019	0.0934 (J)					
2/7/2019			<0.125	<0.125		
2/25/2019	<0.125		<0.125	<0.125		
8/20/2019	0.0889 (J)					
8/21/2019			<0.125	<0.125		
4/13/2020	0.103	<0.125				
4/15/2020			<0.125	<0.125		
8/24/2020	0.114	<0.125	<0.125	<0.125		
3/16/2021			<0.125	<0.125		
3/17/2021		<0.125				
3/24/2021	0.0725 (J)					
10/5/2021	<0.125	<0.125				
10/6/2021					8.34	
10/11/2021						1.43
10/12/2021			<0.125	<0.125		
5/9/2022	0.0824 (J)	<0.125				
5/10/2022			<0.125	<0.125		
5/17/2022					8.22	1.27
10/26/2022	<0.125	<0.125	<0.125	<0.125	7.57	1.36
6/5/2023		<0.125				
6/6/2023					7.65	
6/7/2023	<0.125					1.12
6/13/2023			<0.125	<0.125		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.000203	<0.000203	<0.000203	<0.000203			
2/6/2018	<0.000203						
2/7/2018		<0.000203	<0.000203				
2/8/2018				<0.000203			
4/23/2018	<0.000203						
4/24/2018		<0.000203	<0.000203	<0.000203			
6/26/2018	<0.000203						
6/27/2018		<0.000203	<0.000203	<0.000203	0.00158 (J)		
7/18/2018					0.00152 (J)		
8/6/2018					0.00143 (J)		
8/7/2018	<0.000203	<0.000203					
8/8/2018			<0.000203	<0.000203			
9/5/2018					0.00118 (J)		
9/24/2018					0.00156 (J)		
10/22/2018	<0.000203	<0.000203					
10/23/2018			<0.000203	<0.000203			
10/24/2018					0.00121 (J)	<0.000203	<0.000203
11/14/2018						<0.000203	<0.000203
11/28/2018						<0.000203	<0.000203
12/4/2018	<0.000203	<0.000203	<0.000203				
12/5/2018				<0.000203	0.00117 (J)	<0.000203	<0.000203
12/18/2018						<0.000203	<0.000203
1/3/2019						0.001 (J)	<0.000203
1/24/2019						0.00114 (J)	<0.000203
2/5/2019	<0.000203				0.00156 (J)	0.00135 (J)	<0.000203
2/6/2019		<0.000203	<0.000203	<0.000203			
6/24/2019						0.00125 (J)	
8/19/2019						<0.000203	<0.000203
8/20/2019					0.00176 (J)		
8/21/2019	<0.000203						
8/22/2019		<0.000203	<0.000203	<0.000203			
4/14/2020			<0.000203	<0.000203			
4/15/2020	<0.000203	<0.000203				<0.000203	
4/16/2020					0.00258 (J)		<0.000203
8/24/2020							<0.000203
8/25/2020	<0.000203				0.0018 (J)	0.0011 (J)	
8/26/2020		<0.000203	<0.000203	<0.000203			
3/16/2021	<0.000203						
3/22/2021					0.00143	0.0016	<0.000203
3/23/2021		<0.000203	<0.000203	<0.000203			
10/5/2021	<0.000203			<0.000203			
10/6/2021						0.00116	<0.000203
10/11/2021		<0.000203					
10/12/2021			<0.000203		0.00156		
5/9/2022					0.00194		<0.000203
5/10/2022	<0.000203	<0.000203		<0.000203			
5/17/2022			<0.000203			0.00178	
10/25/2022						0.000634	0.000196 (J)
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	0.00134		
6/5/2023	<0.000203						
6/6/2023					0.00202	0.00152	<0.000203
6/13/2023		<0.000203	<0.000203	<0.000203			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.000203				<0.000203
2/6/2018			<0.000203				<0.000203
4/23/2018			<0.000203				
4/24/2018							<0.000203
6/27/2018			<0.000203				<0.000203
8/7/2018			<0.000203				<0.000203
10/22/2018			<0.000203				<0.000203
12/3/2018							<0.000203
12/4/2018			<0.000203				
2/5/2019			<0.000203				<0.000203
6/18/2019							<0.000203
8/20/2019			<0.000203				<0.000203
4/13/2020							<0.000203
4/14/2020		<0.000203		<0.000203			
4/15/2020	<0.000203		<0.000203		<0.000203		
8/25/2020	<0.000203		<0.000203		<0.000203		
8/26/2020		<0.000203		<0.000203			<0.000203
3/16/2021	<0.000203						
3/22/2021					<0.000203		<0.000203
3/23/2021		0.000201 (J)		<0.000203			
3/24/2021			<0.000203				
3/30/2021						<0.000203	
10/5/2021							<0.000203
10/6/2021					<0.000203		
10/11/2021		0.00016 (J)	9E-05 (J)	8E-05 (J)			
10/12/2021	<0.000203					<0.000203	
5/10/2022	<0.000203						<0.000203
5/16/2022		0.00015 (J)	<0.000203		<0.000203	<0.000203	
5/17/2022				<0.000203			
10/25/2022			<0.000203		<0.000203	<0.000203	
10/26/2022	<0.000203	<0.000203		<0.000203			<0.000203
6/5/2023				<0.000203			<0.000203
6/6/2023			<0.000203				
6/7/2023					<0.000203	<0.000203	
6/12/2023	<0.000203	0.000234					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/6/2018	<0.000203		<0.000203				
2/8/2018				<0.000203	<0.000203	<0.000203	<0.000203
4/24/2018	<0.000203						
4/25/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/26/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
6/27/2018			<0.000203				
8/6/2018	<0.000203						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	<0.000203	<0.000203
10/22/2018	<0.000203						
10/23/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018	<0.000203			<0.000203			
12/4/2018					<0.000203	<0.000203	
12/5/2018			<0.000203				<0.000203
2/5/2019	<0.000203		<0.000203	<0.000203			
2/6/2019					<0.000203	<0.000203	<0.000203
8/20/2019	<0.000203		<0.000203	<0.000203			
8/21/2019					<0.000203	<0.000203	<0.000203
4/13/2020			<0.000203	<0.000203			
4/14/2020						<0.000203	<0.000203
4/15/2020	<0.000203	<0.000203			<0.000203		
8/24/2020			<0.000203				
8/26/2020	<0.000203	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203
3/16/2021			<0.000203				
3/17/2021				<0.000203			
3/23/2021					<0.000203	<0.000203	<0.000203
3/24/2021	<0.000203	<0.000203					
10/5/2021	<0.000203		<0.000203	<0.000203	<0.000203		
10/11/2021		<0.000203					
10/12/2021						<0.000203	<0.000203
5/9/2022			<0.000203				
5/10/2022				<0.000203	<0.000203		
5/11/2022		<0.000203				<0.000203	<0.000203
5/16/2022	<0.000203						
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/5/2023		<0.000203		<0.000203			
6/6/2023	<0.000203						
6/7/2023			<0.000203			<0.000203	
6/12/2023							<0.000203
6/13/2023					<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		<0.000203	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.000203				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.000203	<0.000203	<0.000203		
3/16/2021			0.00013 (J)	8.35E-05 (J)		
3/17/2021		0.000191 (J)				
3/24/2021	<0.000203					
10/5/2021	<0.000203	0.00012 (J)				
10/6/2021					0.00022	
10/11/2021						<0.000203
10/12/2021			<0.000203	0.00012 (J)		
5/9/2022	<0.000203	0.00018 (J)				
5/10/2022			<0.000203	0.00012 (J)		
5/17/2022					0.00022	<0.000203
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/5/2023		0.000394				
6/6/2023					<0.000203	
6/7/2023	<0.000203					0.000312
6/13/2023			7.8E-05 (J)	<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.02	<0.02	<0.02	<0.02			
2/6/2018	<0.02						
2/7/2018		<0.02	<0.02				
2/8/2018				<0.02			
4/23/2018	<0.02						
4/24/2018		<0.02	<0.02	<0.02			
6/26/2018	<0.02						
6/27/2018		<0.02	<0.02	<0.02	<0.02		
7/18/2018					<0.02		
8/6/2018					<0.02		
8/7/2018	<0.02	<0.02					
8/8/2018			<0.02	<0.02			
9/5/2018					<0.02		
9/24/2018					<0.02		
10/22/2018	<0.02	<0.02					
10/23/2018			<0.02	<0.02			
10/24/2018					<0.02	<0.02	<0.02
11/14/2018						<0.02	<0.02
11/28/2018						<0.02	0.0111 (J)
12/4/2018	<0.02	<0.02	<0.02				
12/5/2018				<0.02	<0.02	<0.02	0.0124 (J)
12/18/2018						<0.02	0.0121 (J)
1/3/2019						<0.02	0.0137 (J)
1/24/2019						<0.02	0.0134 (J)
2/5/2019	<0.02				<0.02	<0.02	0.0126 (J)
2/6/2019		<0.02	<0.02	<0.02			
6/24/2019						<0.02	
8/19/2019						<0.02	<0.02
8/20/2019					<0.02		
8/21/2019	<0.02						
8/22/2019		<0.02	<0.02	<0.02			
4/14/2020			<0.02	<0.02			
4/15/2020	<0.02	<0.02				<0.02	
4/16/2020					<0.02		0.0127 (J)
8/24/2020							<0.02
8/25/2020	<0.02				<0.02	<0.02	
8/26/2020		<0.02	<0.02	<0.02			
3/16/2021	<0.02						
3/22/2021					<0.02	<0.02	0.0083 (J)
3/23/2021		<0.02	<0.02	<0.02			
10/5/2021	<0.02			<0.02			
10/6/2021						<0.02	0.00881 (J)
10/11/2021		<0.02					
10/12/2021			<0.02		<0.02		
5/9/2022					<0.02		0.00859 (J)
5/10/2022	<0.02	<0.02		<0.02			
5/17/2022			<0.02			<0.02	
10/25/2022						<0.02	0.00897 (J)
10/26/2022	<0.02	<0.02	<0.02	<0.02	<0.02		
6/5/2023	<0.02						
6/6/2023					<0.02	<0.02	0.0101 (J)
6/13/2023		<0.02	<0.02	<0.02			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.092				<0.02
2/6/2018			0.0817				<0.02
4/23/2018			0.051				
4/24/2018							<0.02
6/27/2018			0.0734				<0.02
8/7/2018			0.0764				<0.02
10/22/2018			0.0804				<0.02
12/3/2018							<0.02
12/4/2018			0.0474				
2/5/2019			0.0545				<0.02
6/18/2019							<0.02
8/20/2019			0.0583				<0.02
4/13/2020							<0.02
4/14/2020		<0.02		<0.02			
4/15/2020	<0.02		0.0406		0.0783		
7/1/2020					0.069		
8/25/2020	<0.02		0.041		0.0666		
8/26/2020		<0.02		<0.02			<0.02
3/16/2021	<0.02						
3/22/2021					0.0666		<0.02
3/23/2021		<0.02		<0.02			
3/24/2021			0.0318				
3/30/2021						0.13	
10/5/2021							<0.02
10/6/2021					0.0685		
10/11/2021		<0.02	0.0225	<0.02			
10/12/2021	<0.02					0.129	
5/10/2022	<0.02						<0.02
5/16/2022		<0.02	0.0271		0.0612	0.111	
5/17/2022				<0.02			
10/25/2022			0.0304		0.0748	0.141	
10/26/2022	<0.02	<0.02		<0.02			<0.02
6/5/2023				<0.02			<0.02
6/6/2023			0.0258				
6/7/2023					0.0668	0.125	
6/12/2023	<0.02	<0.02					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02
2/6/2018	<0.02		<0.02				
2/8/2018				<0.02	<0.02	<0.02	<0.02
4/24/2018	<0.02						
4/25/2018			<0.02	<0.02	<0.02	<0.02	<0.02
6/26/2018	<0.02			<0.02	<0.02	<0.02	<0.02
6/27/2018			<0.02				
8/6/2018	<0.02						
8/7/2018			<0.02	<0.02			
8/8/2018					<0.02	<0.02	<0.02
10/22/2018	<0.02						
10/23/2018			<0.02	<0.02	<0.02	<0.02	<0.02
12/3/2018	<0.02			<0.02			
12/4/2018					<0.02	<0.02	
12/5/2018			<0.02				<0.02
2/5/2019	<0.02		<0.02	<0.02			
2/6/2019					<0.02	<0.02	<0.02
8/20/2019	<0.02		<0.02	<0.02			
8/21/2019					<0.02	<0.02	<0.02
4/13/2020			<0.02	<0.02			
4/14/2020						<0.02	<0.02
4/15/2020	<0.02	0.0219			<0.02		
8/24/2020			<0.02				
8/26/2020	<0.02	0.0203		<0.02	<0.02	<0.02	<0.02
3/16/2021			<0.02				
3/17/2021				<0.02			
3/23/2021					<0.02	<0.02	<0.02
3/24/2021	<0.02	0.0203					
10/5/2021	<0.02		<0.02	<0.02	<0.02		
10/11/2021		0.0198 (J)					
10/12/2021						<0.02	<0.02
5/9/2022			<0.02				
5/10/2022				<0.02	<0.02		
5/11/2022		0.0187 (J)				<0.02	<0.02
5/16/2022	<0.02						
10/26/2022	<0.02	0.0226	<0.02	<0.02	<0.02	<0.02	<0.02
6/5/2023		0.0189 (J)		<0.02			
6/6/2023	<0.02						
6/7/2023			<0.02			<0.02	
6/12/2023							<0.02
6/13/2023					<0.02		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.02		<0.02	<0.02		
7/18/2018	<0.02		<0.02	<0.02		
8/7/2018	<0.02					
8/8/2018			<0.02	<0.02		
9/5/2018	<0.02		<0.02	<0.02		
9/24/2018	<0.02		<0.02	<0.02		
10/22/2018	<0.02					
10/23/2018			<0.02	<0.02		
12/3/2018	<0.02		<0.02	<0.02		
2/5/2019	<0.02					
2/7/2019			<0.02	<0.02		
8/20/2019	<0.02					
8/21/2019			<0.02	<0.02		
4/13/2020	<0.02	<0.02				
4/15/2020			<0.02	<0.02		
8/24/2020	<0.02	<0.02	<0.02	<0.02		
3/16/2021			<0.02	<0.02		
3/17/2021		<0.02				
3/24/2021	<0.02					
10/5/2021	<0.02	<0.02				
10/6/2021					0.227	
10/11/2021						0.0544
10/12/2021			<0.02	<0.02		
5/9/2022	<0.02	<0.02				
5/10/2022			<0.02	<0.02		
5/17/2022					0.196	0.0499
10/26/2022	<0.02	<0.02	<0.02	<0.02	0.262	0.0616
6/5/2023		<0.02				
6/6/2023					0.205	
6/7/2023	<0.02					0.0517
6/13/2023			<0.02	<0.02		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0005	<0.0005	<0.0005	<0.0005			
2/6/2018	<0.0005						
2/7/2018		<0.0005	<0.0005				
2/8/2018				<0.0005			
4/23/2018	<0.0005						
4/24/2018		<0.0005	<0.0005	<0.0005			
6/26/2018	<0.0005						
6/27/2018		<0.0005	<0.0005	<0.0005	0.000661		
7/18/2018					0.000398 (J)		
8/6/2018					0.00042 (J)		
8/7/2018	<0.0005	<0.0005					
8/8/2018			<0.0005	<0.0005			
9/5/2018					0.00037 (J)		
9/24/2018					0.000329 (J)		
10/22/2018	<0.0005	<0.0005					
10/23/2018			<0.0005	<0.0005			
10/24/2018					<0.0005	<0.0005	<0.0005
11/14/2018						<0.0005	<0.0005
11/28/2018						<0.0005	<0.0005
12/4/2018	<0.0005	0.000302 (J)	<0.0005				
12/5/2018				<0.0005	0.000253 (J)	<0.0005	<0.0005
12/18/2018						<0.0005	<0.0005
1/3/2019						<0.0005	<0.0005
1/24/2019						0.000411 (J)	<0.0005
2/5/2019	<0.0005				0.000664	0.000473 (J)	<0.0005
2/6/2019		<0.0005	<0.0005	<0.0005			
8/19/2019						<0.0005	<0.0005
8/20/2019					0.000301 (J)		
8/21/2019	<0.0005						
8/22/2019		<0.0005	<0.0005	<0.0005			
4/14/2020			<0.0005	<0.0005			
4/15/2020	<0.0005	<0.0005				<0.0005	
4/16/2020					0.000558		<0.0005
8/24/2020							<0.0005
8/25/2020	<0.0005				<0.0005	<0.0005	
8/26/2020		<0.0005	<0.0005	<0.0005			
3/16/2021	<0.0005						
3/22/2021					0.000363 (J)	0.000775	<0.0005
3/23/2021		<0.0005	<0.0005	<0.0005			
10/5/2021	<0.0005			<0.0005			
10/6/2021						<0.0005	<0.0005
10/11/2021		<0.0005					
10/12/2021			<0.0005		<0.0005		
5/9/2022					0.00039 (J)		<0.0005
5/10/2022	<0.0005	<0.0005		<0.0005			
5/17/2022			<0.0005			<0.0005	
10/25/2022						<0.0005	<0.0005
10/26/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
6/5/2023	<0.0005						
6/6/2023					<0.0005	<0.0005	<0.0005
6/13/2023		<0.0005	<0.0005	<0.0005			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.0005				<0.0005
2/6/2018			<0.0005				<0.0005
4/23/2018			<0.0005				
4/24/2018							<0.0005
6/27/2018			<0.0005				<0.0005
8/7/2018			<0.0005				<0.0005
10/22/2018			<0.0005				<0.0005
12/3/2018							<0.0005
12/4/2018			<0.0005				
2/5/2019			<0.0005				<0.0005
8/20/2019			<0.0005				<0.0005
4/13/2020							<0.0005
4/14/2020		<0.0005		<0.0005			
4/15/2020	<0.0005		<0.0005		<0.0005		
8/25/2020	<0.0005		<0.0005		<0.0005		
8/26/2020		<0.0005		<0.0005			<0.0005
3/16/2021	<0.0005						
3/22/2021					<0.0005		<0.0005
3/23/2021		<0.0005		<0.0005			
3/24/2021			<0.0005				
3/30/2021						<0.0005	
10/5/2021							<0.0005
10/6/2021					<0.0005		
10/11/2021		<0.0005	<0.0005	<0.0005			
10/12/2021	<0.0005					<0.0005	
5/10/2022	<0.0005						<0.0005
5/16/2022		<0.0005	<0.0005		<0.0005	<0.0005	
5/17/2022				<0.0005			
10/25/2022			<0.0005		<0.0005	<0.0005	
10/26/2022	<0.0005	<0.0005		<0.0005			<0.0005
6/5/2023				<0.0005			<0.0005
6/6/2023			<0.0005				
6/7/2023					<0.0005	<0.0005	
6/12/2023	<0.0005	<0.0005					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/6/2018	<0.0005		<0.0005				
2/8/2018				<0.0005	<0.0005	<0.0005	<0.0005
4/24/2018	<0.0005						
4/25/2018			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6/26/2018	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
6/27/2018			<0.0005				
8/6/2018	<0.0005						
8/7/2018			<0.0005	<0.0005			
8/8/2018					<0.0005	<0.0005	<0.0005
10/22/2018	<0.0005						
10/23/2018			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
12/3/2018	<0.0005			<0.0005			
12/4/2018					0.00034 (J)	0.000284 (J)	
12/5/2018			<0.0005				<0.0005
2/5/2019	<0.0005		<0.0005	<0.0005			
2/6/2019					<0.0005	<0.0005	<0.0005
8/20/2019	<0.0005		<0.0005	<0.0005			
8/21/2019					<0.0005	<0.0005	<0.0005
4/13/2020			<0.0005	<0.0005			
4/14/2020						<0.0005	<0.0005
4/15/2020	<0.0005	<0.0005			<0.0005		
8/24/2020			<0.0005				
8/26/2020	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
3/16/2021			<0.0005				
3/17/2021				<0.0005			
3/23/2021					<0.0005	<0.0005	<0.0005
3/24/2021	<0.0005	<0.0005					
10/5/2021	<0.0005		<0.0005	<0.0005	<0.0005		
10/11/2021		<0.0005					
10/12/2021						<0.0005	<0.0005
5/9/2022			<0.0005				
5/10/2022				<0.0005	<0.0005		
5/11/2022		<0.0005				<0.0005	<0.0005
5/16/2022	<0.0005						
10/26/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6/5/2023		<0.0005		<0.0005			
6/6/2023	<0.0005						
6/7/2023			<0.0005			<0.0005	
6/12/2023							<0.0005
6/13/2023					<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.0005		<0.0005	<0.0005		
7/18/2018	<0.0005		<0.0005	<0.0005		
8/7/2018	<0.0005					
8/8/2018			<0.0005	<0.0005		
9/5/2018	<0.0005		<0.0005	<0.0005		
9/24/2018	<0.0005		<0.0005	<0.0005		
10/22/2018	<0.0005					
10/23/2018			<0.0005	<0.0005		
12/3/2018	<0.0005		<0.0005	<0.0005		
2/5/2019	<0.0005					
2/7/2019			<0.0005	<0.0005		
8/20/2019	<0.0005					
8/21/2019			<0.0005	<0.0005		
4/13/2020	<0.0005	<0.0005				
4/15/2020			<0.0005	<0.0005		
8/24/2020	<0.0005	<0.0005	<0.0005	<0.0005		
3/16/2021			<0.0005	<0.0005		
3/17/2021		<0.0005				
3/24/2021	<0.0005					
10/5/2021	<0.0005	<0.0005				
10/6/2021					<0.0005	
10/11/2021						<0.0005
10/12/2021			<0.0005	<0.0005		
5/9/2022	<0.0005	<0.0005				
5/10/2022			<0.0005	0.00286		
5/17/2022					<0.0005	<0.0005
10/26/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6/5/2023		<0.0005				
6/6/2023					<0.0005	
6/7/2023	<0.0005					<0.0005
6/13/2023			<0.0005	<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.01015	<0.01015	<0.01015	<0.01015			
2/6/2018	<0.01015						
2/7/2018		<0.01015	<0.01015				
2/8/2018				<0.01015			
4/23/2018	<0.01015						
4/24/2018		<0.01015	<0.01015	<0.01015			
6/26/2018	<0.01015						
6/27/2018		<0.01015	<0.01015	<0.01015	<0.01015		
7/18/2018					<0.01015		
8/6/2018					<0.01015		
8/7/2018	<0.01015	<0.01015					
8/8/2018			<0.01015	<0.01015			
9/5/2018					<0.01015		
9/24/2018					<0.01015		
10/22/2018	<0.01015	<0.01015					
10/23/2018			<0.01015	<0.01015			
10/24/2018					<0.01015	<0.01015	0.00507 (J)
11/14/2018						<0.01015	0.00358 (J)
11/28/2018						<0.01015	0.00322 (J)
12/4/2018	<0.01015	<0.01015	<0.01015				
12/5/2018				<0.01015	<0.01015	<0.01015	0.00256 (J)
12/18/2018						<0.01015	0.00215 (J)
1/3/2019						<0.01015	0.00257 (J)
1/24/2019						<0.01015	0.00211 (J)
2/5/2019	<0.01015				<0.01015	<0.01015	0.00205 (J)
2/6/2019		<0.01015	<0.01015	<0.01015			
6/24/2019						<0.01015	
8/19/2019						<0.01015	<0.01015
8/20/2019					<0.01015		
8/21/2019	<0.01015						
8/22/2019		<0.01015	<0.01015	<0.01015			
4/14/2020			<0.01015	<0.01015			
4/15/2020	<0.01015	<0.01015				<0.01015	
4/16/2020					<0.01015		<0.01015
8/24/2020							<0.01015
8/25/2020	<0.01015				<0.01015	<0.01015	
8/26/2020		<0.01015	<0.01015	<0.01015			
3/16/2021	<0.01015						
3/22/2021					<0.01015	<0.01015	0.000723
3/23/2021		0.000204	0.000124 (J)	<0.01015			
10/5/2021	<0.01015			<0.01015			
10/6/2021						<0.01015	0.00045
10/11/2021		0.00045					
10/12/2021			0.00015 (J)		<0.01015		
5/9/2022					<0.01015		0.00046
5/10/2022	<0.01015	0.00047		<0.01015			
5/17/2022			0.00012 (J)			<0.01015	
10/25/2022						<0.01015	0.000466
10/26/2022	0.000198 (J)	0.000438	<0.01015	<0.01015	<0.01015		
6/5/2023	<0.01015						
6/6/2023					<0.01015	<0.01015	<0.01015
6/13/2023		<0.01015	<0.01015	<0.01015			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.0254				<0.01015
2/6/2018			0.0239				<0.01015
4/23/2018			0.0165				
4/24/2018							<0.01015
6/27/2018			0.0302				<0.01015
8/7/2018			0.0209				<0.01015
10/22/2018			0.0198				<0.01015
12/3/2018							<0.01015
12/4/2018			0.0118				
2/5/2019			0.0196				<0.01015
6/18/2019							<0.01015
8/20/2019			0.027				<0.01015
4/13/2020							<0.01015
4/14/2020		<0.01015		<0.01015			
4/15/2020	<0.01015		0.0202		<0.01015		
8/25/2020	<0.01015		0.0269		0.00323 (J)		
8/26/2020		<0.01015		<0.01015			<0.01015
3/16/2021	<0.01015						
3/22/2021					0.00386		<0.01015
3/23/2021		<0.01015		0.000481			
3/24/2021			0.0164				
3/30/2021						0.000673	
10/5/2021							<0.01015
10/6/2021					0.00363		
10/11/2021		0.00012 (J)	0.0204	0.00031			
10/12/2021	<0.01015					0.00156	
5/10/2022	<0.01015						<0.01015
5/16/2022		<0.01015	0.0201		0.00357	0.00095	
5/17/2022				0.0004			
10/25/2022			0.0202		0.00361	0.00135	
10/26/2022	<0.01015	0.000136 (J)		0.00033			<0.01015
6/5/2023				<0.01015			<0.01015
6/6/2023			0.0203				
6/7/2023					<0.01015	<0.01015	
6/12/2023	<0.01015	<0.01015					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.01015		<0.01015	<0.01015	<0.01015	<0.01015	<0.01015
2/6/2018	<0.01015		<0.01015				
2/8/2018				<0.01015	<0.01015	<0.01015	<0.01015
4/24/2018	<0.01015						
4/25/2018			<0.01015	<0.01015	<0.01015	<0.01015	<0.01015
6/26/2018	<0.01015			<0.01015	<0.01015	<0.01015	<0.01015
6/27/2018			<0.01015				
8/6/2018	<0.01015						
8/7/2018			<0.01015	<0.01015			
8/8/2018					<0.01015	<0.01015	<0.01015
10/22/2018	<0.01015						
10/23/2018			<0.01015	<0.01015	<0.01015	<0.01015	<0.01015
12/3/2018	<0.01015			<0.01015			
12/4/2018					<0.01015	<0.01015	
12/5/2018			<0.01015				<0.01015
2/5/2019	<0.01015		<0.01015	<0.01015			
2/6/2019					<0.01015	<0.01015	<0.01015
8/20/2019	<0.01015		<0.01015	<0.01015			
8/21/2019					<0.01015	<0.01015	<0.01015
4/13/2020			<0.01015	<0.01015			
4/14/2020						<0.01015	<0.01015
4/15/2020	<0.01015	<0.01015			<0.01015		
8/24/2020			<0.01015				
8/26/2020	<0.01015	<0.01015		<0.01015	<0.01015	<0.01015	<0.01015
3/16/2021			<0.01015				
3/17/2021				<0.01015			
3/23/2021					<0.01015	0.000357	0.00027
3/24/2021	0.00118	0.00188					
10/5/2021	0.00111		0.00015 (J)	<0.01015	0.0001 (J)		
10/11/2021		0.00173					
10/12/2021						0.00032	0.00018 (J)
5/9/2022			0.00011 (J)				
5/10/2022				<0.01015	<0.01015		
5/11/2022		0.00135				0.0004	0.00024
5/16/2022	0.00122						
10/26/2022	0.00106	0.00135	0.000371	<0.01015	0.000169 (J)	0.000422	0.000276
6/5/2023		<0.01015		<0.01015			
6/6/2023	<0.01015						
6/7/2023			<0.01015			<0.01015	
6/12/2023							<0.01015
6/13/2023					<0.01015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.01015		<0.01015	<0.01015		
7/18/2018	<0.01015		<0.01015	<0.01015		
8/7/2018	<0.01015					
8/8/2018			<0.01015	<0.01015		
9/5/2018	<0.01015		<0.01015	<0.01015		
9/24/2018	<0.01015		<0.01015	<0.01015		
10/22/2018	<0.01015					
10/23/2018			<0.01015	<0.01015		
12/3/2018	<0.01015		<0.01015	<0.01015		
2/5/2019	<0.01015					
2/7/2019			<0.01015	<0.01015		
8/20/2019	<0.01015					
8/21/2019			<0.01015	<0.01015		
4/13/2020	<0.01015	<0.01015				
4/15/2020			<0.01015	<0.01015		
8/24/2020	<0.01015	<0.01015	<0.01015	<0.01015		
3/16/2021			<0.01015	<0.01015		
3/17/2021		<0.01015				
3/24/2021	9.88E-05 (J)					
10/5/2021	7E-05 (J)	0.00028				
10/6/2021					0.00107	
10/11/2021						0.00538
10/12/2021			<0.01015	<0.01015		
5/9/2022	<0.01015	<0.01015				
5/10/2022			<0.01015	<0.01015		
5/17/2022					0.00194	0.0028
10/26/2022	<0.01015	0.00022	<0.01015	<0.01015	0.00238	0.0019
6/5/2023		<0.01015				
6/6/2023					<0.01015	
6/7/2023	<0.01015					<0.01015
6/13/2023			<0.01015	<0.01015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (pH) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.5	6.83	6.81	5.6			
2/6/2018	6.48						
2/7/2018		6.82	6.74				
2/8/2018				5.44			
4/23/2018	6.36						
4/24/2018		6.74	6.62	5.41			
6/26/2018	6.32						
6/27/2018		6.67	6.69	5.45	3.95		
7/18/2018					4.02		
8/6/2018					4.07		
8/7/2018	6.32	6.72					
8/8/2018			6.67	5.46			
9/5/2018					4.07		
9/24/2018					4.07		
10/22/2018	6.2	6.73					
10/23/2018			6.73	5.47			
10/24/2018					4.1	5.27	7.92
11/14/2018						4.99	8.23
11/28/2018						4.74	8.95
12/4/2018	6.31	6.77	6.67				
12/5/2018				5.45	4.1	4.76	8.77
12/18/2018						4.57	8.99
1/3/2019						4.56	9.35
1/24/2019						4.45	9.42
2/5/2019	6.1				4.02	4.3	9.23
2/6/2019		6.67	6.58	5.31			
2/26/2019	6.11	6.77					
2/27/2019			6.56	5.4			
2/28/2019					3.94 (E)	4.35	9.48
8/19/2019						4.57	7.93
8/20/2019					4		
8/21/2019	6.01						
8/22/2019		6.37	6.26	5.35			
4/14/2020			6.63	5.39			
4/15/2020	5.65	6.85				4.49	
4/16/2020					3.93		8.1
8/24/2020							8.17
8/25/2020	6				4.03	4.2	
8/26/2020		6.73	6.38	5.63			
3/16/2021	5.87						
3/22/2021					3.25	3.45	7.85
3/23/2021		6.87	6.58	5.5			
10/5/2021	5.79			5.19			
10/6/2021						4.16	7.92
10/11/2021		6.72					
10/12/2021			6.66		4.04		
5/9/2022					3.6		7.29
5/10/2022	5.77	6.39		4.78			
5/17/2022			6.44			4.34	
10/25/2022						4.64	7.97
10/26/2022	5.86	6.84	6.2	5.52	4.07		
6/5/2023	5.68						

Time Series

Constituent: pH (pH) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
6/6/2023					3.82	3.65	7.8
6/13/2023		6.55	6.4	5.48			

Time Series

Constituent: pH (pH) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			6.61				6.54
2/6/2018			6.66				6.39
4/23/2018			6.54				
4/24/2018							6.02
6/27/2018			6.63				6.07
8/7/2018			6.57				6.28
10/22/2018			6.55				6.3
12/3/2018							6.38
12/4/2018			6.52				
2/5/2019			6.47				5.83
2/25/2019							5.93
2/26/2019			6.54				
8/20/2019			6.3				5.73
4/13/2020							5.83
4/14/2020		5.79		6.02			
4/15/2020	5.1		6.45		8.6		
7/1/2020					8.36		
8/25/2020	5.13		6.65		8.43		
8/26/2020		6.33		6.36			5.87
3/16/2021	5.08						
3/22/2021					8.34		5.51
3/23/2021		5.88		6.38			
3/24/2021			6.49				
3/30/2021						8.52	
10/5/2021							5.76
10/6/2021					8.36		
10/11/2021		6.08	6.59	6.36			
10/12/2021	5.12					8.62	
5/10/2022	4.87						5.95
5/16/2022		5.24	6.16		8.1	8.48	
5/17/2022				5.74			
10/25/2022			6.64		8.33	8.33	
10/26/2022	4.81	6.25		6.36			5.97
6/5/2023				6.13			5.66
6/6/2023			6.63				
6/7/2023					7.81	8.25	
6/12/2023	4.52	5.81					

Time Series

Constituent: pH (pH) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	6.73		6.32	6.38	6.62	6.81	6.93
2/6/2018	6.76		6.27				
2/8/2018				6.29	6.39	6.73	6.96
2/12/2018							6.88
4/24/2018	6.66						
4/25/2018			6.14	6.15	6.17	6.61	6.89
6/26/2018	6.61			6.09	6.38	6.59	6.85
6/27/2018			6.15				
8/6/2018	6.68						
8/7/2018			6.18	6.16			
8/8/2018					6.56	6.6	6.94
10/22/2018	6.63						
10/23/2018			6.15	6.1	6.54	6.64	6.93
12/3/2018	6.67			6.09			
12/4/2018					6.33	6.68	
12/5/2018			6.15				6.94
2/5/2019	6.63		6.08	6.04			
2/6/2019					6.13	6.62	6.73
2/26/2019	6.64			6.17			
2/27/2019			6.11		6.12	6.56	6.85
8/20/2019	6.33		6.11	5.4			
8/21/2019					5.97	6.16	6.61
4/13/2020			6.18	5.82			
4/14/2020						6.49	7.02
4/15/2020	6.77	7.93			6.16		
8/24/2020			6.11				
8/26/2020	6.68	7.83		5.96	6.11	6.29	6.75
3/16/2021			6.22				
3/17/2021				5.92			
3/23/2021					6.04	6.47	6.85
3/24/2021	6.86	8.01					
10/5/2021	6.58		6.24	5.74	6.06		
10/11/2021		7.82					
10/12/2021						6.61	6.9
5/9/2022			5.43				
5/10/2022				5.51	5.08		
5/11/2022		7.91				6.25	6.7
5/16/2022	6.61						
10/26/2022	6.67	7.92	6.44	5.98	6.44	6.68	7.07
6/5/2023		7.72		5.68			
6/6/2023	6.74						
6/7/2023			6.25			6.37	
6/12/2023							6.81
6/13/2023					5.98		

Time Series

Constituent: pH (pH) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	6.79		5.81	5.44		
7/18/2018	6.8		5.74	5.58		
8/7/2018	6.73					
8/8/2018			5.7	5.55		
9/5/2018	6.75		5.61	5.56		
9/24/2018	6.83		5.59	5.57		
10/22/2018	6.76					
10/23/2018			5.6	5.55		
12/3/2018	6.6		5.73	5.6		
2/5/2019	6.66					
2/7/2019			5.44	5.51		
2/25/2019	6.6		5.46	5.54		
8/20/2019	6.3					
8/21/2019			5.13	5.44		
4/13/2020	6.66	5.84				
4/15/2020			5.31	5.52		
8/24/2020	6.64	6	4.65	5.38		
3/16/2021			5.47	5.56		
3/17/2021		5.34				
3/24/2021	5.85					
10/5/2021	6.46	5.72				
10/6/2021					8.53	
10/11/2021						8.13
10/12/2021			5.33	5.41		
5/9/2022	6.03	4.35				
5/10/2022			5.38	5.57		
5/17/2022					8.31	8.29
10/26/2022	6.66	6.16	5.31	5.43	8.31	8.11
6/5/2023		5.2				
6/6/2023					8.41	
6/7/2023	5.9					7.41
6/13/2023			5.1	5.15		

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001015	<0.001015	<0.001015	<0.001015			
2/6/2018	<0.001015						
2/7/2018		<0.001015	<0.001015				
2/8/2018				<0.001015			
4/23/2018	<0.001015						
4/24/2018		<0.001015	<0.001015	<0.001015			
6/26/2018	<0.001015						
6/27/2018		<0.001015	<0.001015	<0.001015	<0.001015		
7/18/2018					<0.001015		
8/6/2018					<0.001015		
8/7/2018	<0.001015	<0.001015					
8/8/2018			<0.001015	<0.001015			
9/5/2018					<0.001015		
9/24/2018					<0.001015		
10/22/2018	<0.001015	<0.001015					
10/23/2018			<0.001015	<0.001015			
10/24/2018					<0.001015	<0.001015	<0.001015
11/14/2018						<0.001015	<0.001015
11/28/2018						<0.001015	<0.001015
12/4/2018	<0.001015	<0.001015	<0.001015				
12/5/2018				<0.001015	0.00208 (J)	0.00349 (J)	<0.001015
12/18/2018						0.00395 (J)	<0.001015
1/3/2019						0.00488 (J)	<0.001015
1/24/2019						0.00707 (J)	<0.001015
2/5/2019	<0.001015				0.00387 (J)	0.00938 (J)	<0.001015
2/6/2019		<0.001015	<0.001015	<0.001015			
6/24/2019						0.00563 (J)	
8/19/2019						0.00316 (J)	<0.001015
8/20/2019					0.00328 (J)		
8/21/2019	<0.001015						
8/22/2019		<0.001015	<0.001015	<0.001015			
4/14/2020			<0.001015	<0.001015			
4/15/2020	<0.001015	<0.001015				0.00434 (J)	
4/16/2020					0.00608 (J)		<0.001015
8/24/2020							<0.001015
8/25/2020	<0.001015				0.00247 (J)	0.00262 (J)	
8/26/2020		<0.001015	<0.001015	<0.001015			
3/16/2021	<0.001015						
3/22/2021					0.00488	0.0134	<0.001015
3/23/2021		<0.001015	<0.001015	<0.001015			
10/5/2021	<0.001015			<0.001015			
10/6/2021						0.00262	<0.001015
10/11/2021		<0.001015					
10/12/2021			<0.001015		0.00287		
5/9/2022					0.00394		<0.001015
5/10/2022	<0.001015	<0.001015		<0.001015			
5/17/2022			<0.001015			0.00609	
10/25/2022						0.00118	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	0.00151		
6/5/2023	<0.001015						
6/6/2023					0.0022	0.00301	<0.001015
6/13/2023		<0.001015	<0.001015	<0.001015			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.001015				<0.001015
2/6/2018			<0.001015				<0.001015
4/23/2018			<0.001015				
4/24/2018							<0.001015
6/27/2018			<0.001015				<0.001015
8/7/2018			<0.001015				<0.001015
10/22/2018			<0.001015				<0.001015
12/3/2018							<0.001015
12/4/2018			<0.001015				
2/5/2019			<0.001015				<0.001015
6/18/2019							<0.001015
8/20/2019			<0.001015				<0.001015
4/13/2020							<0.001015
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.001015		<0.001015		<0.001015		
8/25/2020	<0.001015		<0.001015		<0.001015		
8/26/2020		<0.001015		<0.001015			<0.001015
3/16/2021	0.000935 (J)						
3/22/2021					<0.001015		<0.001015
3/23/2021		<0.001015		<0.001015			
3/24/2021			<0.001015				
3/30/2021						<0.001015	
10/5/2021							<0.001015
10/6/2021					<0.001015		
10/11/2021		<0.001015	<0.001015	<0.001015			
10/12/2021	0.00068 (J)					<0.001015	
5/10/2022	0.00125						<0.001015
5/16/2022		<0.001015	<0.001015		<0.001015	<0.001015	
5/17/2022				<0.001015			
10/25/2022			<0.001015		<0.001015	<0.001015	
10/26/2022	0.00117	<0.001015		<0.001015			<0.001015
6/5/2023				<0.001015			<0.001015
6/6/2023			<0.001015				
6/7/2023					<0.001015	<0.001015	
6/12/2023	0.000931 (J)	<0.001015					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.001015	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.001015			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.001015			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.001015			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.001015			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.001015			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.001015			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
3/16/2021			<0.001015				
3/17/2021				<0.001015			
3/23/2021					<0.001015	<0.001015	<0.001015
3/24/2021	<0.001015	<0.001015					
10/5/2021	<0.001015		<0.001015	<0.001015	<0.001015		
10/11/2021		<0.001015					
10/12/2021						<0.001015	<0.001015
5/9/2022			<0.001015				
5/10/2022				<0.001015	<0.001015		
5/11/2022		<0.001015				<0.001015	<0.001015
5/16/2022	<0.001015						
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/5/2023		<0.001015		<0.001015			
6/6/2023	<0.001015						
6/7/2023			<0.001015			<0.001015	
6/12/2023							<0.001015
6/13/2023					<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.001015	<0.001015		
7/18/2018	<0.001015		<0.001015	<0.001015		
8/7/2018	<0.001015					
8/8/2018			<0.001015	<0.001015		
9/5/2018	<0.001015		<0.001015	<0.001015		
9/24/2018	<0.001015		<0.001015	<0.001015		
10/22/2018	<0.001015					
10/23/2018			<0.001015	<0.001015		
12/3/2018	<0.001015		<0.001015	<0.001015		
2/5/2019	<0.001015					
2/7/2019			<0.001015	<0.001015		
8/20/2019	<0.001015					
8/21/2019			<0.001015	<0.001015		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.001015	<0.001015		
8/24/2020	<0.001015	<0.001015	<0.001015	<0.001015		
3/16/2021			<0.001015	<0.001015		
3/17/2021		<0.001015				
3/24/2021	<0.001015					
10/5/2021	<0.001015	<0.001015				
10/6/2021					<0.001015	
10/11/2021						<0.001015
10/12/2021			<0.001015	<0.001015		
5/9/2022	<0.001015	<0.001015				
5/10/2022			<0.001015	<0.001015		
5/17/2022					<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/5/2023		<0.001015				
6/6/2023					<0.001015	
6/7/2023	<0.001015					<0.001015
6/13/2023			<0.001015	<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	650	11	83	200			
2/6/2018	560						
2/7/2018		19	84				
2/8/2018				200			
4/23/2018	640						
4/24/2018		27	98	210			
6/26/2018	670						
6/27/2018		<5	95	240	120		
7/18/2018					120		
8/6/2018					110		
8/7/2018	660	<5					
8/8/2018			110	260			
9/5/2018					86		
9/24/2018					80		
10/22/2018	580	<5					
10/23/2018			78	280			
10/24/2018					68	44	16
11/14/2018						44	13
11/28/2018						46	11
12/4/2018	580	11	97				
12/5/2018				280	54	51	12
12/18/2018						76	11
1/3/2019						94	10
1/24/2019						135	10.2
2/5/2019	702				126	183	10.4
2/6/2019		16.8	113	239			
2/26/2019	748	38.4					
2/27/2019			135	257			
2/28/2019					207	192	9.86
6/24/2019						129 (D)	
8/19/2019						66.6	8.74
8/20/2019					106		
8/21/2019	708						
8/22/2019		6.74	305	339			
4/14/2020			146	155			
4/15/2020	647	50.7				92.8	
4/16/2020					191		11.5
8/24/2020							10
8/25/2020	642				98.4	74.1	
8/26/2020		10.5	280	282			
3/16/2021	593						
3/22/2021					83.8	128	10.6
3/23/2021		60.1	135	160			
10/5/2021	567			195			
10/6/2021						93.5	10.2
10/11/2021		7.75					
10/12/2021			142		95.7		
5/9/2022					125		10
5/10/2022	508	11.6		193			
5/17/2022			145			139	
10/25/2022						37.099998	9.25
10/26/2022	512	4.42	278	230	50.700001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
6/5/2023	406						
6/6/2023					116	121	12.4
6/13/2023		21.9	150	212			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			210				250
2/6/2018			190				230
4/23/2018			140				
4/24/2018							260
6/27/2018			130				230
8/7/2018			150				200
10/22/2018			160				190
12/3/2018							200
12/4/2018			170				
2/5/2019			145				263
2/25/2019							246
2/26/2019			148				
6/18/2019							245
8/20/2019			110				222
4/13/2020							256
4/14/2020		75.3		135			
4/15/2020	67.1		116		4.18		
8/25/2020	52.6		114		4.83		
8/26/2020		72.9		112			246
3/16/2021	18.5						
3/22/2021					2.04		254
3/23/2021		71.8		168			
3/24/2021			101				
3/30/2021						10.3	
10/5/2021							228
10/6/2021					2.44		
10/11/2021		61.7	112	174			
10/12/2021	36.7					15.2	
5/10/2022	42.1						215
5/16/2022		60.2	93.1		1.15 (J)	10	
5/17/2022				187			
10/25/2022			111		2.13	18	
10/26/2022	37.299999	55.099998		158			206
6/5/2023				172			171
6/6/2023			73.900002				
6/7/2023					2.39	33.599998	
6/12/2023	36.900002	60.400002					

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<5		19	10	14	6.5	9
2/6/2018	<5		20				
2/8/2018				11	10	8.9	
2/12/2018							8.3
4/24/2018	<5						
4/25/2018			22	13	11	7.9	12
6/26/2018	<5			11	11	7.5	8.5
6/27/2018			18				
8/6/2018	<5						
8/7/2018			20	12			
8/8/2018					13	7.3	6.7
10/22/2018	<5						
10/23/2018			18	11	13	7.8	9.4
12/3/2018	<5			12			
12/4/2018					9.8	8.2	
12/5/2018			20				7.8
2/5/2019	5.38		24.3	13.9			
2/6/2019					10.8	9.53	17
2/26/2019	5.1			14.1			
2/27/2019			24.7		8.98	8.25	12.4
8/20/2019	7.34		21.3	12.3			
8/21/2019					11.8	10.8	11.3
4/13/2020			21.9	13.9			
4/14/2020						12.5	15.9
4/15/2020	17.2	1.25			7.95		
8/24/2020			21.2				
8/26/2020	15.5	1.21		13.1	9.19	16.1	12.9
3/16/2021			18.8				
3/17/2021				13.7			
3/23/2021					8.08	9.21	15.7
3/24/2021	19.9	1.39					
10/5/2021	37.8		14.4	14.2	9.19		
10/11/2021		1.7					
10/12/2021						16	18
5/9/2022			15.5				
5/10/2022				14.8	7.13		
5/11/2022		1.73 (J)				11.8	17.7
5/16/2022	51.8						
10/26/2022	61.799999	2.36	16.1	12.2	11.4	10.1	13.8
6/5/2023		3.68		15.1			
6/6/2023	88.699997						
6/7/2023			27.5			12.5	
6/12/2023							18.9
6/13/2023					6.16		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	2.2 (J)		<2	<5		
7/18/2018	2.5 (J)		<2	<5		
8/7/2018	<5					
8/8/2018			<2	<5		
9/5/2018	1.4 (J)		<2	<5		
9/24/2018	<5		<2	<5		
10/22/2018	1.7 (J)					
10/23/2018			<2	<5		
12/3/2018	2.1 (J)		<2	<5		
2/5/2019	3.99					
2/7/2019			0.639 (J)	1.69		
2/25/2019	4.01		<2	1.53		
8/20/2019	3.73					
8/21/2019			1.21	1.62		
4/13/2020	3.83	1.48				
4/15/2020			0.554 (J)	1.68		
8/24/2020	4.16	3.88	<2	1.31		
3/16/2021			1.02	1.7		
3/17/2021		1.64				
3/24/2021	2.88					
10/5/2021	2.17	5.29				
10/6/2021					8.35	
10/11/2021						13.8
10/12/2021			0.895 (J)	1.34		
5/9/2022	2.51	1.15 (J)				
5/10/2022			1.02 (J)	1.28 (J)		
5/17/2022					19.1	6.55
10/26/2022	3.43	3.32	0.992 (J)	1.7 (J)	23.9	3.55
6/5/2023		1.31 (J)				
6/6/2023					18.700001	
6/7/2023	2.38					6.49
6/13/2023			<2	1.14 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.000203	<0.000203	<0.000203	<0.000203			
2/6/2018	<0.000203						
2/7/2018		<0.000203	<0.000203				
2/8/2018				<0.000203			
4/23/2018	<0.000203						
4/24/2018		<0.000203	<0.000203	<0.000203			
6/26/2018	<0.000203						
6/27/2018		<0.000203	<0.000203	<0.000203	<0.000203		
7/18/2018					<0.000203		
8/6/2018					<0.000203		
8/7/2018	<0.000203	<0.000203					
8/8/2018			<0.000203	<0.000203			
9/5/2018					<0.000203		
9/24/2018					<0.000203		
10/22/2018	<0.000203	<0.000203					
10/23/2018			<0.000203	<0.000203			
10/24/2018					<0.000203	<0.000203	<0.000203
11/14/2018						<0.000203	<0.000203
11/28/2018						<0.000203	<0.000203
12/4/2018	<0.000203	<0.000203	<0.000203				
12/5/2018				<0.000203	<0.000203	<0.000203	<0.000203
12/18/2018						<0.000203	<0.000203
1/3/2019						<0.000203	<0.000203
1/24/2019						<0.000203	<0.000203
2/5/2019	<0.000203				<0.000203	<0.000203	<0.000203
2/6/2019		<0.000203	<0.000203	<0.000203			
6/24/2019						<0.000203	
8/19/2019						<0.000203	<0.000203
8/20/2019					<0.000203		
8/21/2019	<0.000203						
8/22/2019		<0.000203	<0.000203	<0.000203			
4/14/2020			<0.000203	<0.000203			
4/15/2020	<0.000203	<0.000203				<0.000203	
4/16/2020					<0.000203		<0.000203
8/24/2020							<0.000203
8/25/2020	<0.000203				<0.000203	<0.000203	
8/26/2020		<0.000203	<0.000203	<0.000203			
3/16/2021	0.000112 (J)						
3/22/2021					<0.000203	<0.000203	<0.000203
3/23/2021		<0.000203	<0.000203	<0.000203			
10/5/2021	<0.000203			<0.000203			
10/6/2021						<0.000203	<0.000203
10/11/2021		<0.000203					
10/12/2021			<0.000203		<0.000203		
5/9/2022					<0.000203		<0.000203
5/10/2022	0.00013 (J)	<0.000203		<0.000203			
5/17/2022			<0.000203			<0.000203	
10/25/2022						<0.000203	7E-05 (J)
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203		
6/5/2023	0.000101 (J)						
6/6/2023					<0.000203	<0.000203	<0.000203
6/13/2023		<0.000203	<0.000203	<0.000203			

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.000203				<0.000203
2/6/2018			<0.000203				<0.000203
4/23/2018			<0.000203				
4/24/2018							<0.000203
6/27/2018			<0.000203				<0.000203
8/7/2018			<0.000203				<0.000203
10/22/2018			0.000213 (J)				<0.000203
12/3/2018							<0.000203
12/4/2018			<0.000203				
2/5/2019			0.000256 (J)				<0.000203
6/18/2019							<0.000203
8/20/2019			0.000322 (J)				<0.000203
4/13/2020							<0.000203
4/14/2020		<0.000203		<0.000203			
4/15/2020	<0.000203		0.000318 (J)		<0.000203		
8/25/2020	<0.000203		0.000347 (J)		<0.000203		
8/26/2020		<0.000203		<0.000203			<0.000203
3/16/2021	<0.000203						
3/22/2021					<0.000203		0.000121 (J)
3/23/2021		<0.000203		0.000145 (J)			
3/24/2021			0.00037				
3/30/2021						<0.000203	
10/5/2021							0.00014 (J)
10/6/2021					<0.000203		
10/11/2021		<0.000203	0.00029	0.00013 (J)			
10/12/2021	<0.000203					<0.000203	
5/10/2022	<0.000203						0.00011 (J)
5/16/2022		<0.000203	0.00041		<0.000203	<0.000203	
5/17/2022				0.00013 (J)			
10/25/2022			0.000361		<0.000203	<0.000203	
10/26/2022	<0.000203	<0.000203		0.000149 (J)			0.00011 (J)
6/5/2023				0.000125 (J)			0.000104 (J)
6/6/2023			0.000425				
6/7/2023					<0.000203	<0.000203	
6/12/2023	<0.000203	<0.000203					

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/6/2018	<0.000203		<0.000203				
2/8/2018				<0.000203	<0.000203	<0.000203	<0.000203
4/24/2018	<0.000203						
4/25/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/26/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
6/27/2018			<0.000203				
8/6/2018	<0.000203						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	<0.000203	<0.000203
10/22/2018	<0.000203						
10/23/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018	<0.000203			<0.000203			
12/4/2018					<0.000203	<0.000203	
12/5/2018			<0.000203				<0.000203
2/5/2019	<0.000203		<0.000203	<0.000203			
2/6/2019					<0.000203	<0.000203	<0.000203
8/20/2019	<0.000203		<0.000203	<0.000203			
8/21/2019					<0.000203	<0.000203	<0.000203
4/13/2020			<0.000203	<0.000203			
4/14/2020						<0.000203	<0.000203
4/15/2020	<0.000203	<0.000203			<0.000203		
8/24/2020			<0.000203				
8/26/2020	<0.000203	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203
3/16/2021			<0.000203				
3/17/2021				<0.000203			
3/23/2021					<0.000203	<0.000203	<0.000203
3/24/2021	<0.000203	<0.000203					
10/5/2021	<0.000203		<0.000203	<0.000203	<0.000203		
10/11/2021		<0.000203					
10/12/2021						<0.000203	<0.000203
5/9/2022			<0.000203				
5/10/2022				<0.000203	<0.000203		
5/11/2022		<0.000203				<0.000203	<0.000203
5/16/2022	<0.000203						
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/5/2023		<0.000203		<0.000203			
6/6/2023	<0.000203						
6/7/2023			<0.000203			<0.000203	
6/12/2023							<0.000203
6/13/2023					<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		<0.000203	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.000203				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.000203	<0.000203	<0.000203		
3/16/2021			<0.000203	<0.000203		
3/17/2021		<0.000203				
3/24/2021	<0.000203					
10/5/2021	<0.000203	<0.000203				
10/6/2021					<0.000203	
10/11/2021						<0.000203
10/12/2021			<0.000203	<0.000203		
5/9/2022	<0.000203	<0.000203				
5/10/2022			<0.000203	<0.000203		
5/17/2022					<0.000203	<0.000203
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/5/2023		<0.000203				
6/6/2023					<0.000203	
6/7/2023	<0.000203					<0.000203
6/13/2023			<0.000203	<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1300	215	312	371			
2/6/2018	1310						
2/7/2018		237	323				
2/8/2018				367			
4/23/2018	1210						
4/24/2018		242	324	365			
6/26/2018	1250						
6/27/2018		194	333	421	219		
7/18/2018					195		
8/6/2018					175		
8/7/2018	1220	195					
8/8/2018			346	479			
9/5/2018					153		
9/24/2018					127		
10/22/2018	1150	184					
10/23/2018			311	507			
10/24/2018					125	107	184
11/14/2018						96.7	170
11/28/2018						102	167
12/4/2018	1090	215	343				
12/5/2018				479	101	103	185
12/18/2018						126	164
1/3/2019						191	167
1/24/2019						212	137
2/5/2019	1200				180	269	138
2/6/2019		208	317	399			
2/26/2019	1210	252					
2/27/2019			360	422			
2/28/2019					287	261	140
6/24/2019						203.5 (D)	
8/19/2019						121	240
8/20/2019					265		
8/21/2019	1200						
8/22/2019		194	555	501			
4/14/2020			372	278			
4/15/2020	1060	262				155	
4/16/2020					280		166
8/24/2020							162
8/25/2020	1060				160	131	
8/26/2020		186	517	472			
3/16/2021	1040						
3/22/2021					126	204	157
3/23/2021		273	361	286			
10/5/2021	964			378			
10/6/2021						136	182
10/11/2021		190					
10/12/2021			352		142		
5/9/2022					185		152
5/10/2022	780	199		319			
5/17/2022			367			226	
10/25/2022						72.699997	159
10/26/2022	840	202	545	402	98		

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
6/5/2023	710						
6/6/2023					214	220	138
6/13/2023		199	374	370			

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			574				628
2/6/2018			572				556
4/23/2018			414				
4/24/2018							510
6/27/2018			440				486
8/7/2018			485				487
10/22/2018			484				450
12/3/2018							492
12/4/2018			504				
2/5/2019			366				428
2/25/2019							441
2/26/2019			372				
6/18/2019							422
8/20/2019			369				416
4/13/2020							433
4/14/2020		190		323			
4/15/2020	126		300		324		
8/25/2020	107		339		321		
8/26/2020		202		310			455
3/16/2021	52						
3/22/2021					314		427
3/23/2021		174		385			
3/24/2021			287				
3/30/2021						528	
10/5/2021							389
10/6/2021					317		
10/11/2021		202	337	384			
10/12/2021	78.7					536	
5/10/2022	90						362
5/16/2022		138	244		316	508	
5/17/2022				401			
10/25/2022			337		330	588	
10/26/2022	82.699997	207		364			328
6/5/2023				408			334
6/6/2023			246				
6/7/2023					324	658	
6/12/2023	84.699997	162					

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	189		215	136	137	253	183
2/6/2018	206		204				
2/8/2018				122	124	229	
2/12/2018							201
4/24/2018	193						
4/25/2018			192	102	106	223	180
6/26/2018	180			106	129	232	191
6/27/2018			180				
8/6/2018	182						
8/7/2018			183	71.3			
8/8/2018					142	208	192
10/22/2018	204						
10/23/2018			169	105	142	209	185
12/3/2018	168			102			
12/4/2018					121	213	
12/5/2018			177				200
2/5/2019	158		198	107			
2/6/2019					108	212	151
2/26/2019	191			99.3			
2/27/2019			185		103	211	186
8/20/2019	164		174	98.7			
8/21/2019					133	226	200
4/13/2020			192	90.7			
4/14/2020						222	187
4/15/2020	170	218			102		
8/24/2020			175				
8/26/2020	168	239		91.3	109	215	192
3/16/2021			184				
3/17/2021				80			
3/23/2021					92.7	200	178
3/24/2021	180	222					
10/5/2021	200		168	96.7	113		
10/11/2021		220					
10/12/2021						245	169
5/9/2022			174				
5/10/2022				73.3	82.7		
5/11/2022		220				216	181
5/16/2022	218						
10/26/2022	247	221	178	91.300003	121	226	194
6/5/2023		227		94			
6/6/2023	263						
6/7/2023			202			226	
6/12/2023							185
6/13/2023					74.699997		

Time Series

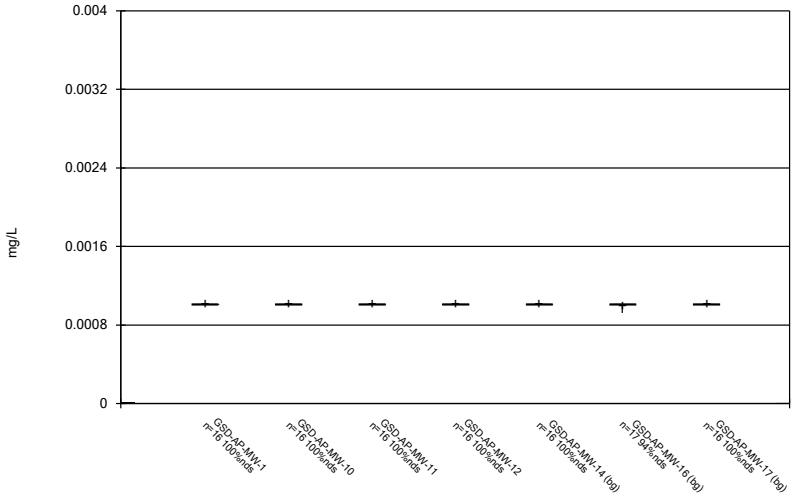
Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/20/2023 11:44 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	144		48.7	44		
7/18/2018	156		46	42.7		
8/7/2018	140					
8/8/2018			48	46		
9/5/2018	154		47.3	67.3		
9/24/2018	165		44.7	49.3		
10/22/2018	148					
10/23/2018			35.3	31.3		
12/3/2018	127		48.7	46		
2/5/2019	113					
2/7/2019			42.7	32.7		
2/25/2019	106		40.7	31.3		
8/20/2019	141					
8/21/2019			46	42.7		
4/13/2020	104	88				
4/15/2020			41.3	37.3		
8/24/2020	114	115	42.7	37.3		
3/16/2021			42	41.3		
3/17/2021		53.3				
3/24/2021	94					
10/5/2021	108	101				
10/6/2021					864	
10/11/2021						230
10/12/2021			38.7	35.3		
5/9/2022	85.3	53.3				
5/10/2022			33.3	33.3		
5/17/2022					921	238
10/26/2022	96	119	45.299999	38	952	239
6/5/2023		84				
6/6/2023					948	
6/7/2023	96.699997					235
6/13/2023			36.700001	36		

FIGURE B.

Box & Whiskers Plot

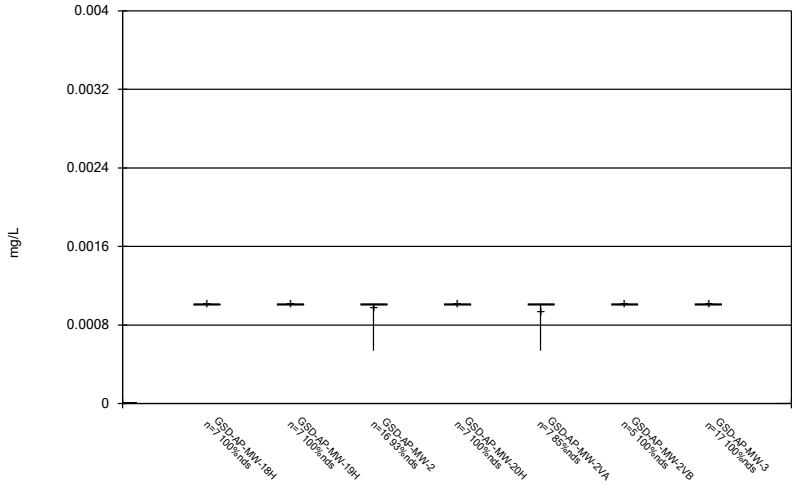


Constituent: Antimony Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

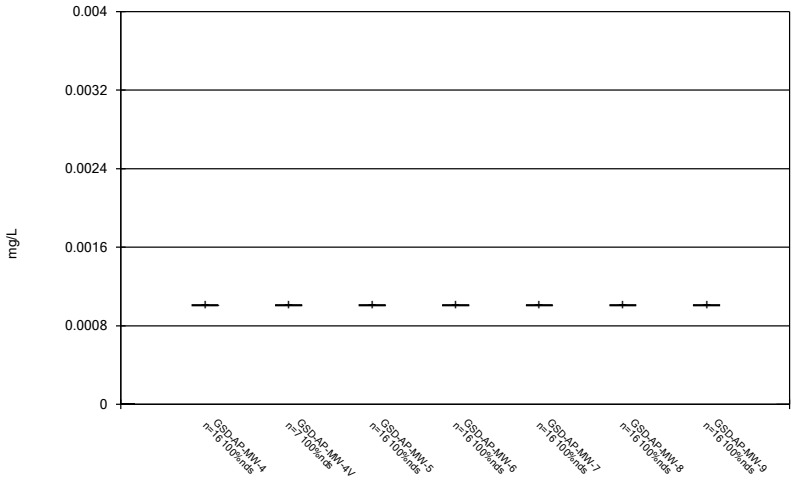


Constituent: Antimony Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

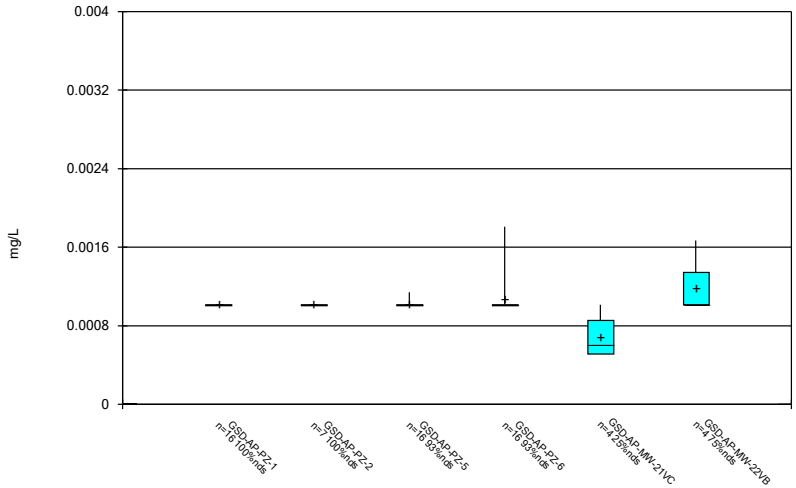


Constituent: Antimony Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

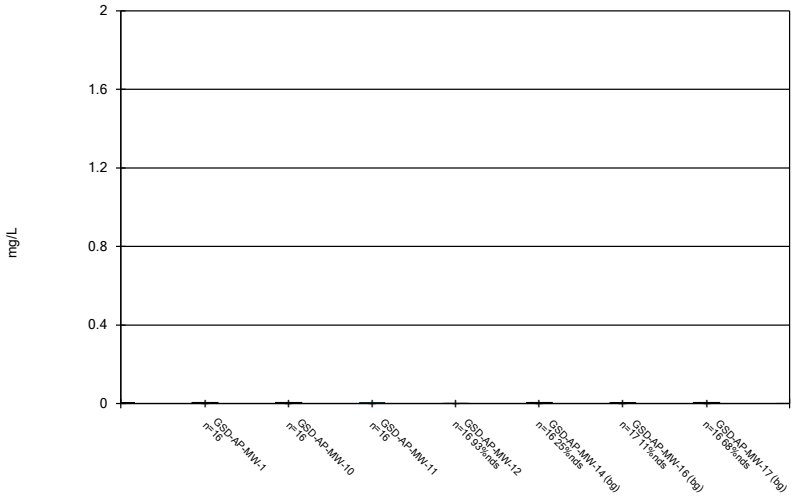
Box & Whiskers Plot



Constituent: Antimony Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

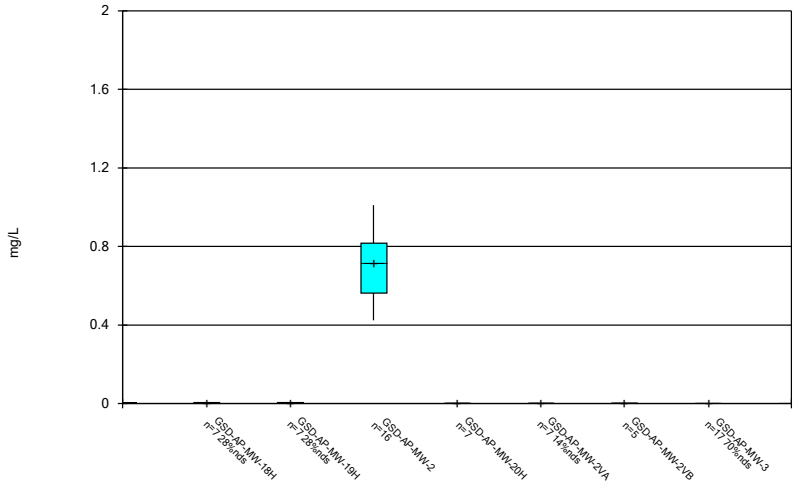


Constituent: Arsenic Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

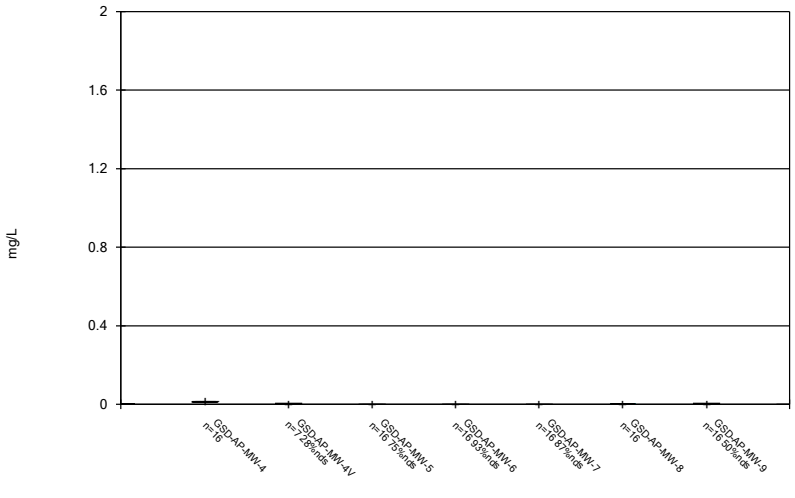


Constituent: Arsenic Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

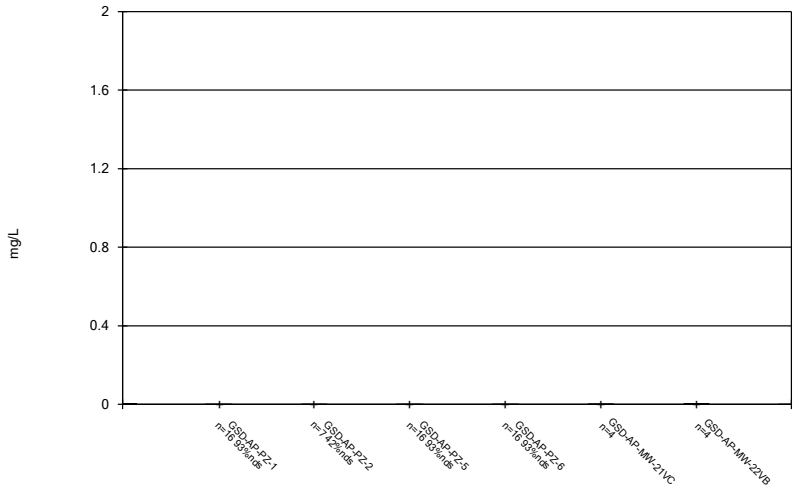


Constituent: Arsenic Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

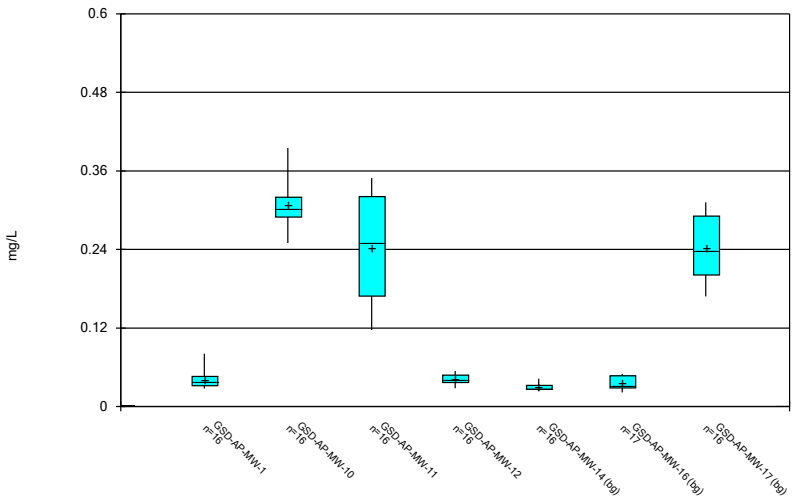
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

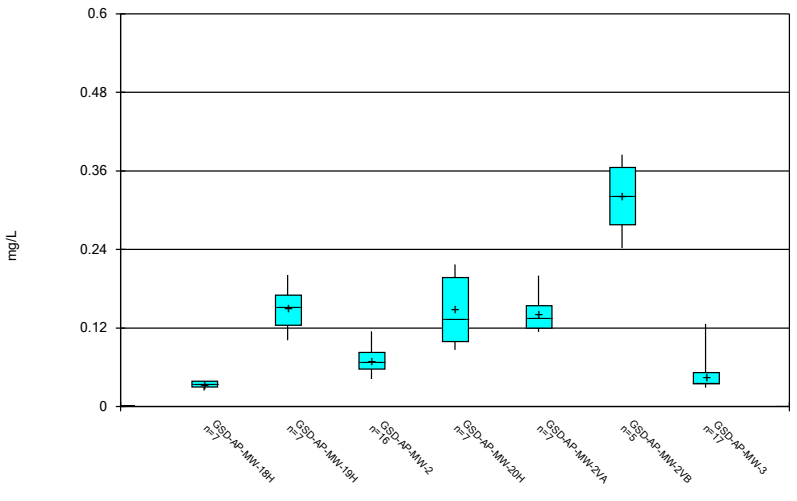


Constituent: Barium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

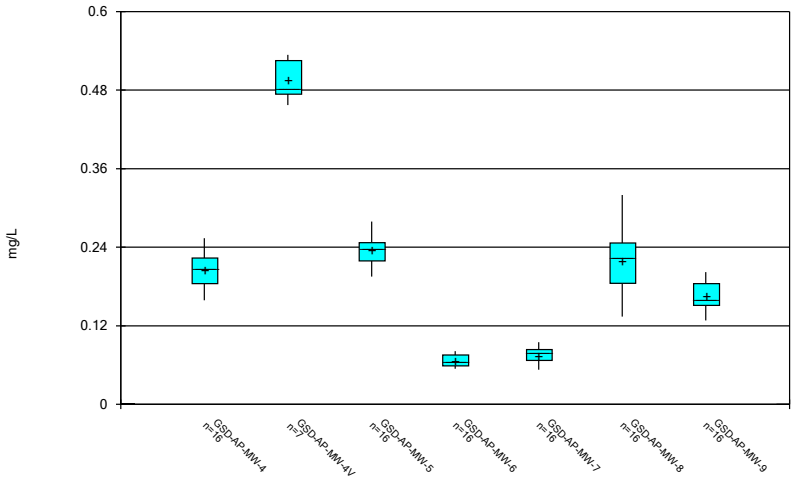


Constituent: Barium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

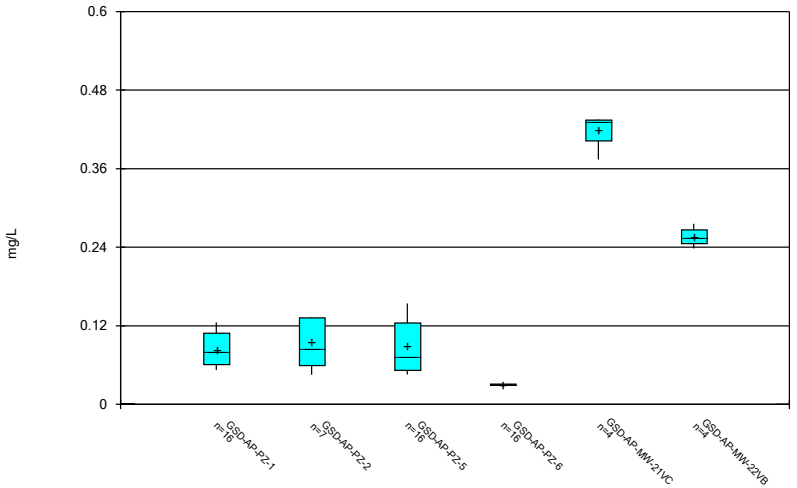


Constituent: Barium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

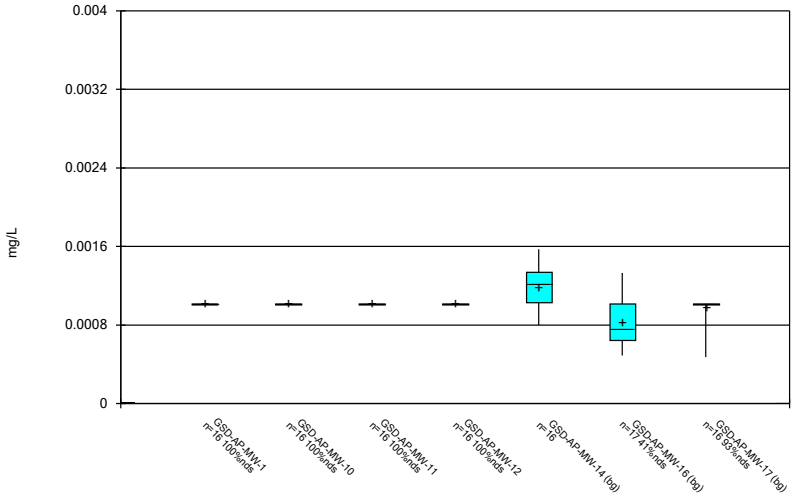
Box & Whiskers Plot



Constituent: Barium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

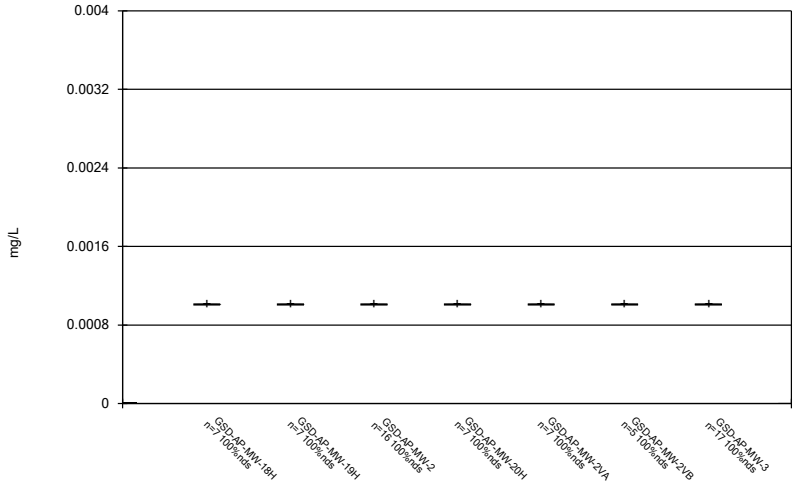


Constituent: Beryllium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

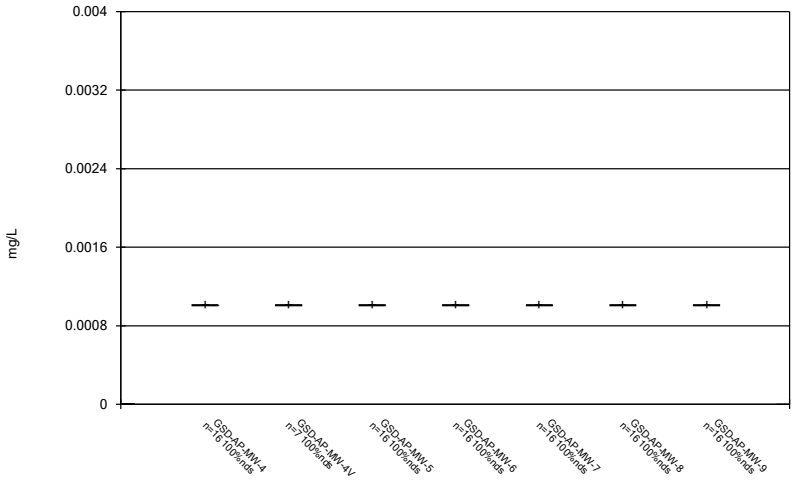


Constituent: Beryllium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

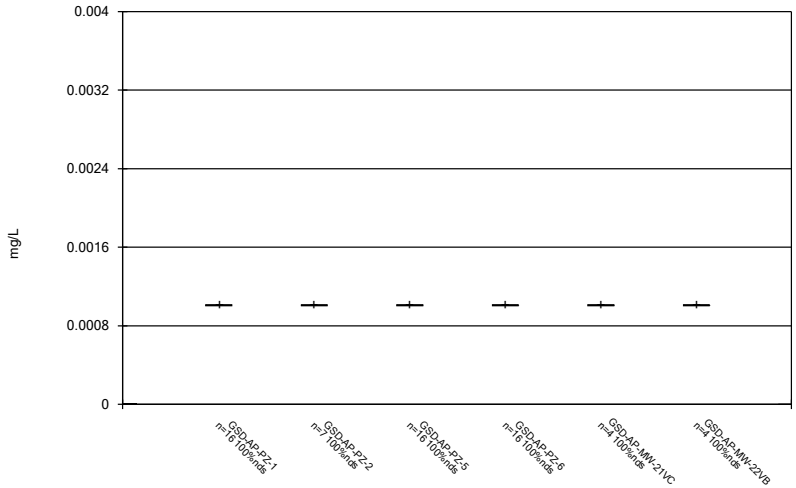


Constituent: Beryllium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

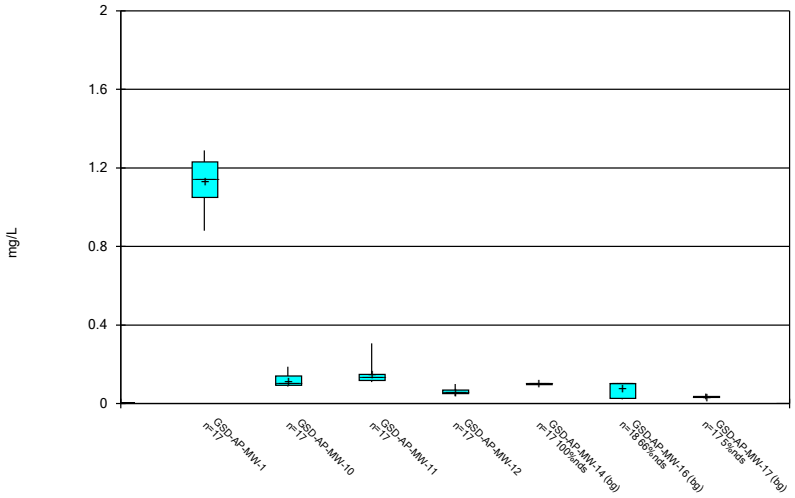


Constituent: Beryllium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

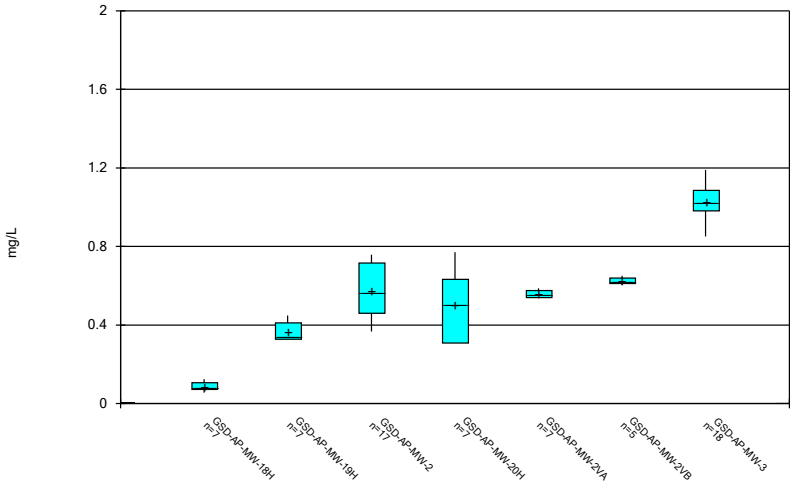


Constituent: Boron Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

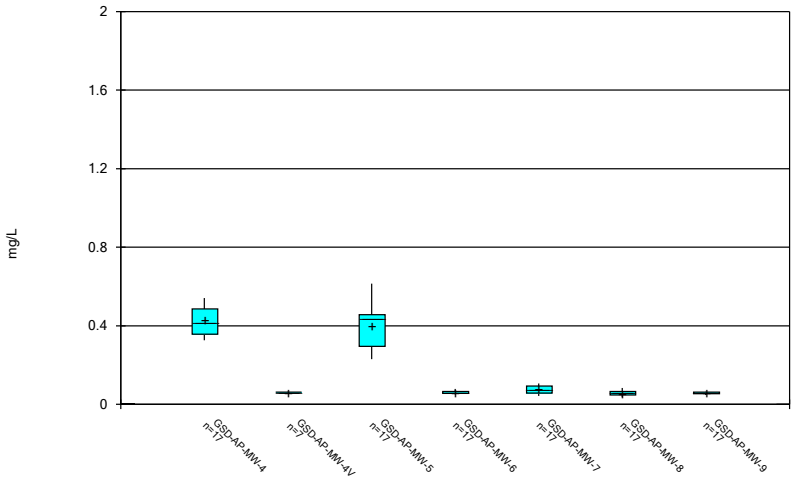


Constituent: Boron Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

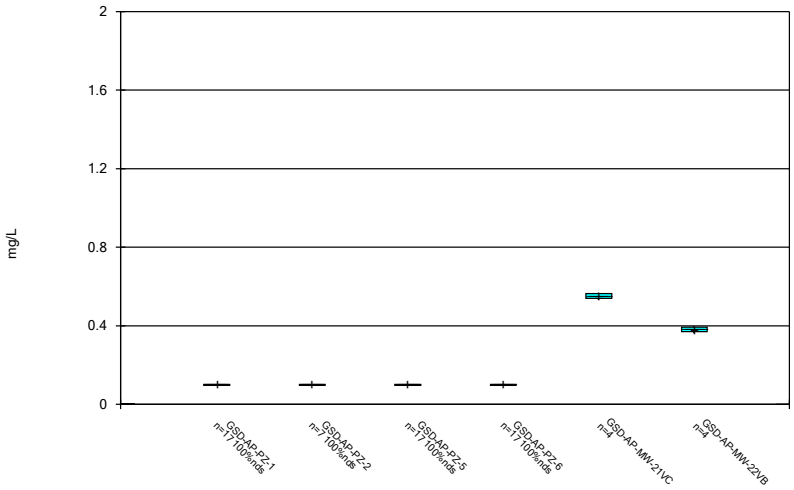


Constituent: Boron Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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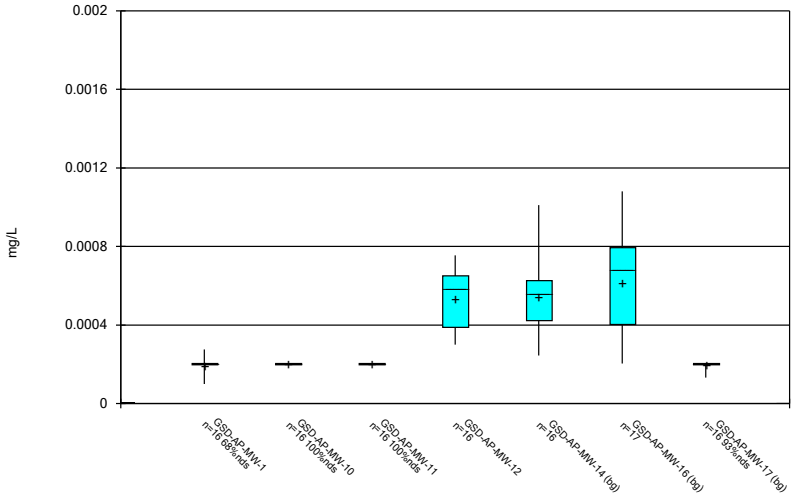
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

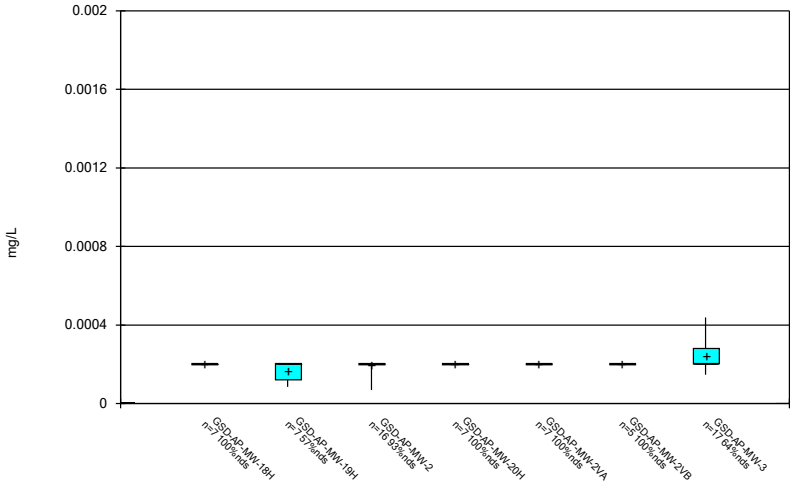


Constituent: Cadmium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

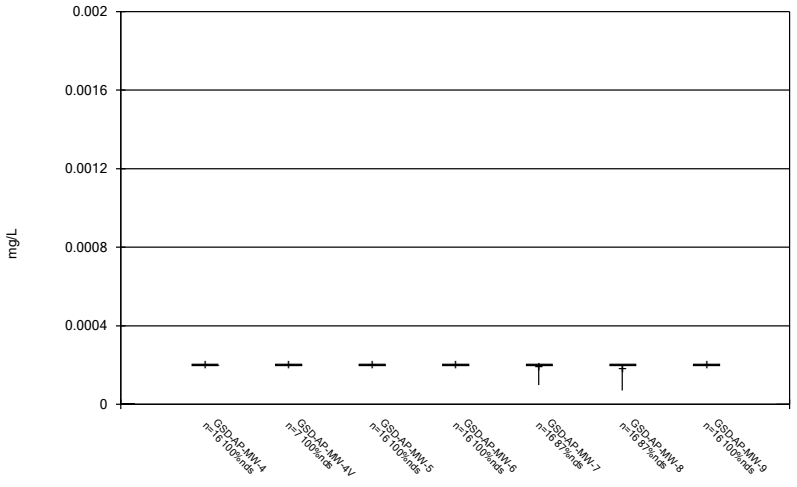


Constituent: Cadmium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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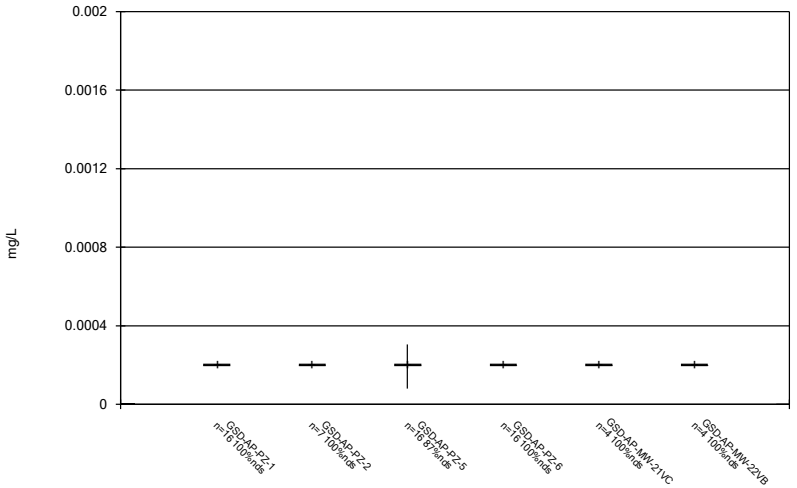
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

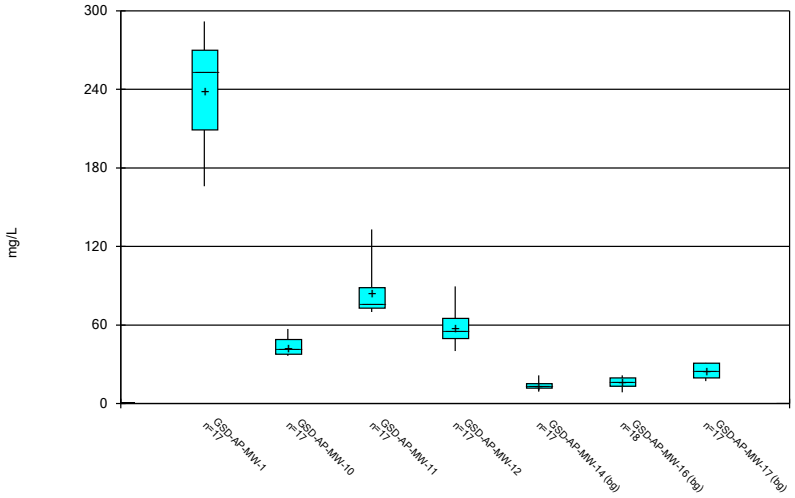


Constituent: Cadmium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

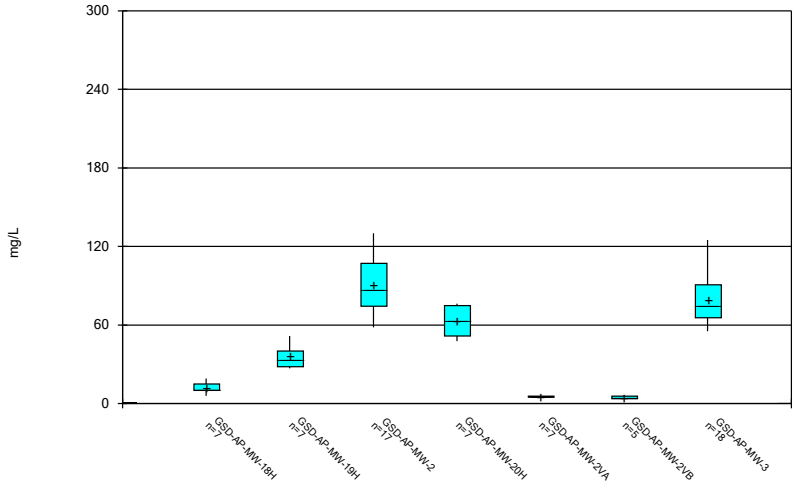


Constituent: Calcium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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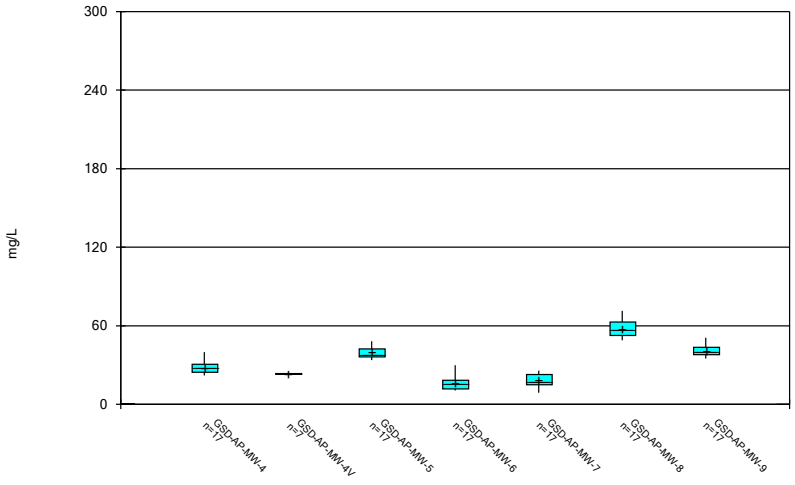
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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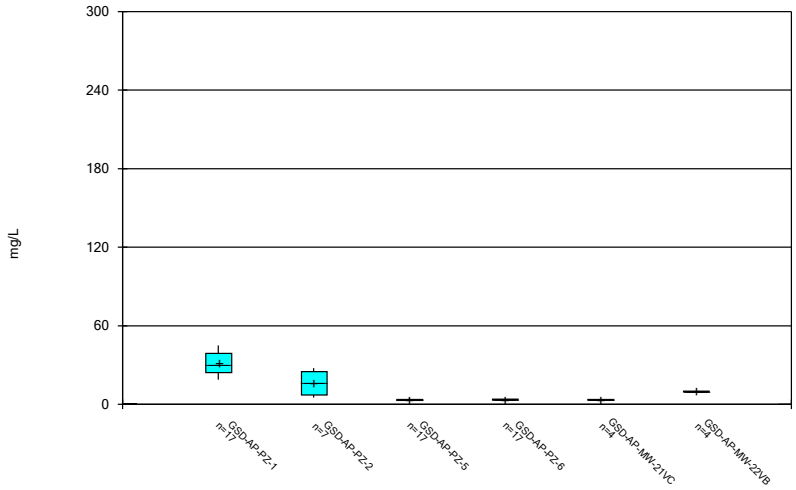
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

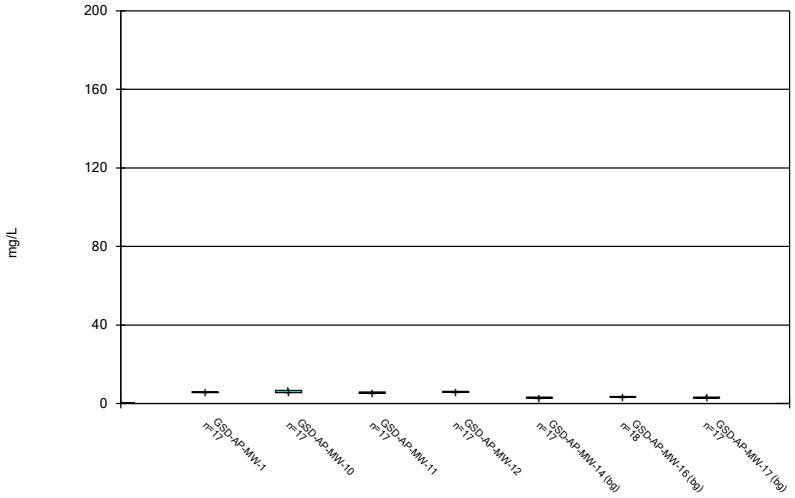
Box & Whiskers Plot



Constituent: Calcium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

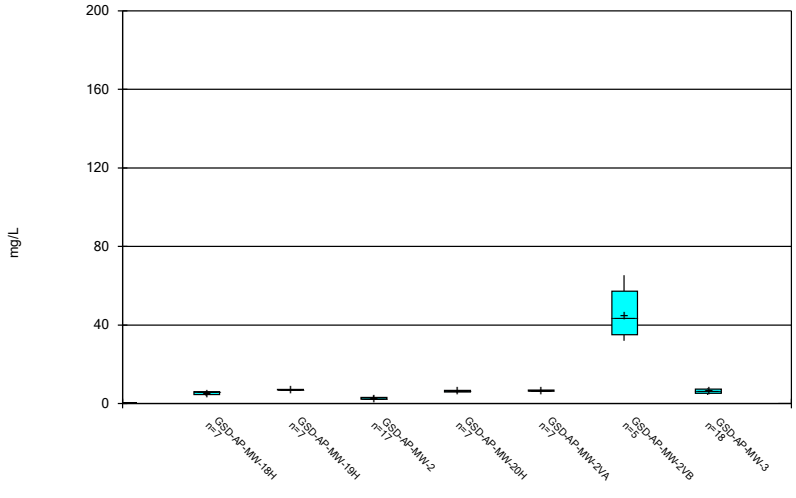


Constituent: Chloride Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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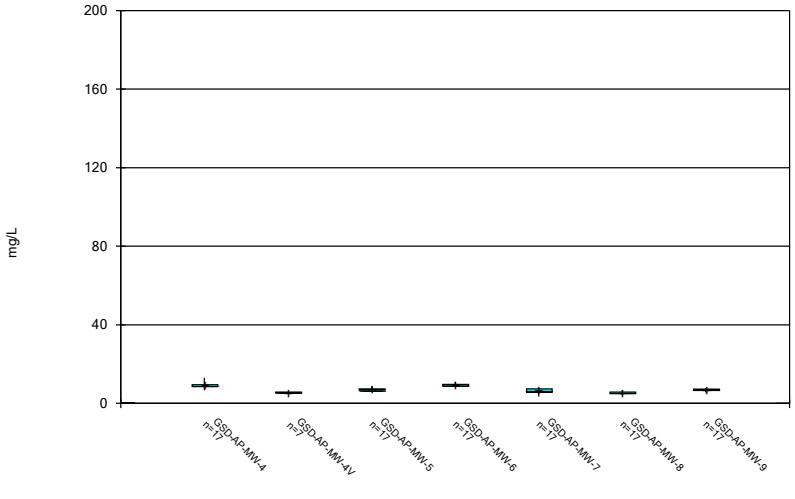
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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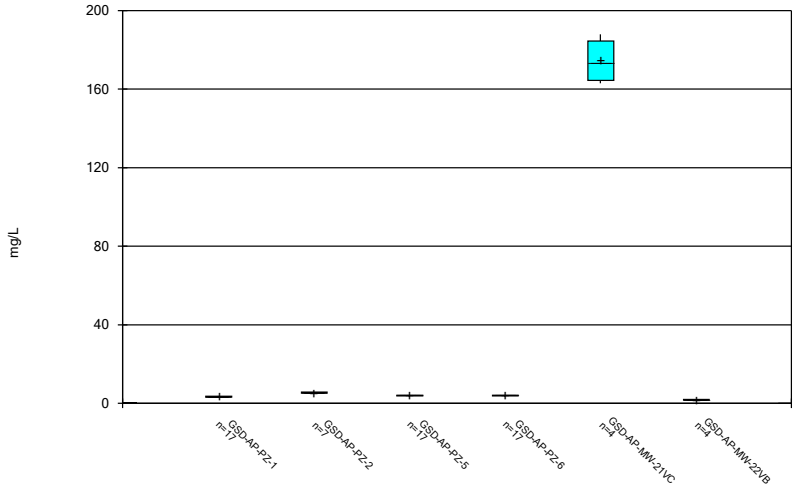
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

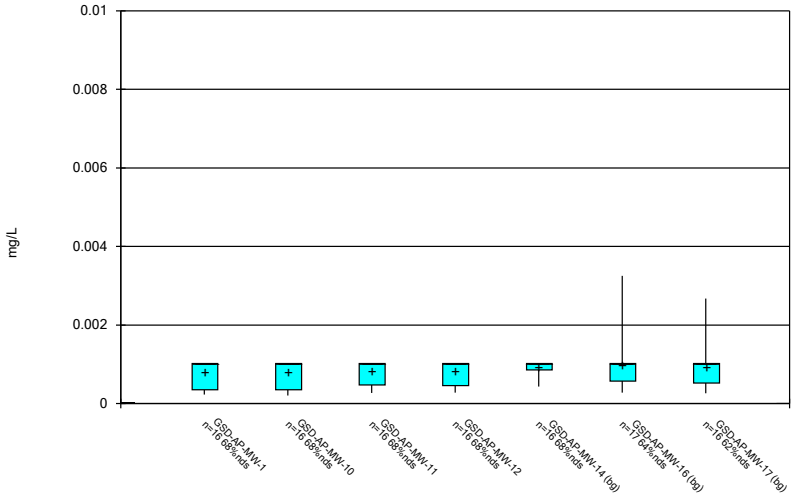


Constituent: Chloride Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

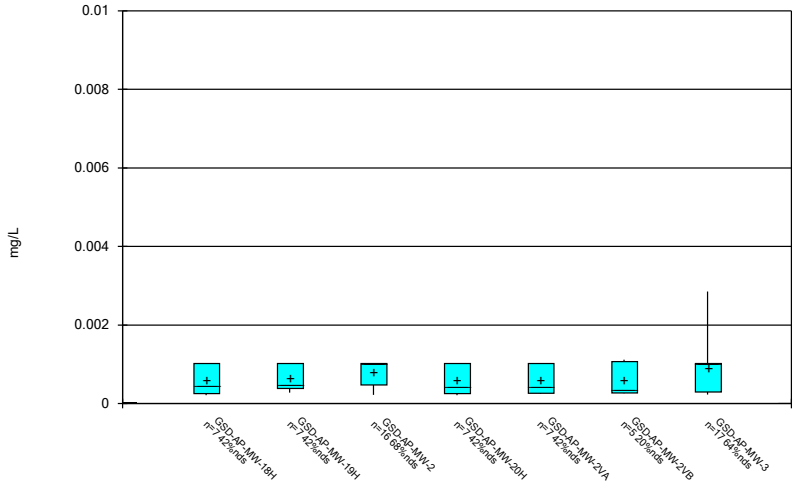


Constituent: Chromium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

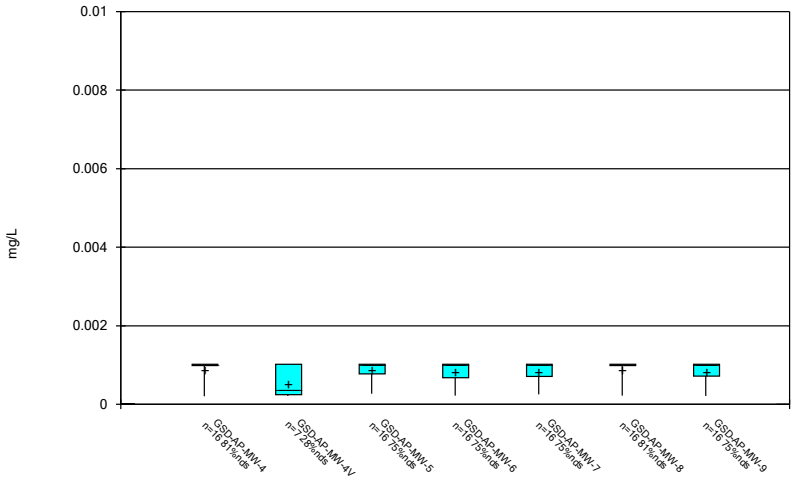


Constituent: Chromium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

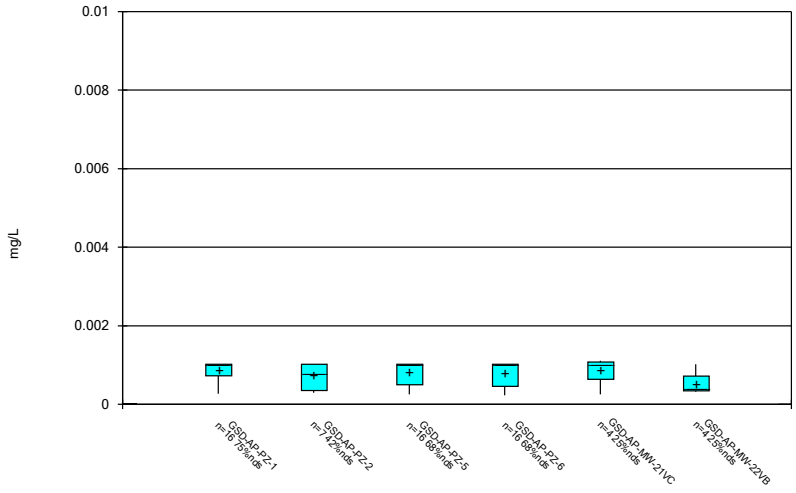


Constituent: Chromium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

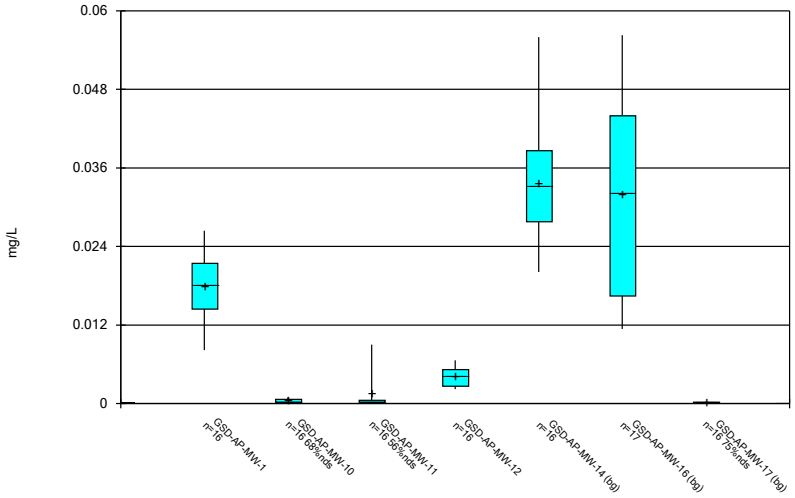
Box & Whiskers Plot



Constituent: Chromium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

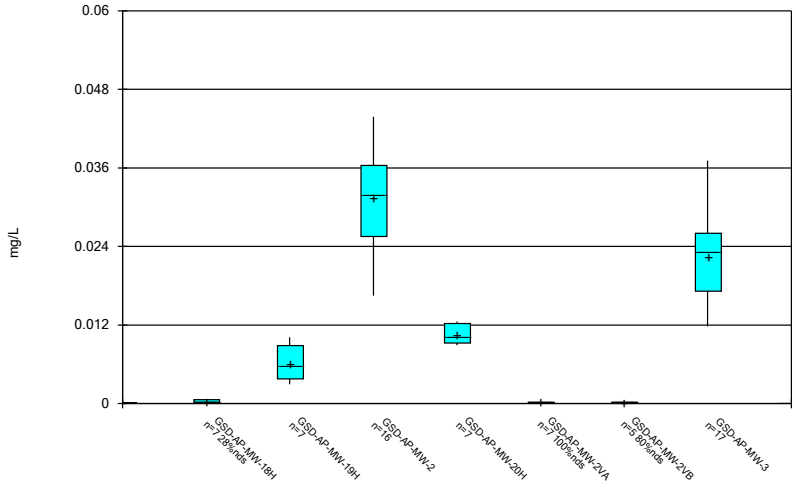


Constituent: Cobalt Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

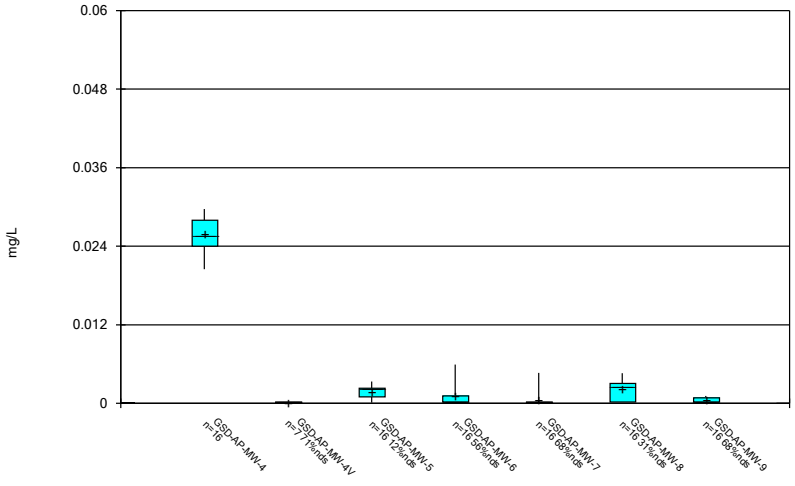


Constituent: Cobalt Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

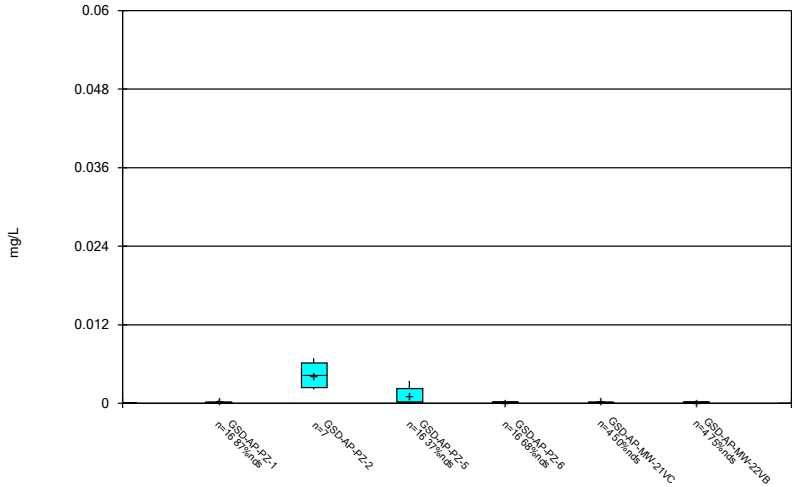


Constituent: Cobalt Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

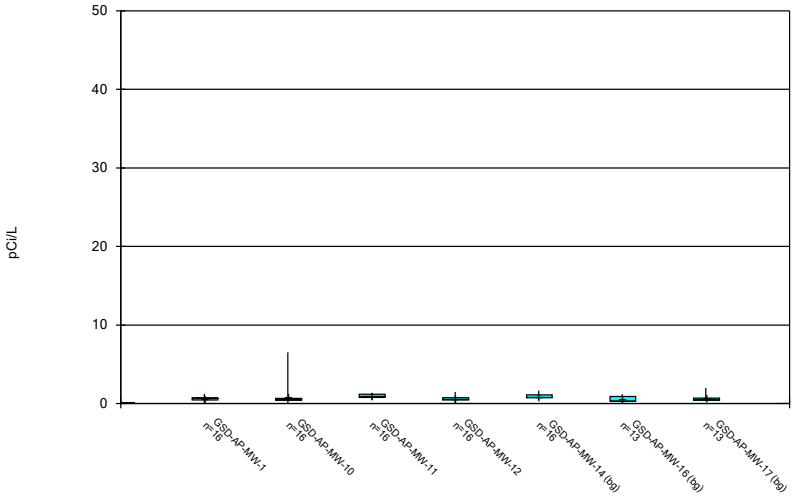
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

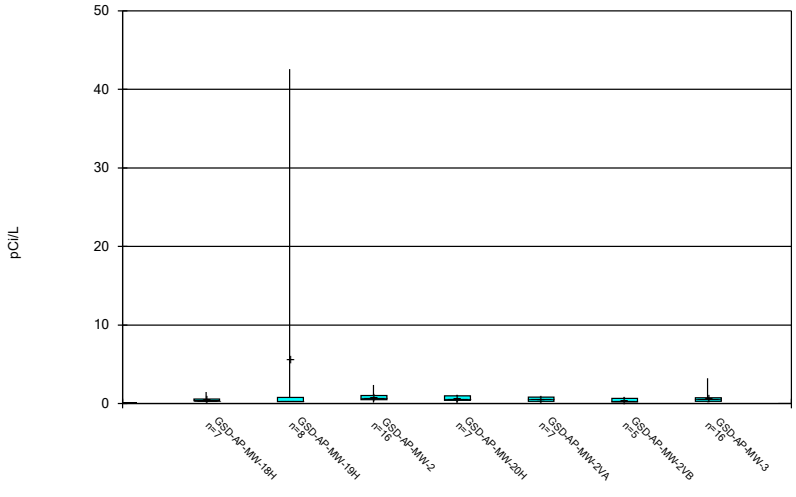
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:45 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

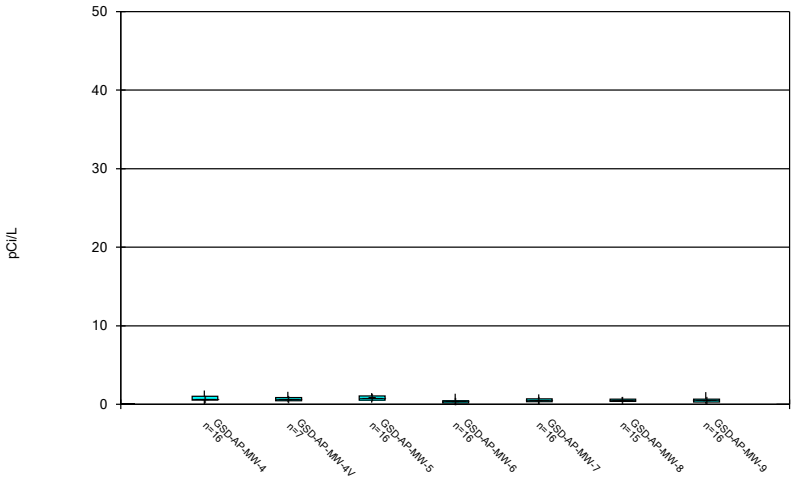
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:45 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

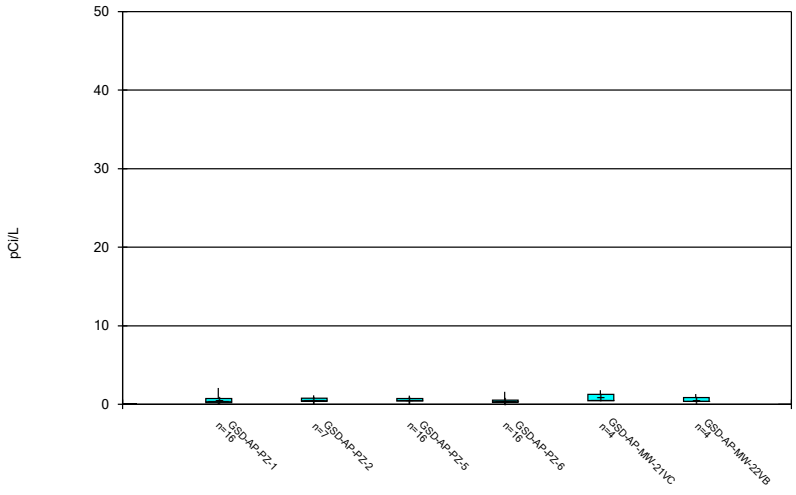
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:45 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

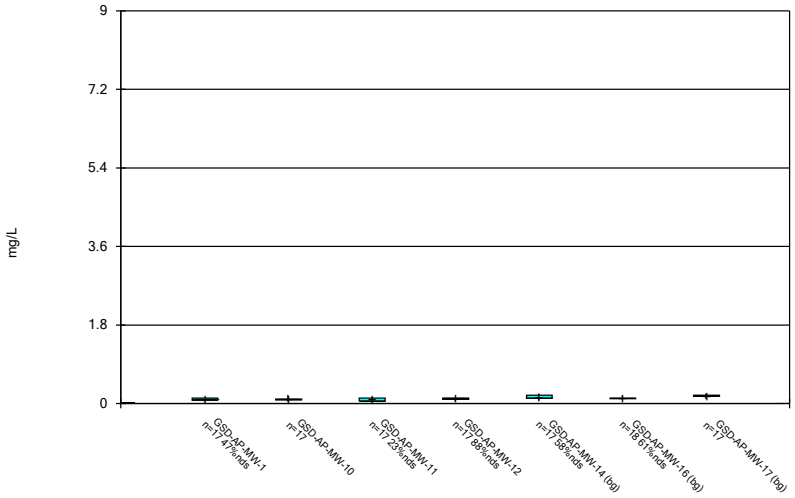
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:45 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

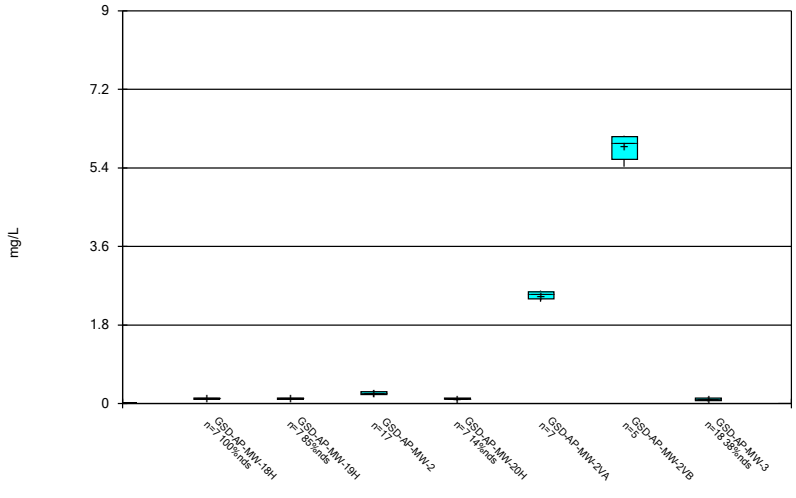


Constituent: Fluoride Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

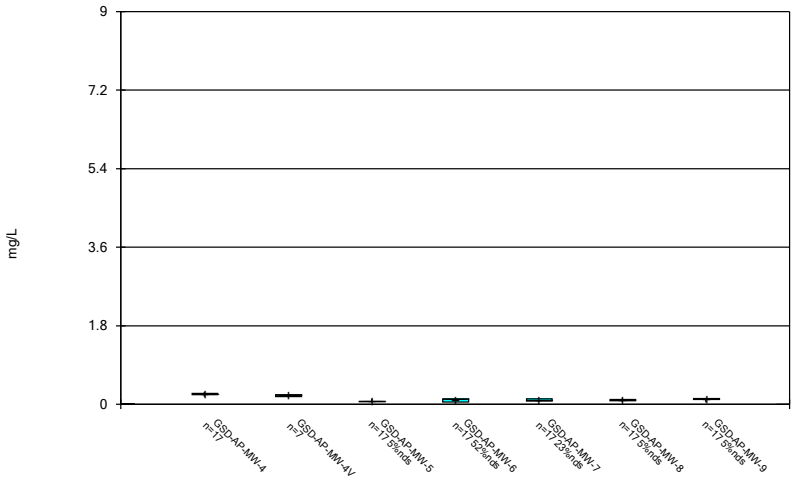


Constituent: Fluoride Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

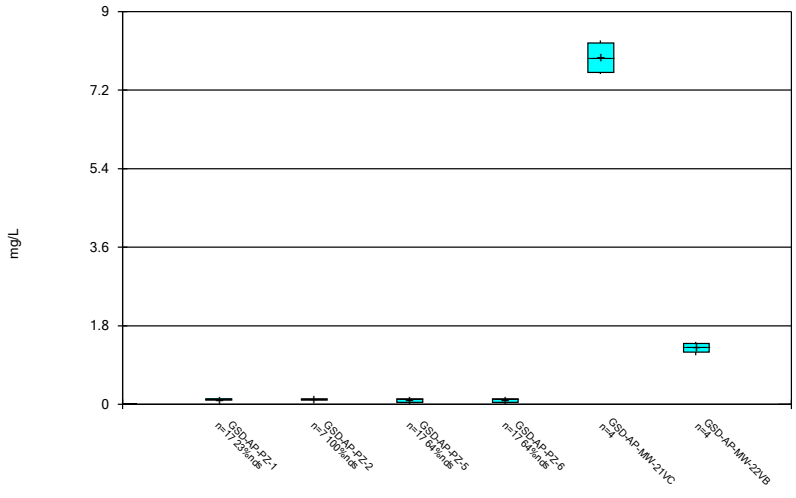


Constituent: Fluoride Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

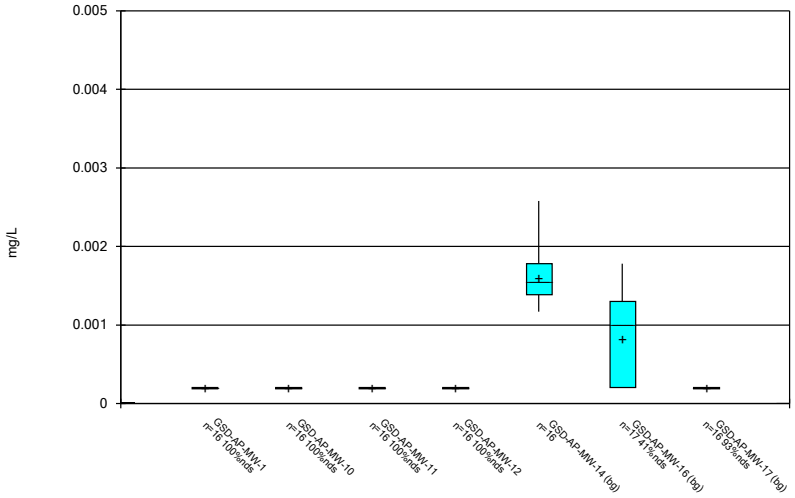
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

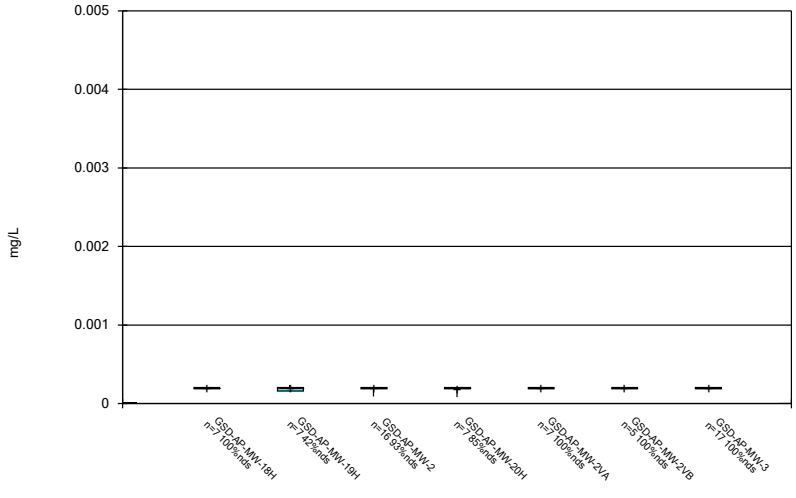


Constituent: Lead Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

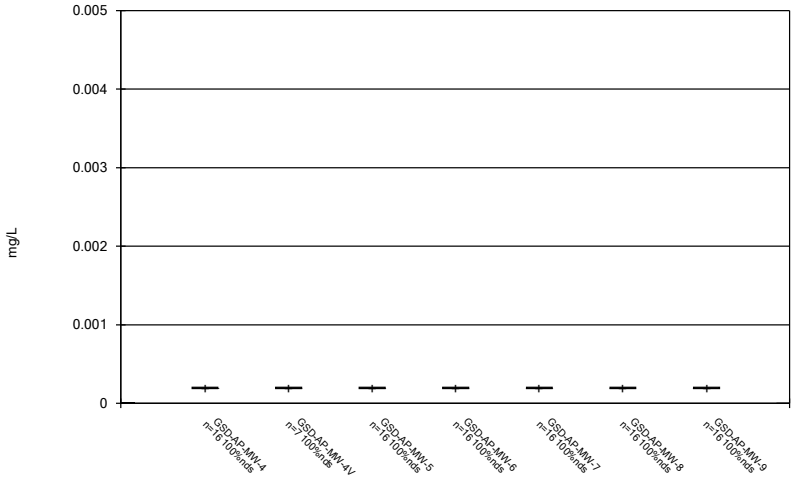


Constituent: Lead Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

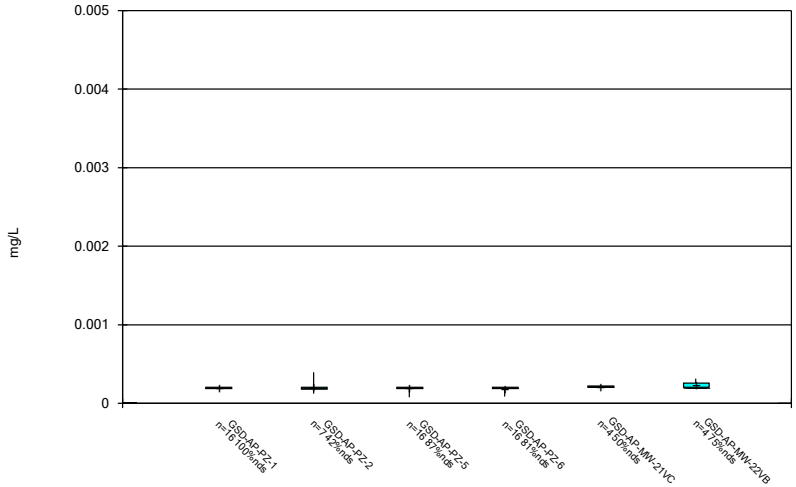


Constituent: Lead Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

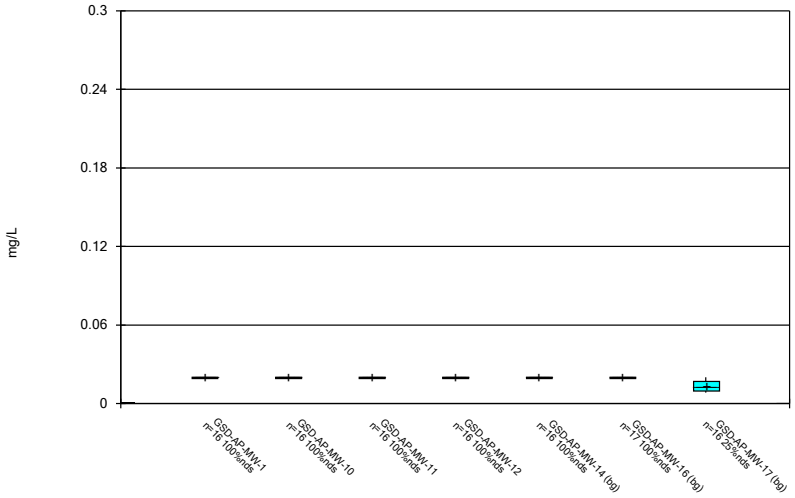
Box & Whiskers Plot



Constituent: Lead Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

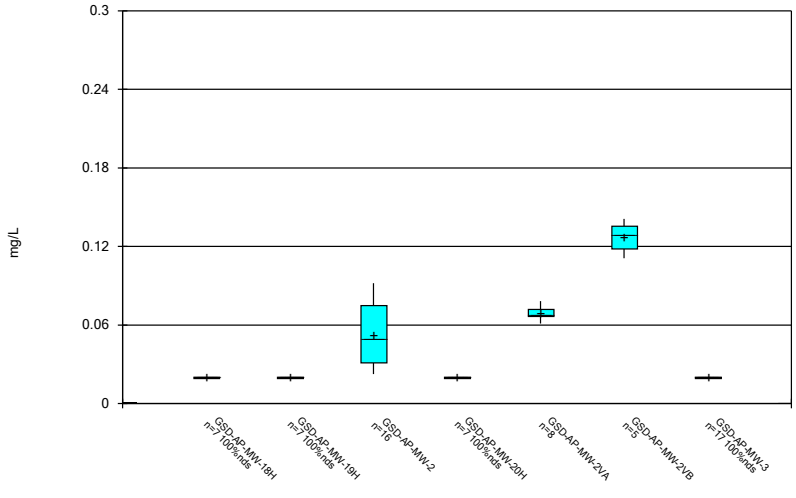


Constituent: Lithium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

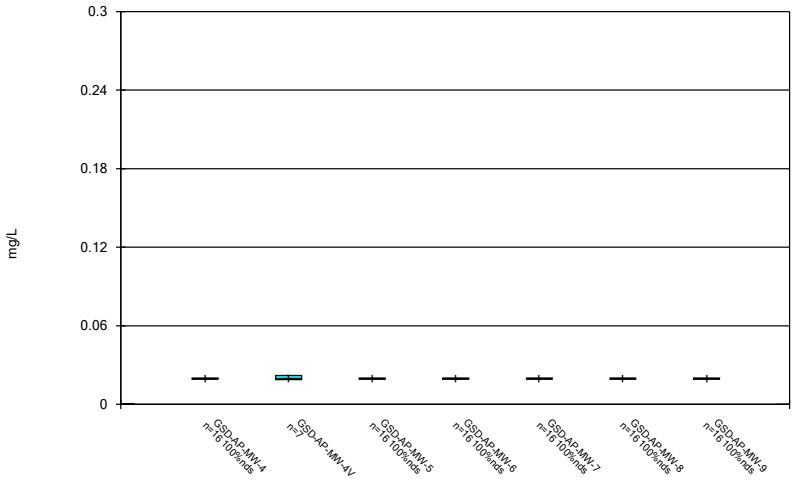


Constituent: Lithium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

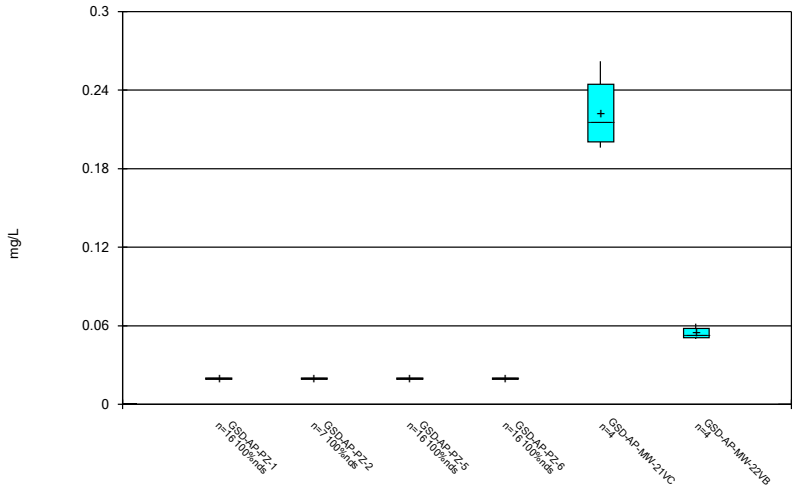


Constituent: Lithium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

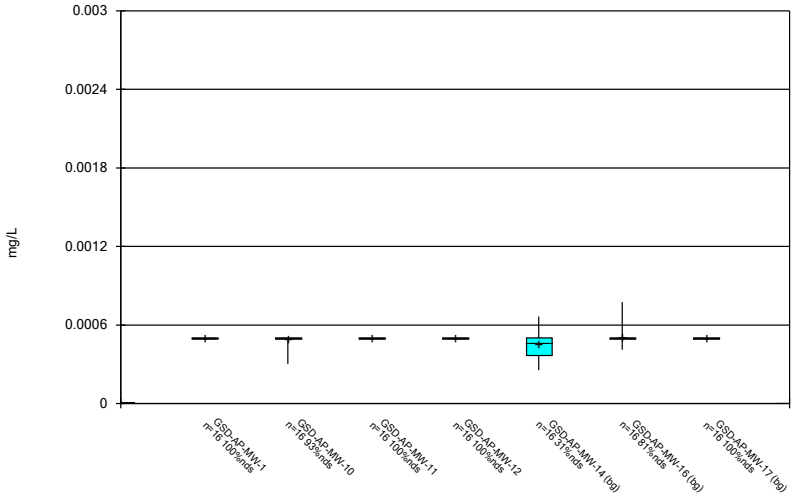
Box & Whiskers Plot



Constituent: Lithium Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

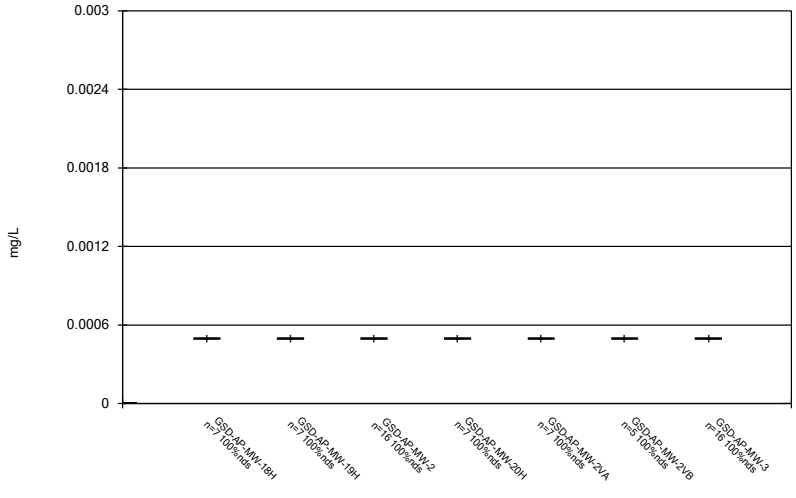


Constituent: Mercury Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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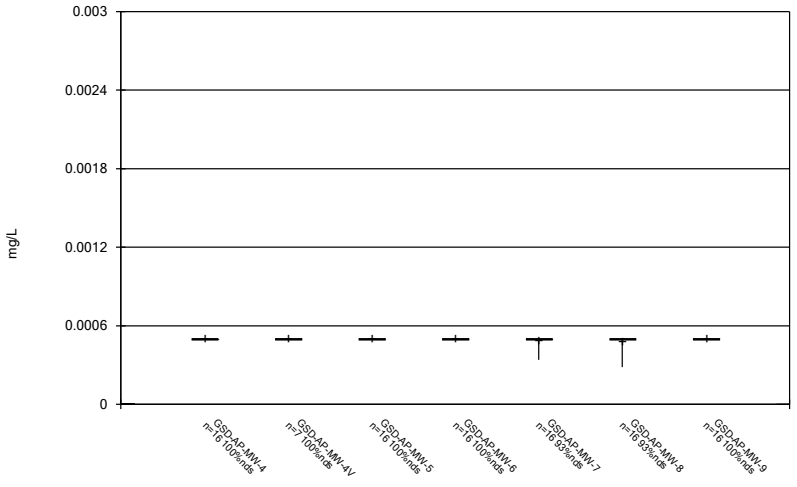
Box & Whiskers Plot

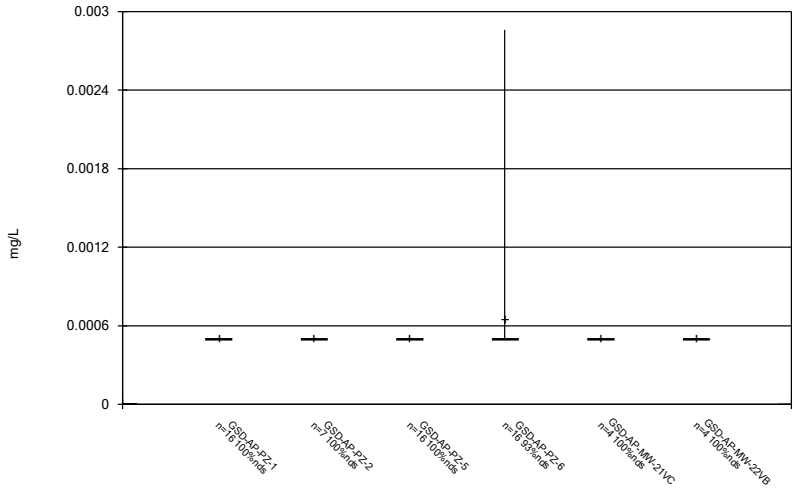


Constituent: Mercury Analysis Run 7/20/2023 11:45 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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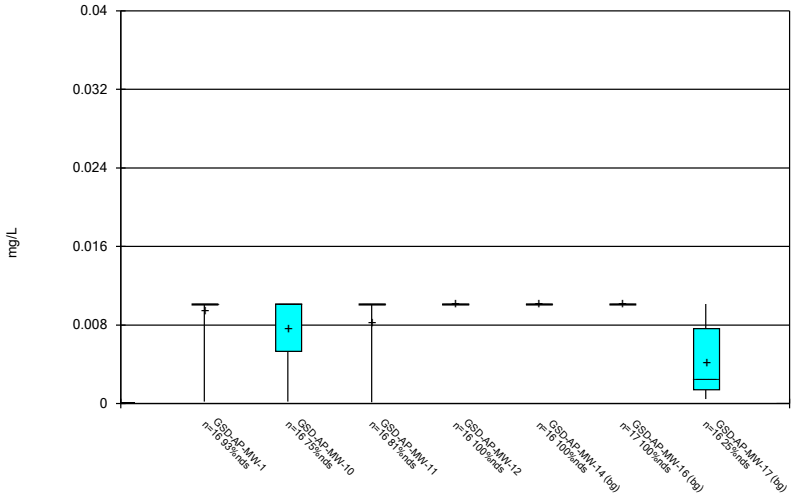
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

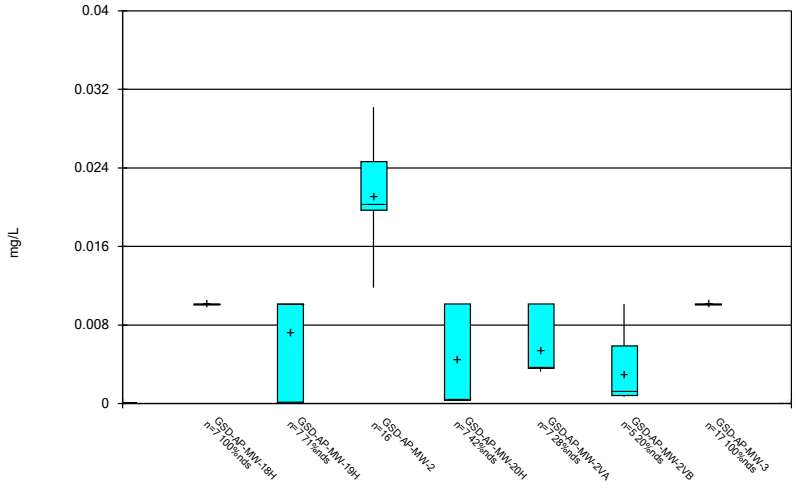


Constituent: Molybdenum Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

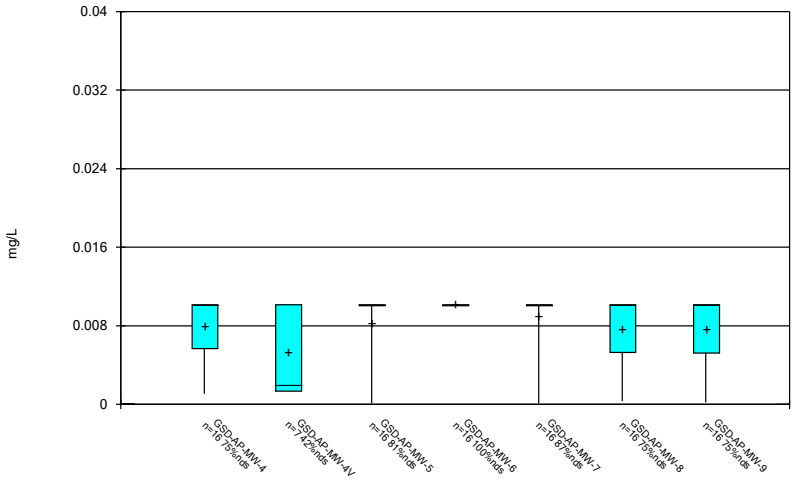


Constituent: Molybdenum Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

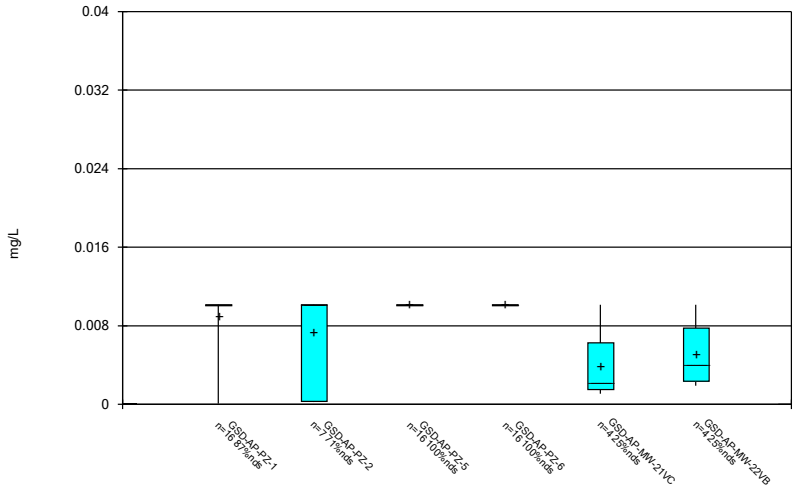


Constituent: Molybdenum Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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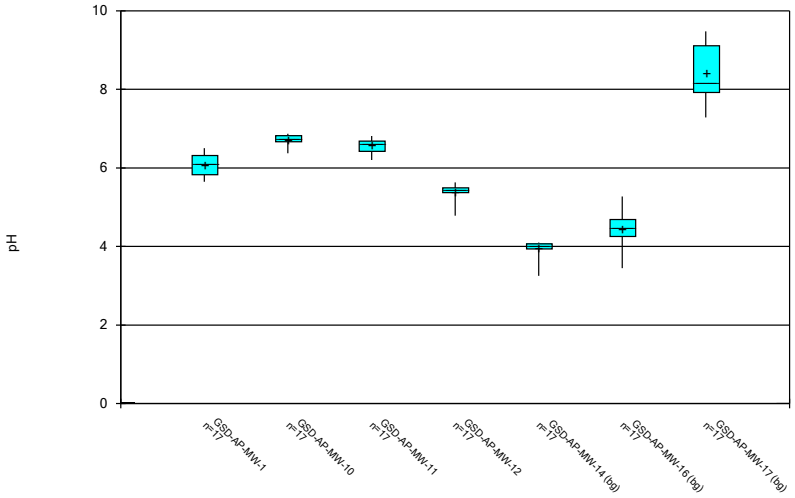
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

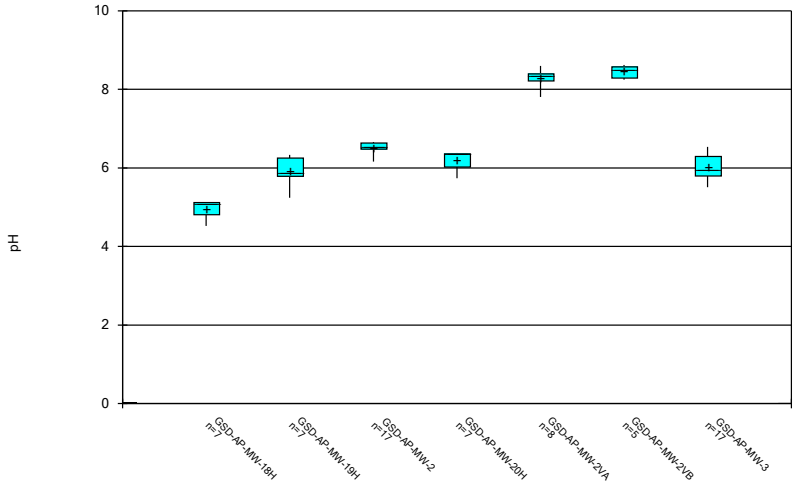


Constituent: pH Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

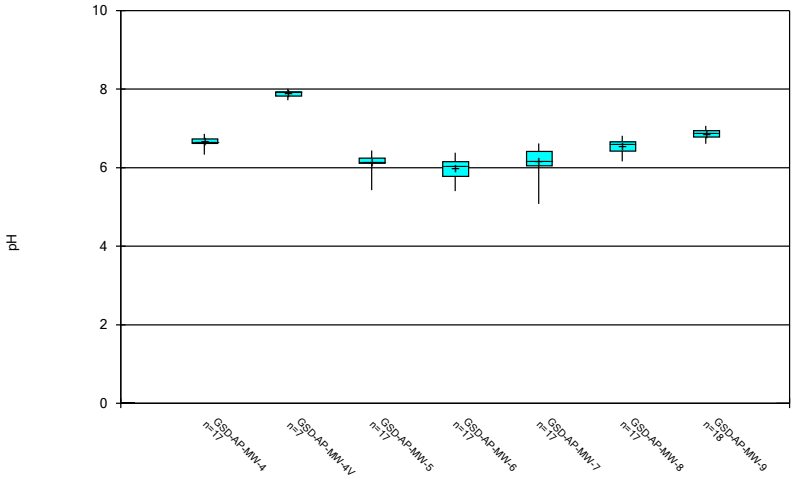


Constituent: pH Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

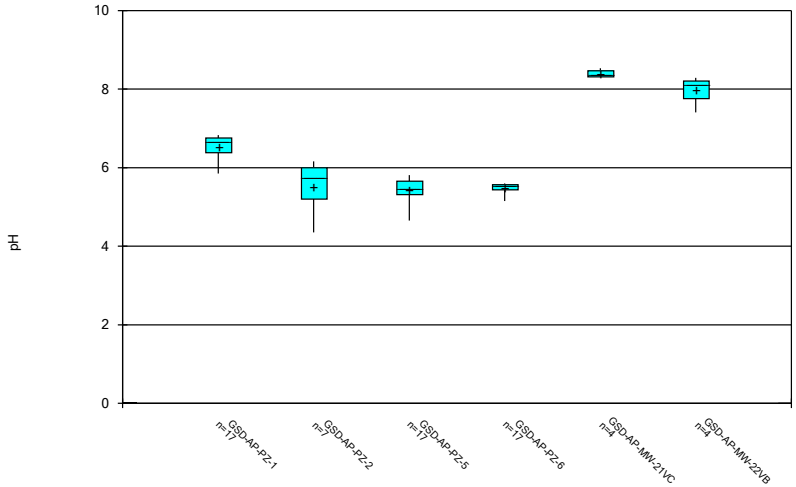


Constituent: pH Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

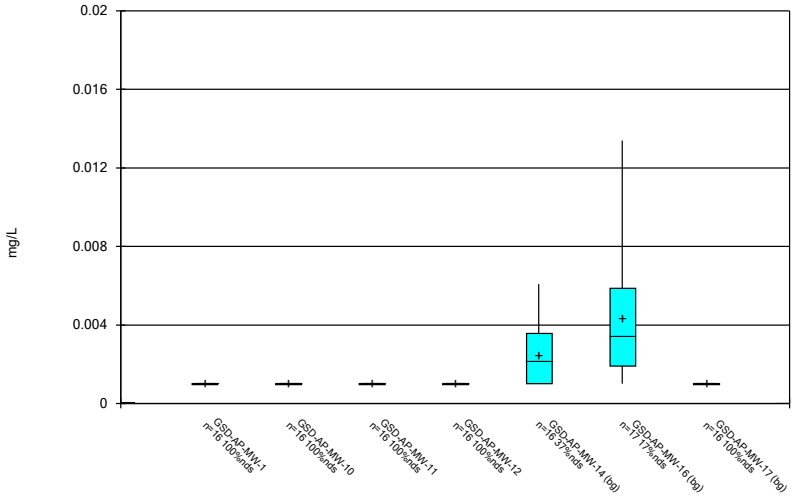
Box & Whiskers Plot



Constituent: pH Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

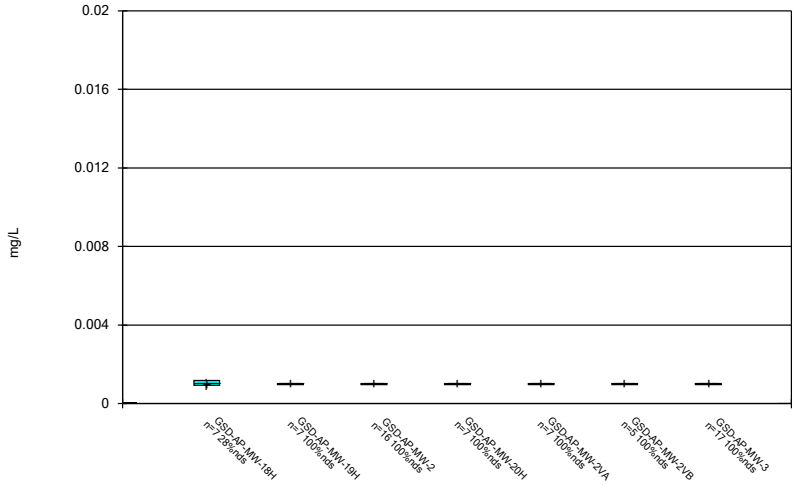


Constituent: Selenium Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

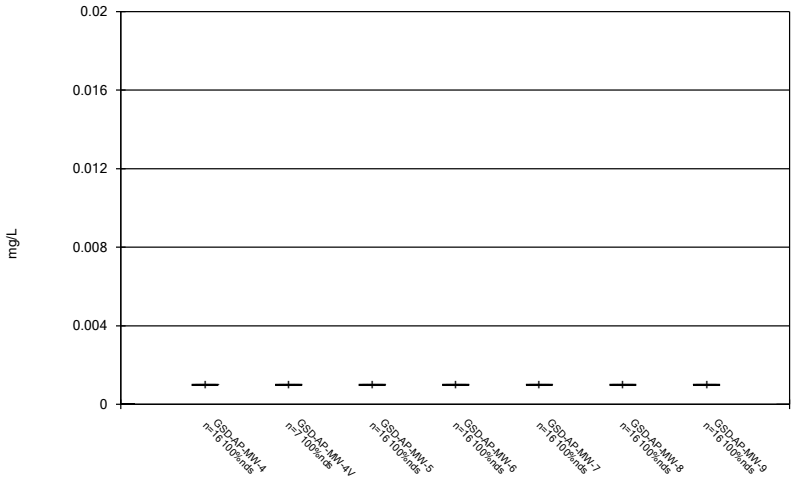


Constituent: Selenium Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

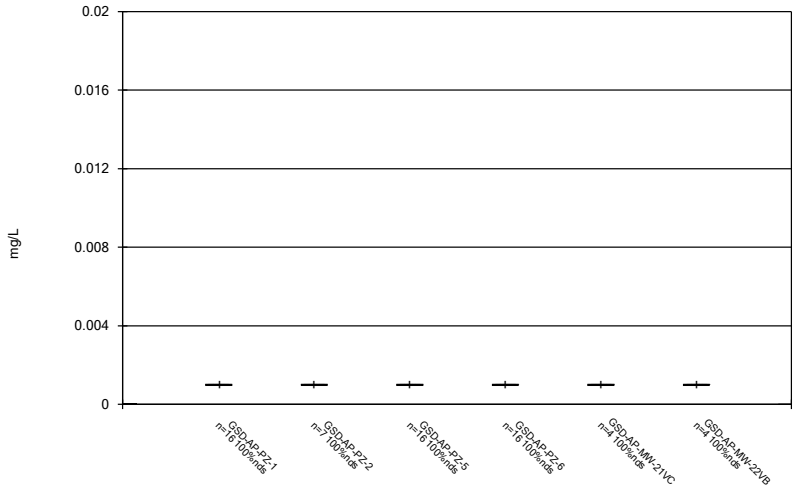


Constituent: Selenium Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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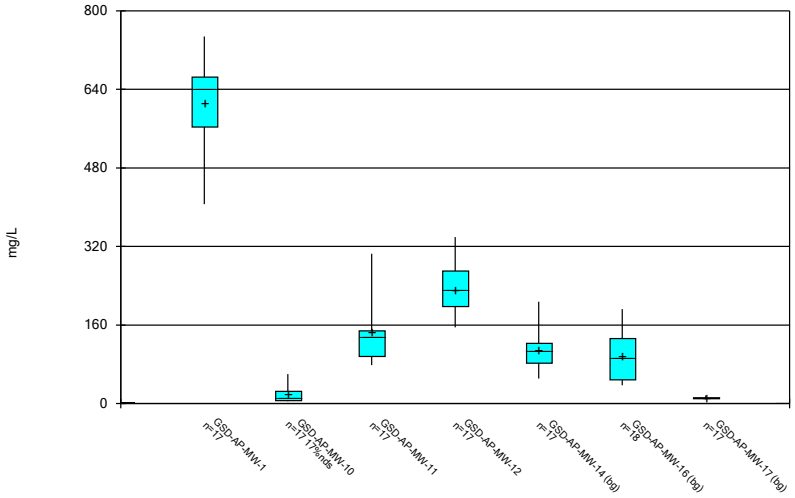
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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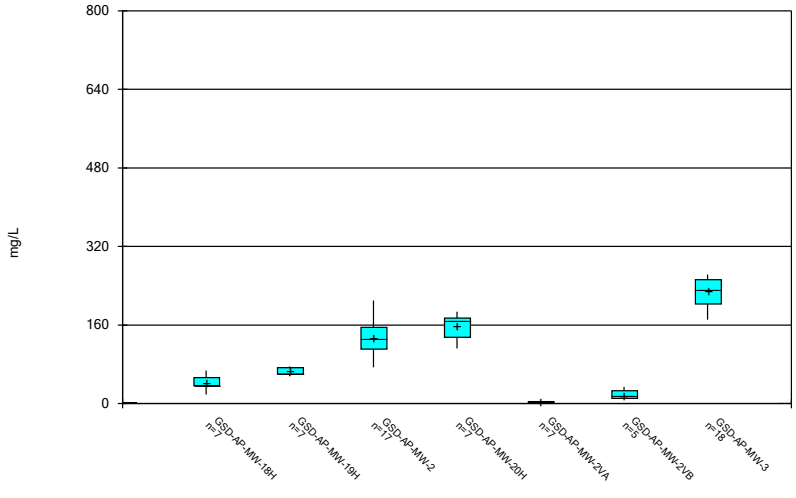
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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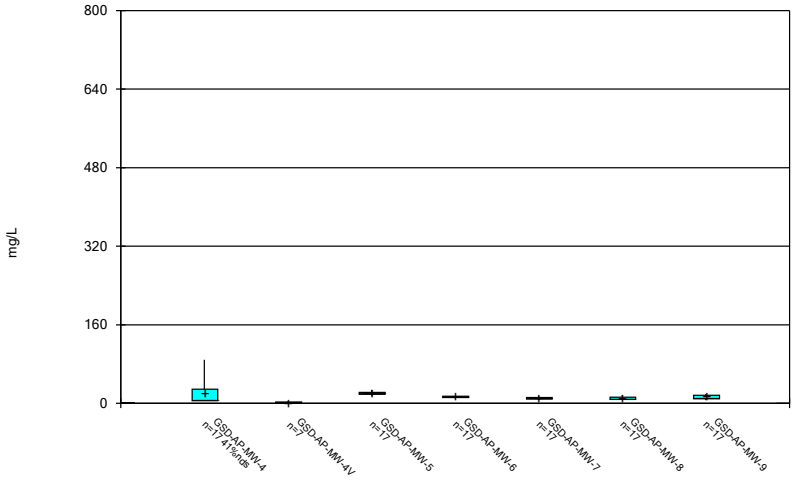
Box & Whiskers Plot



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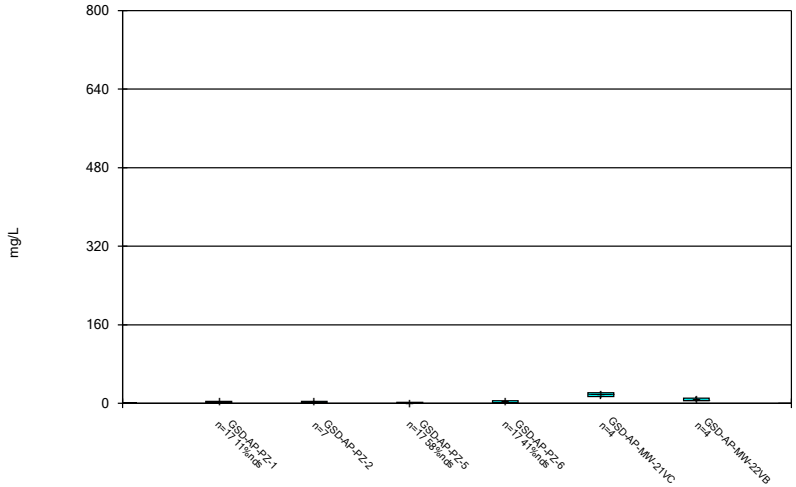

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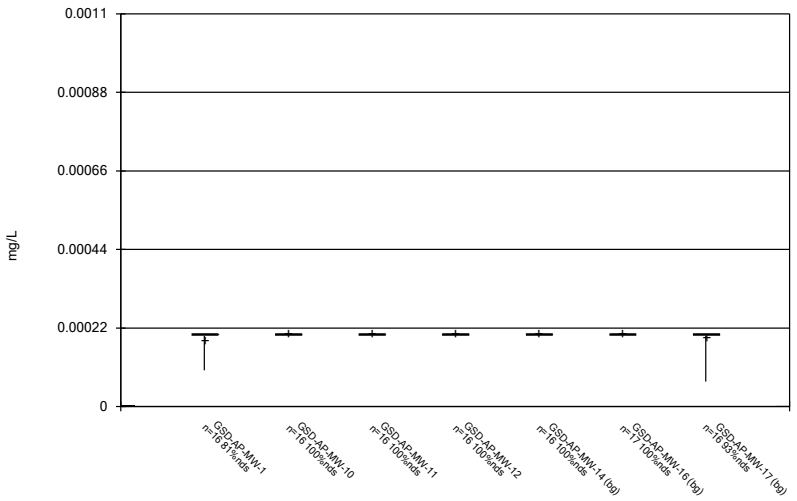
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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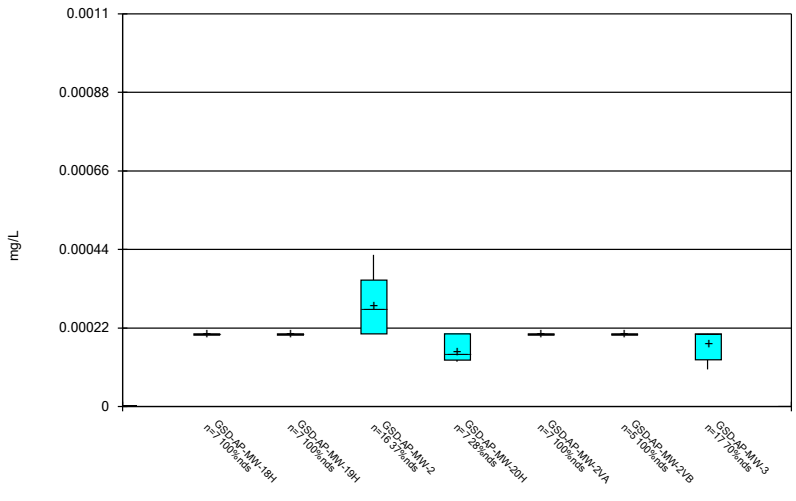
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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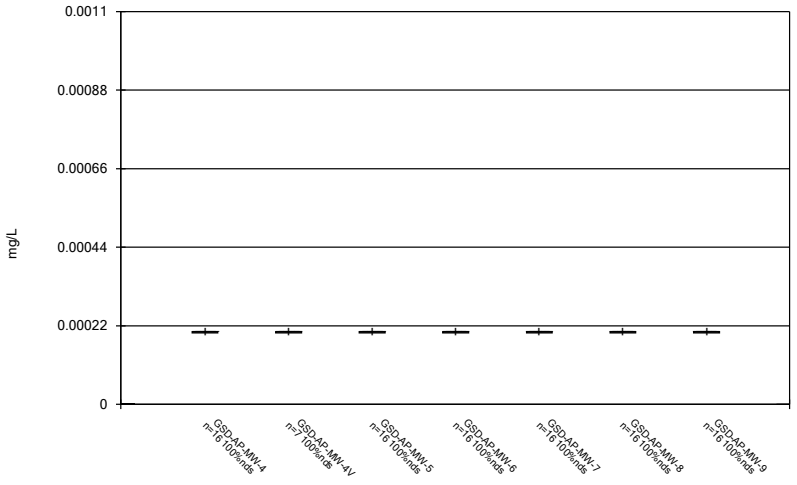
Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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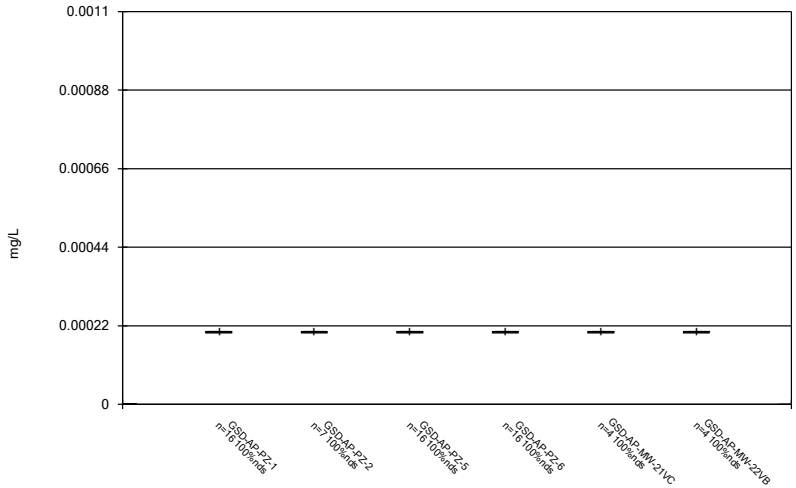
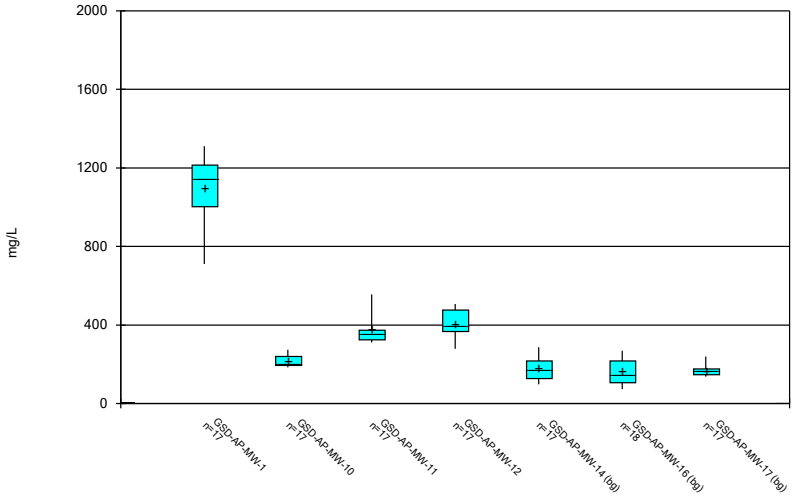


Constituent: Thallium Analysis Run 7/20/2023 11:46 AM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

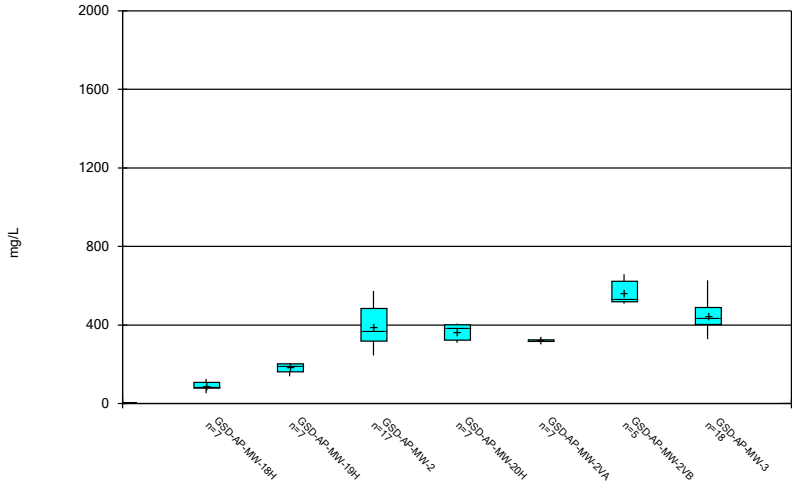
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:46 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

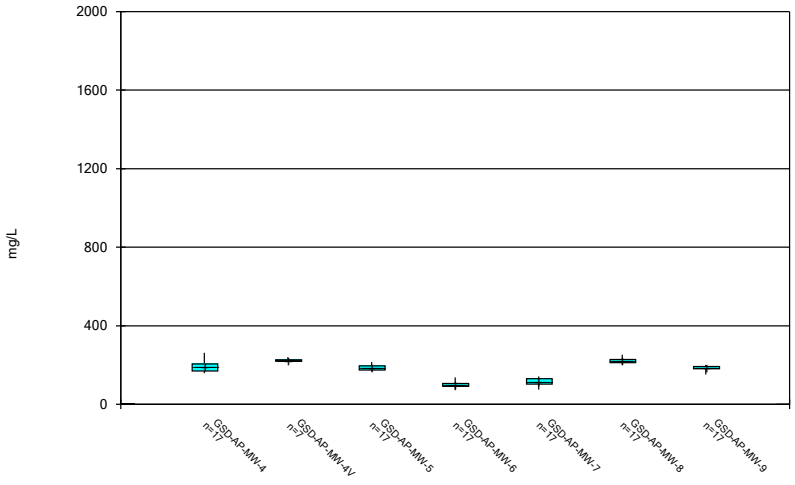
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:46 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

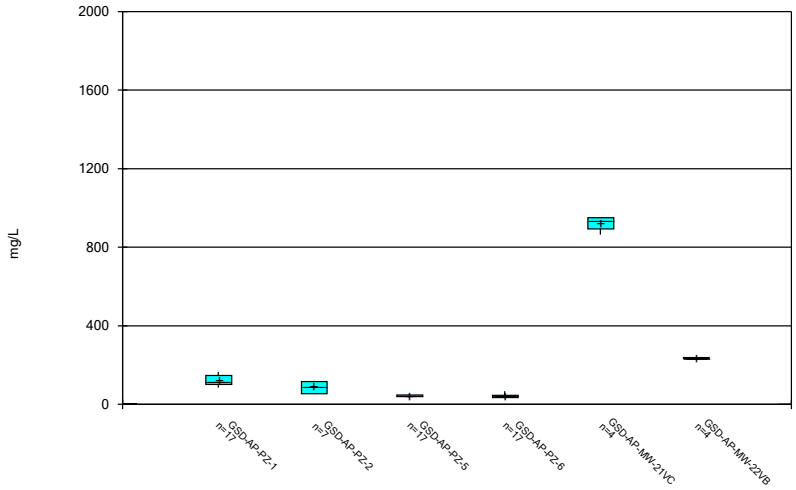
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:46 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/20/2023 11:46 AM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE C.

Outlier Summary

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2023, 3:59 PM

	GSD-AP-MW-8 Combined Radium 226 + 228 (pCi/L)
12/7/2017	7.45 (o)

FIGURE D.

Intrawell Prediction Limit - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:01 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**GSD-AP-PZ-6**	**5.699**	**5.348**	**6/13/2023**	**5.15**	**Yes**	**13**	**5.523**	**0.06473**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Intrawell Prediction Limit - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:01 PM

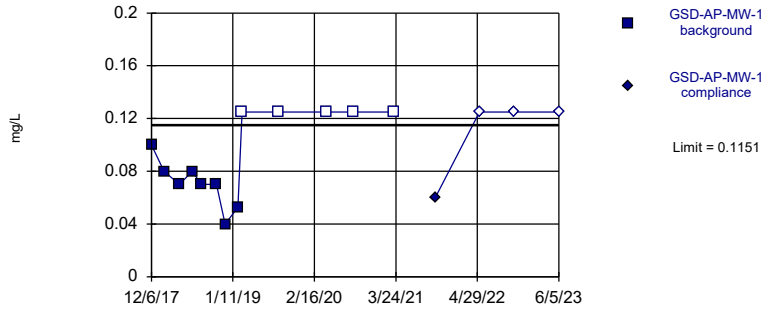
Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	6/5/2023	0.125ND	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-10	0.1381	n/a	6/13/2023	0.0805J	No	13	0.08731	0.01872	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-11	0.1122	n/a	6/13/2023	0.105J	No	13	0.0646	0.01756	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-12	0.125	n/a	6/13/2023	0.0795J	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	6/6/2023	0.125ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.1599	n/a	6/6/2023	0.125ND	No	14	0.1026	0.02163	50	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	6/6/2023	0.113J	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	6/6/2023	0.204	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1359	n/a	6/5/2023	0.125ND	No	14	0.07651	0.02239	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	6/6/2023	0.225	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-5	0.08126	n/a	6/7/2023	0.0625ND	No	13	0.05878	0.008293	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-6	0.09393	n/a	6/5/2023	0.125ND	No	13	0.3704	0.03104	38.46	Kaplan-Meier	x^(1/3)	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-7	0.109	n/a	6/13/2023	0.125ND	No	13	0.0755	0.01236	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-8	0.1549	n/a	6/7/2023	0.128	No	13	0.09159	0.02334	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1718	n/a	6/12/2023	0.13	No	13	0.01358	0.00588	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1638	n/a	6/7/2023	0.125ND	No	13	0.109	0.02021	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	n/a	6/13/2023	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	n/a	6/13/2023	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	6/5/2023	5.68	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	6/13/2023	6.55	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-11	7.012	6.206	6/13/2023	6.4	No	13	6.609	0.1486	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-12	5.692	5.209	6/13/2023	5.48	No	13	5.451	0.08911	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-14	4.1	3.25	6/6/2023	3.82	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	6/6/2023	3.65	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	6/6/2023	7.8	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-2	6.801	6.273	6/6/2023	6.63	No	13	6.537	0.09742	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-3	6.88	5.224	6/5/2023	5.66	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	6/6/2023	6.74	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-5	6.352	5.982	6/7/2023	6.25	No	13	6.167	0.06836	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-6	6.703	5.385	6/5/2023	5.68	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-7	6.847	5.694	6/13/2023	5.98	No	13	6.271	0.2126	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-8	7.032	6.084	6/7/2023	6.37	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	6/12/2023	6.81	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	6/7/2023	5.9	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	6/13/2023	5.1	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-PZ-6**	**5.699**	**5.348**	**6/13/2023**	**5.15**	**Yes**	**13**	**5.523**	**0.06473**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.06075, Std. Dev.=0.02003, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8592, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

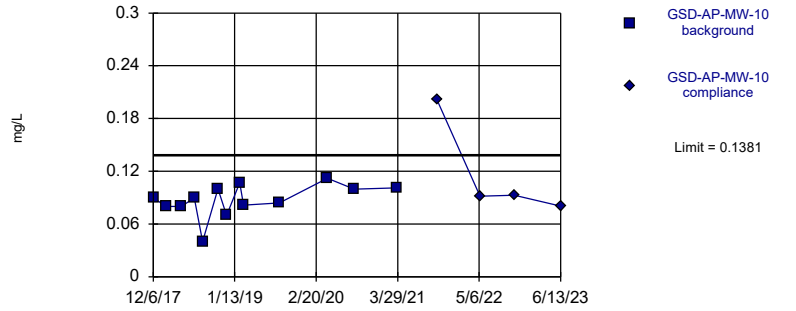
Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.08731, Std. Dev.=0.01872, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9056, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

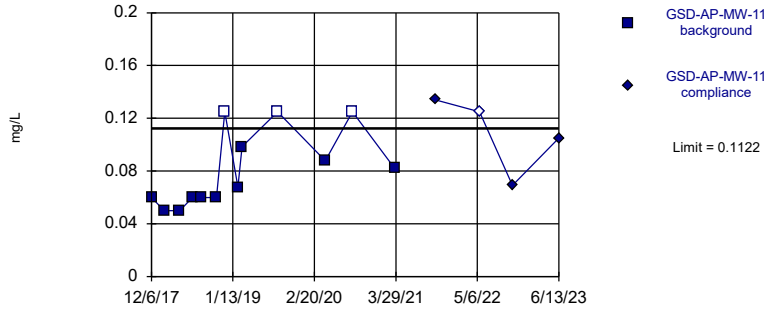
Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0646, Std. Dev.=0.01756, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8376, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

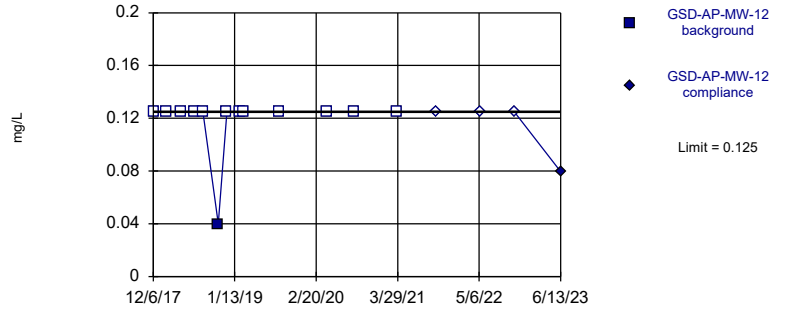
Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



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

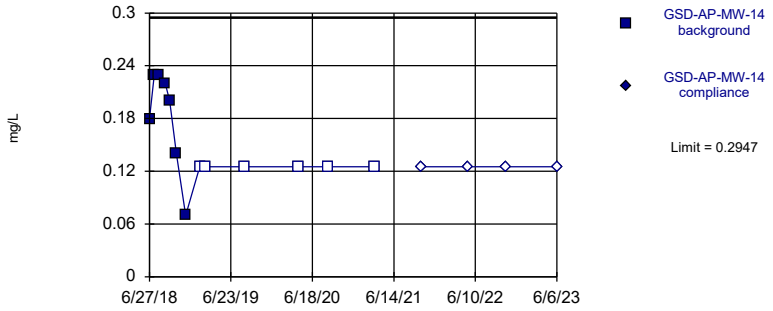
Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1209, Std. Dev.=0.06411, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8602, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

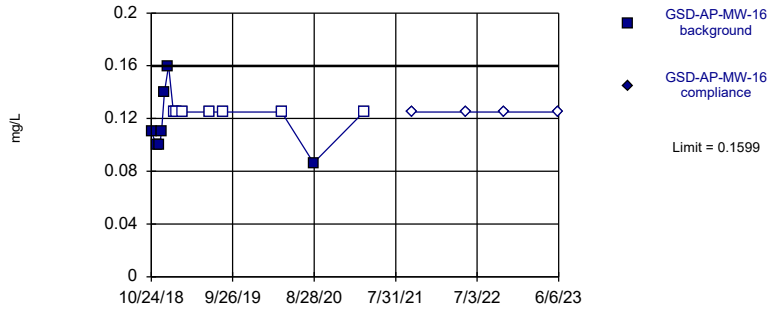
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1026, Std. Dev.=0.02163, n=14, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9116, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

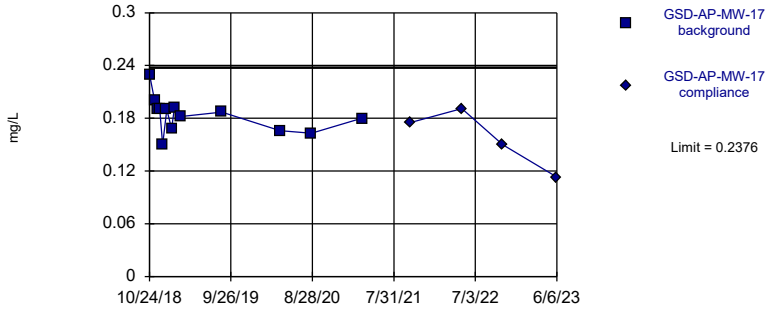
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1837, Std. Dev.=0.01989, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9377, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

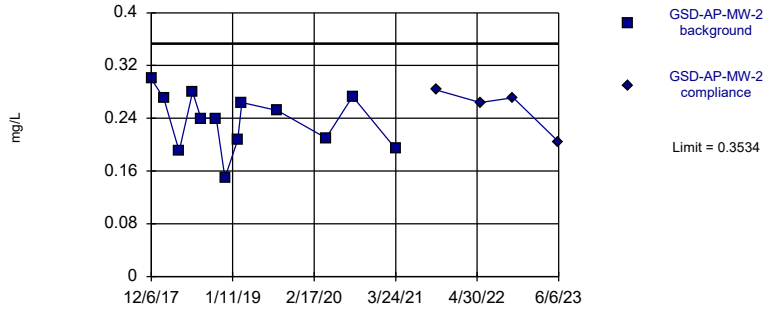
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2362, Std. Dev.=0.04323, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9598, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

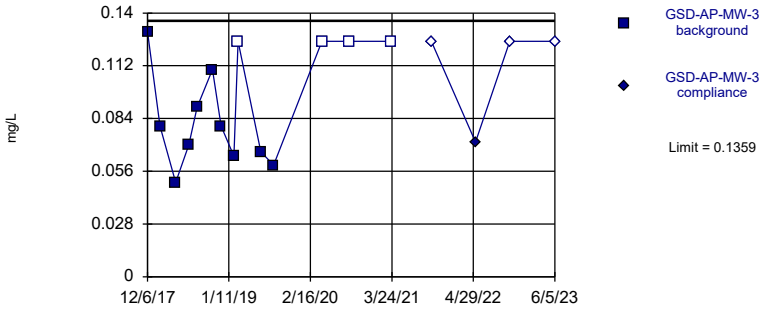
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.07651, Std. Dev.=0.02239, n=14, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8712, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

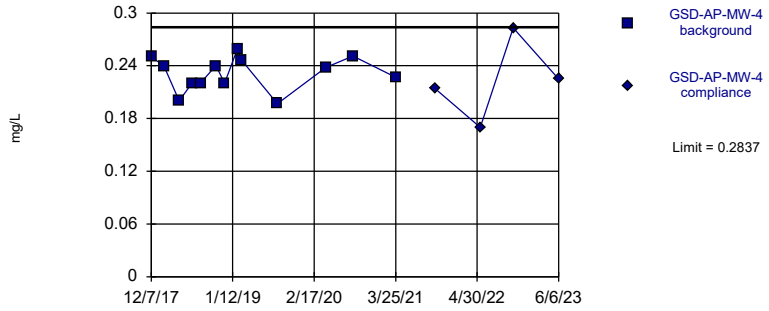
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2314, Std. Dev.=0.01931, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.937, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

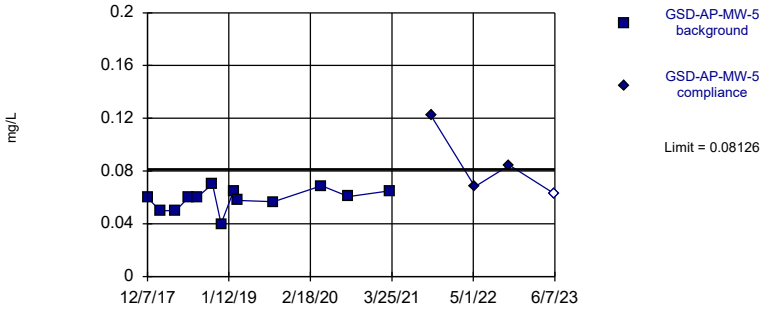
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.05878, Std. Dev.=0.008293, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9302, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

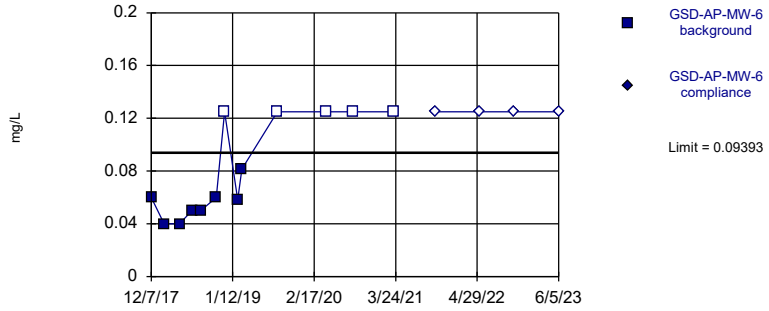
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.3704, Std. Dev.=0.03104, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8158, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

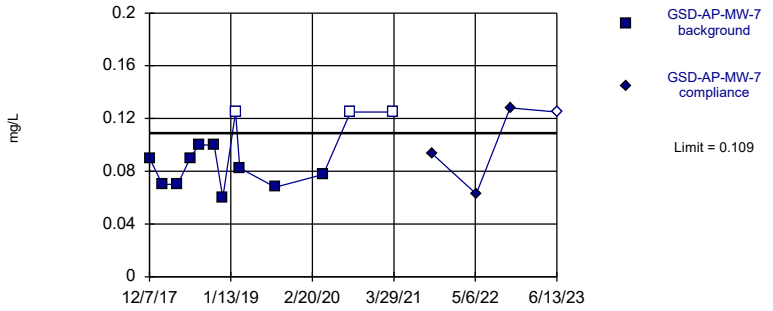
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0755, Std. Dev.=0.01236, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8999, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

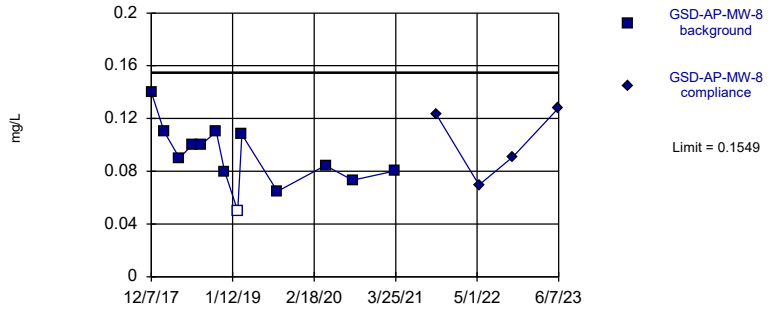
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.09159, Std. Dev.=0.02334, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9776, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

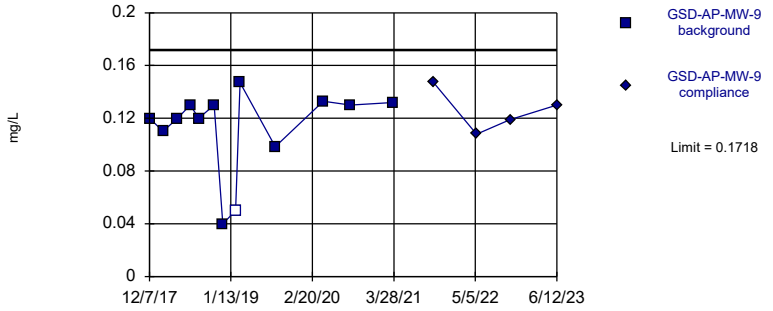
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=0.01358, Std. Dev.=0.00588, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8582, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

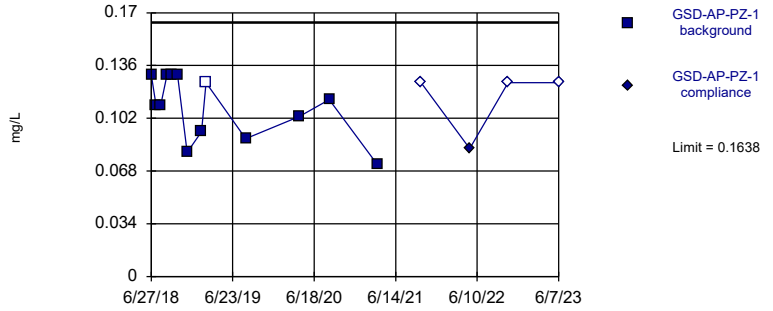
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.109, Std. Dev.=0.02021, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8946, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

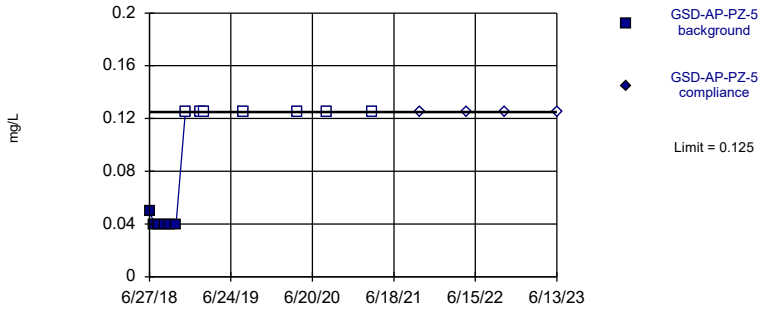
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

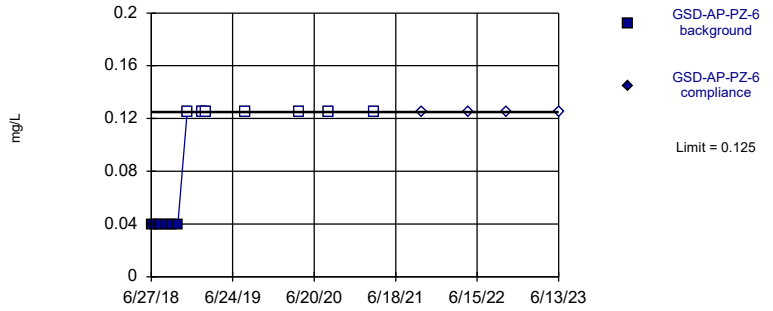
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Fluoride Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

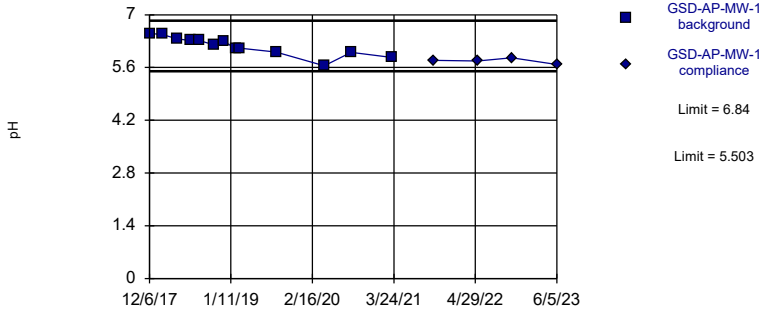
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.172, Std. Dev.=0.2466, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9507, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

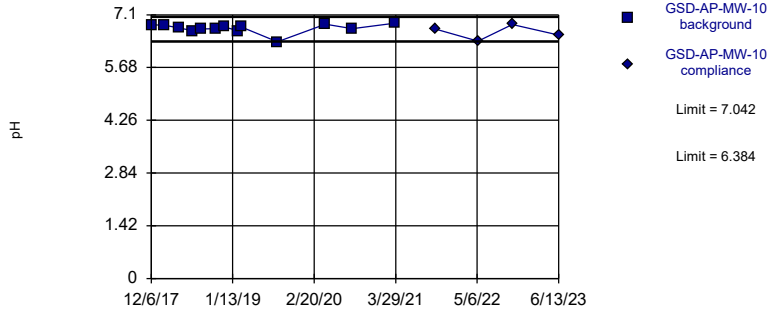
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^4 transformation): Mean=2060, Std. Dev.=147.3, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8204, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

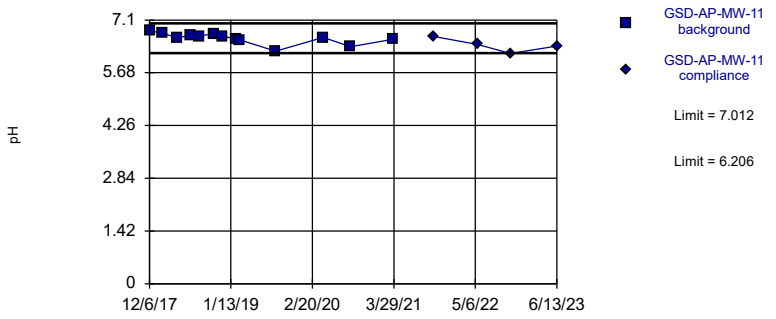
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.609, Std. Dev.=0.1486, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.894, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

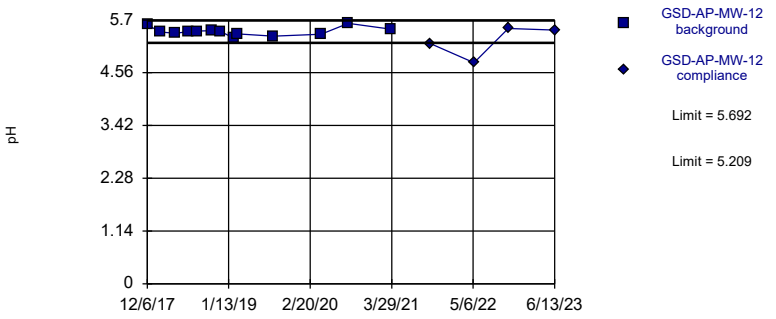
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.451, Std. Dev.=0.08911, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.939, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

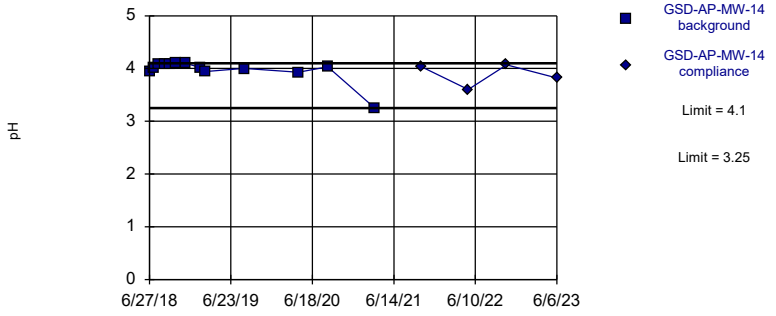
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

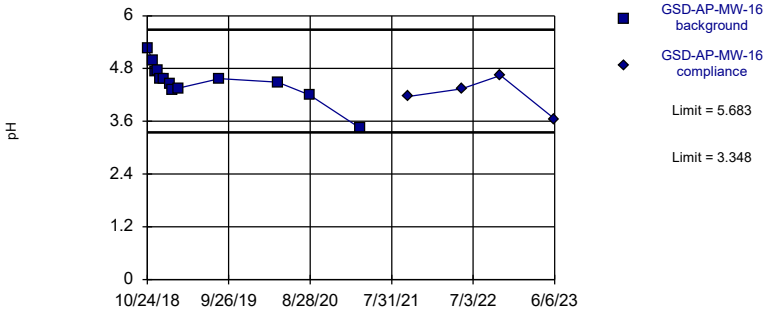
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



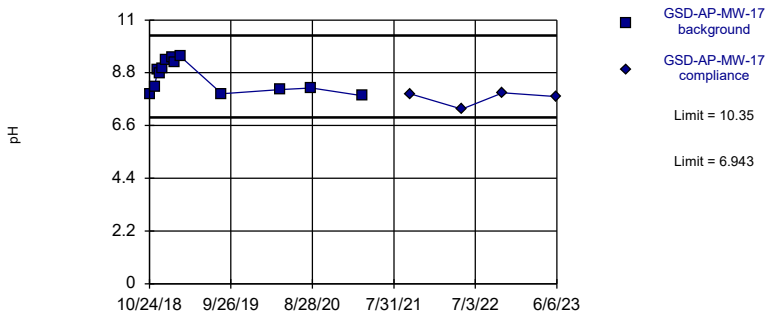
Background Data Summary: Mean=4.515, Std. Dev.=0.4307, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9225, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.645, Std. Dev.=0.6277, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8772, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

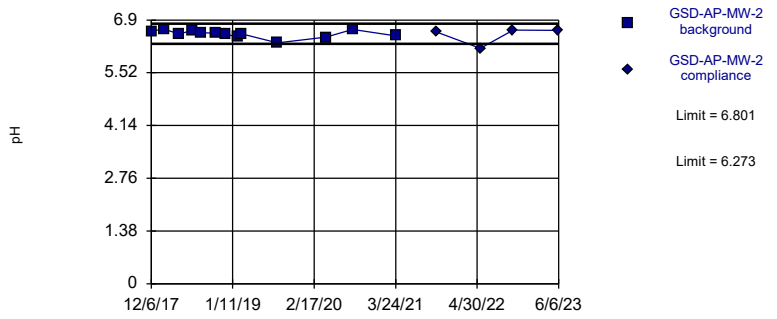
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.537, Std. Dev.=0.09742, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

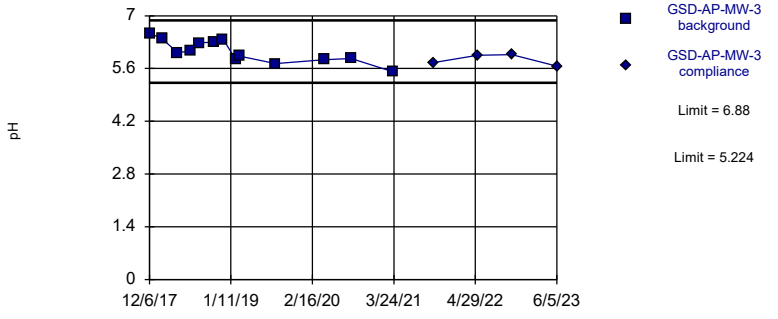
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.052, Std. Dev.=0.3053, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

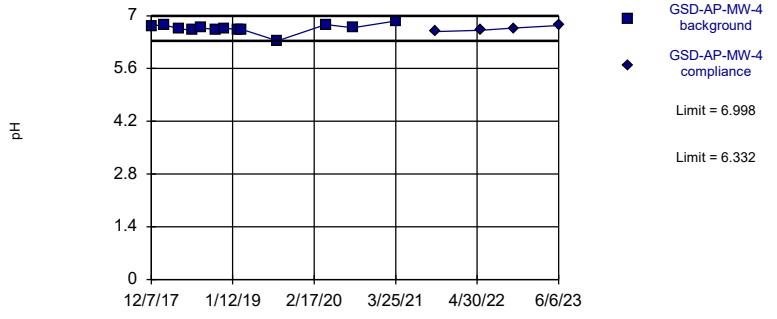
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.665, Std. Dev.=0.1229, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8446, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

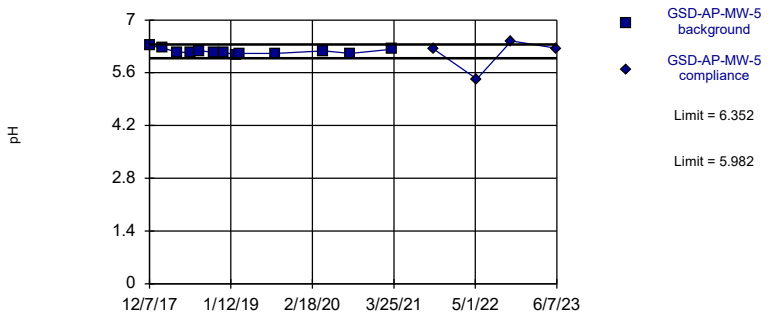
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.167, Std. Dev.=0.06836, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9003, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

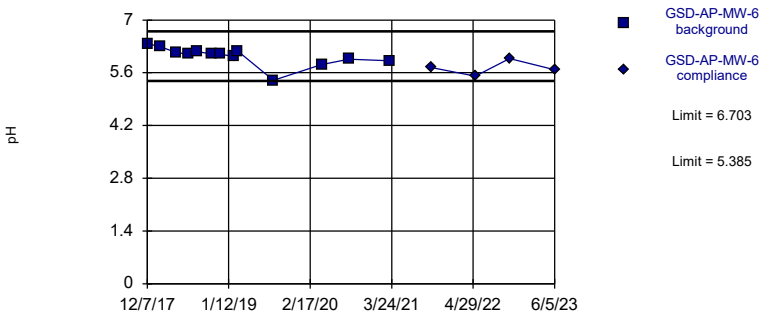
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.044, Std. Dev.=0.243, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8773, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

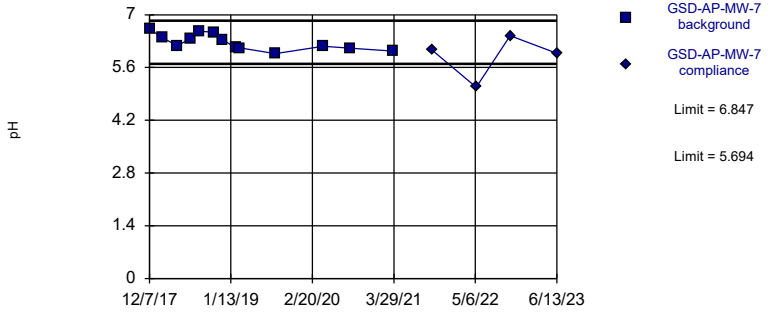
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.271, Std. Dev.=0.2126, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9235, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

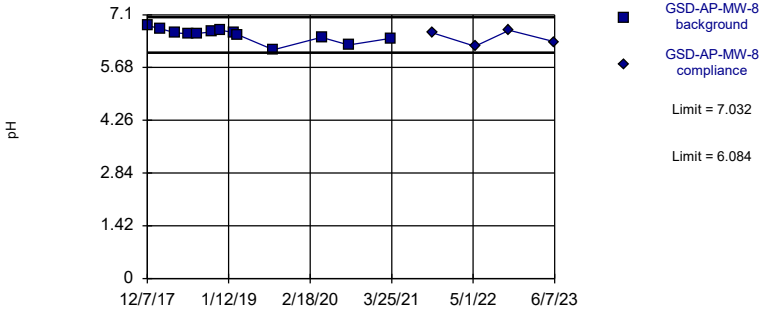
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.558, Std. Dev.=0.1748, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

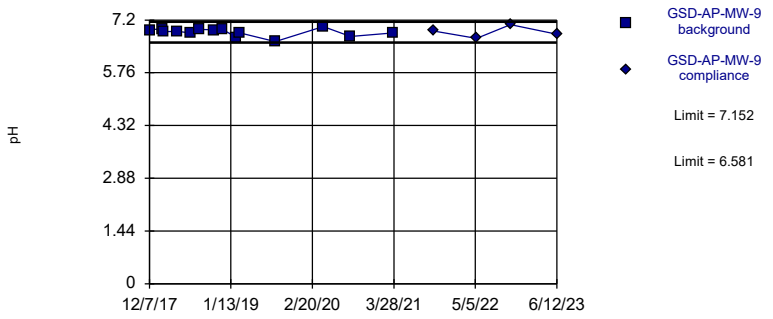
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.866, Std. Dev.=0.1077, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9109, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

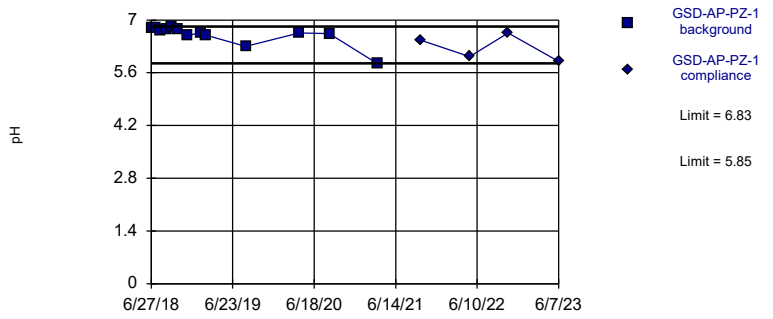
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

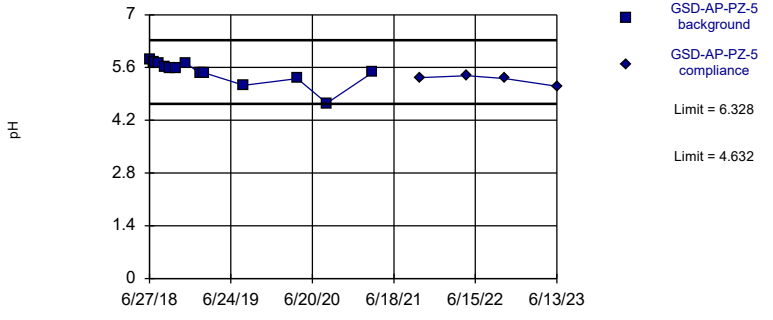
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.48, Std. Dev.=0.3127, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8416, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

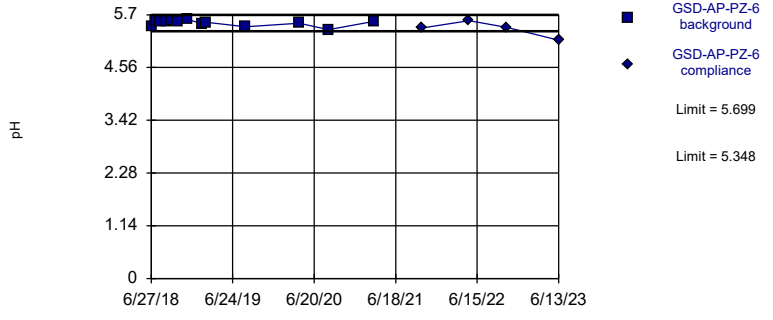
Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.523, Std. Dev.=0.06473, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8711, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/19/2023 12:59 PM View: Intrawell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	0.1	
2/6/2018	0.08 (J)	
4/23/2018	0.07 (J)	
6/26/2018	0.08 (J)	
8/7/2018	0.07 (J)	
10/22/2018	0.07 (J)	
12/4/2018	0.04 (J)	
2/5/2019	0.0525 (J)	
2/26/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/25/2020	<0.125	
3/16/2021	<0.125	
10/5/2021		0.0601 (J)
5/10/2022		<0.125
10/26/2022		<0.125
6/5/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	0.09 (J)	
2/7/2018	0.08 (J)	
4/24/2018	0.08 (J)	
6/27/2018	0.09 (J)	
8/7/2018	0.04 (J)	
10/22/2018	0.1	
12/4/2018	0.07 (J)	
2/6/2019	0.107	
2/26/2019	0.0813 (J)	
8/22/2019	0.084 (J)	
4/15/2020	0.112	
8/26/2020	0.0997 (J)	
3/23/2021	0.101	
10/11/2021		0.201
5/10/2022		0.0918 (J)
10/26/2022		0.0929 (J)
6/13/2023		0.0805 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	0.06 (J)	
2/7/2018	0.05 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/8/2018	0.06 (J)	
10/23/2018	0.06 (J)	
12/4/2018	<0.125	
2/6/2019	0.0678 (J)	
2/27/2019	0.0985 (J)	
8/22/2019	<0.125	
4/14/2020	0.0878 (J)	
8/26/2020	<0.125	
3/23/2021	0.0819 (J)	
10/12/2021		0.134
5/17/2022		<0.125
10/26/2022		0.069 (J)
6/13/2023		0.105 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	<0.125	
2/8/2018	<0.125	
4/24/2018	<0.125	
6/27/2018	<0.125	
8/8/2018	<0.125	
10/23/2018	0.04 (J)	
12/5/2018	<0.125	
2/6/2019	<0.125	
2/27/2019	<0.125	
8/22/2019	<0.125	
4/14/2020	<0.125	
8/26/2020	<0.125	
3/23/2021	<0.125	
10/5/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125
6/13/2023		0.0795 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	0.18	
7/18/2018	0.23	
8/6/2018	0.23	
9/5/2018	0.22	
9/24/2018	0.2	
10/24/2018	0.14	
12/5/2018	0.07 (J)	
2/5/2019	<0.125	
2/28/2019	<0.125	
8/20/2019	<0.125	
4/16/2020	<0.125	
8/25/2020	<0.125	
3/22/2021	<0.125	
10/12/2021		<0.125
5/9/2022		<0.125
10/26/2022		<0.125
6/6/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	0.11	
11/14/2018	0.1	
11/28/2018	0.1	
12/5/2018	0.11	
12/18/2018	0.14	
1/3/2019	0.16	
1/24/2019	<0.125	
2/5/2019	<0.125	
2/28/2019	<0.125	
6/24/2019	<0.125 (D)	
8/19/2019	<0.125	
4/15/2020	<0.125	
8/25/2020	0.0863 (J)	
3/22/2021	<0.125	
10/6/2021		<0.125
5/17/2022		<0.125
10/25/2022		<0.125
6/6/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	0.23	
11/14/2018	0.2	
11/28/2018	0.19	
12/5/2018	0.19	
12/18/2018	0.15	
1/3/2019	0.19	
1/24/2019	0.168	
2/5/2019	0.192	
2/28/2019	0.182	
8/19/2019	0.187	
4/16/2020	0.166	
8/24/2020	0.163	
3/22/2021	0.18	
10/6/2021		0.175
5/9/2022		0.191
10/25/2022		0.15
6/6/2023		0.113 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	0.3	
2/6/2018	0.27	
4/23/2018	0.19	
6/27/2018	0.28	
8/7/2018	0.24	
10/22/2018	0.24	
12/4/2018	0.15	
2/5/2019	0.207	
2/26/2019	0.264	
8/20/2019	0.252	
4/15/2020	0.21	
8/25/2020	0.273	
3/24/2021	0.194	
10/11/2021		0.283
5/16/2022		0.264
10/25/2022		0.271
6/6/2023		0.204

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	0.13	
2/6/2018	0.08 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.07 (J)	
8/7/2018	0.09 (J)	
10/22/2018	0.11	
12/3/2018	0.08 (J)	
2/5/2019	0.064 (J)	
2/25/2019	<0.125	
6/18/2019	0.0664 (J)	
8/20/2019	0.0592 (J)	
4/13/2020	<0.125	
8/26/2020	<0.125	
3/22/2021	<0.125	
10/5/2021		<0.125
5/10/2022		0.0714 (J)
10/26/2022		<0.125
6/5/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	0.25	
2/6/2018	0.24	
4/24/2018	0.2	
6/26/2018	0.22	
8/6/2018	0.22	
10/22/2018	0.24	
12/3/2018	0.22	
2/5/2019	0.259	
2/26/2019	0.246	
8/20/2019	0.197	
4/15/2020	0.238	
8/26/2020	0.251	
3/24/2021	0.227	
10/5/2021		0.214
5/16/2022		0.17
10/26/2022		0.283
6/6/2023		0.225

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	0.06 (J)	
2/6/2018	0.05 (J)	
4/25/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/7/2018	0.06 (J)	
10/23/2018	0.07 (J)	
12/5/2018	0.04 (J)	
2/5/2019	0.0651 (J)	
2/27/2019	0.0578 (J)	
8/20/2019	0.0567 (J)	
4/13/2020	0.0688 (J)	
8/24/2020	0.0607 (J)	
3/16/2021	0.065 (J)	
10/5/2021		0.122
5/9/2022		0.0682 (J)
10/26/2022		0.0845 (J)
6/7/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	0.06 (J)	
2/8/2018	0.04 (J)	
4/25/2018	0.04 (J)	
6/26/2018	0.05 (J)	
8/7/2018	0.05 (J)	
10/23/2018	0.06 (J)	
12/3/2018	<0.125	
2/5/2019	0.0581 (J)	
2/26/2019	0.0816 (J)	
8/20/2019	<0.125	
4/13/2020	<0.125	
8/26/2020	<0.125	
3/17/2021	<0.125	
10/5/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125
6/5/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	0.09 (J)	
2/8/2018	0.07 (J)	
4/25/2018	0.07 (J)	
6/26/2018	0.09 (J)	
8/8/2018	0.1	
10/23/2018	0.1	
12/4/2018	0.06 (J)	
2/6/2019	<0.125	
2/27/2019	0.0824 (J)	
8/21/2019	0.068 (J)	
4/15/2020	0.0775 (J)	
8/26/2020	<0.125	
3/23/2021	<0.125	
10/5/2021		0.0933 (J)
5/10/2022		0.0627 (J)
10/26/2022		0.128
6/13/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	0.14	
2/8/2018	0.11	
4/25/2018	0.09 (J)	
6/26/2018	0.1	
8/8/2018	0.1	
10/23/2018	0.11	
12/4/2018	0.08 (J)	
2/6/2019	<0.1	
2/27/2019	0.108	
8/21/2019	0.0648 (J)	
4/14/2020	0.0845 (J)	
8/26/2020	0.0732 (J)	
3/23/2021	0.0802 (J)	
10/12/2021		0.123
5/11/2022		0.0695 (J)
10/26/2022		0.0911 (J)
6/7/2023		0.128

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	0.12	
2/12/2018	0.11	
4/25/2018	0.12	
6/26/2018	0.13	
8/8/2018	0.12	
10/23/2018	0.13	
12/5/2018	0.04 (J)	
2/6/2019	<0.1	
2/27/2019	0.147	
8/21/2019	0.0984 (J)	
4/14/2020	0.133	
8/26/2020	0.13	
3/23/2021	0.132	
10/12/2021		0.147
5/11/2022		0.108 (J)
10/26/2022		0.119 (J)
6/12/2023		0.13

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	0.13	
7/18/2018	0.11	
8/7/2018	0.11	
9/5/2018	0.13	
9/24/2018	0.13	
10/22/2018	0.13	
12/3/2018	0.08 (J)	
2/5/2019	0.0934 (J)	
2/25/2019	<0.125	
8/20/2019	0.0889 (J)	
4/13/2020	0.103	
8/24/2020	0.114	
3/24/2021	0.0725 (J)	
10/5/2021		<0.125
5/9/2022		0.0824 (J)
10/26/2022		<0.125
6/7/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	0.05 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.125	
2/7/2019	<0.125	
2/25/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/24/2020	<0.125	
3/16/2021	<0.125	
10/12/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125
6/13/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	0.04 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.125	
2/7/2019	<0.125	
2/25/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/24/2020	<0.125	
3/16/2021	<0.125	
10/12/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125
6/13/2023		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	6.5	
2/6/2018	6.48	
4/23/2018	6.36	
6/26/2018	6.32	
8/7/2018	6.32	
10/22/2018	6.2	
12/4/2018	6.31	
2/5/2019	6.1	
2/26/2019	6.11	
8/21/2019	6.01	
4/15/2020	5.65	
8/25/2020	6	
3/16/2021	5.87	
10/5/2021		5.79
5/10/2022		5.77
10/26/2022		5.86
6/5/2023		5.68

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	6.83	
2/7/2018	6.82	
4/24/2018	6.74	
6/27/2018	6.67	
8/7/2018	6.72	
10/22/2018	6.73	
12/4/2018	6.77	
2/6/2019	6.67	
2/26/2019	6.77	
8/22/2019	6.37	
4/15/2020	6.85	
8/26/2020	6.73	
3/23/2021	6.87	
10/11/2021		6.72
5/10/2022		6.39
10/26/2022		6.84
6/13/2023		6.55

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	6.81	
2/7/2018	6.74	
4/24/2018	6.62	
6/27/2018	6.69	
8/8/2018	6.67	
10/23/2018	6.73	
12/4/2018	6.67	
2/6/2019	6.58	
2/27/2019	6.56	
8/22/2019	6.26	
4/14/2020	6.63	
8/26/2020	6.38	
3/23/2021	6.58	
10/12/2021		6.66
5/17/2022		6.44
10/26/2022		6.2
6/13/2023		6.4

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	5.6	
2/8/2018	5.44	
4/24/2018	5.41	
6/27/2018	5.45	
8/8/2018	5.46	
10/23/2018	5.47	
12/5/2018	5.45	
2/6/2019	5.31	
2/27/2019	5.4	
8/22/2019	5.35	
4/14/2020	5.39	
8/26/2020	5.63	
3/23/2021	5.5	
10/5/2021		5.19
5/10/2022		4.78
10/26/2022		5.52
6/13/2023		5.48

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	3.95	
7/18/2018	4.02	
8/6/2018	4.07	
9/5/2018	4.07	
9/24/2018	4.07	
10/24/2018	4.1	
12/5/2018	4.1	
2/5/2019	4.02	
2/28/2019	3.94 (E)	
8/20/2019	4	
4/16/2020	3.93	
8/25/2020	4.03	
3/22/2021	3.25	
10/12/2021		4.04
5/9/2022		3.6
10/26/2022		4.07
6/6/2023		3.82

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	5.27	
11/14/2018	4.99	
11/28/2018	4.74	
12/5/2018	4.76	
12/18/2018	4.57	
1/3/2019	4.56	
1/24/2019	4.45	
2/5/2019	4.3	
2/28/2019	4.35	
8/19/2019	4.57	
4/15/2020	4.49	
8/25/2020	4.2	
3/22/2021	3.45	
10/6/2021		4.16
5/17/2022		4.34
10/25/2022		4.64
6/6/2023		3.65

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	7.92	
11/14/2018	8.23	
11/28/2018	8.95	
12/5/2018	8.77	
12/18/2018	8.99	
1/3/2019	9.35	
1/24/2019	9.42	
2/5/2019	9.23	
2/28/2019	9.48	
8/19/2019	7.93	
4/16/2020	8.1	
8/24/2020	8.17	
3/22/2021	7.85	
10/6/2021		7.92
5/9/2022		7.29
10/25/2022		7.97
6/6/2023		7.8

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	6.61	
2/6/2018	6.66	
4/23/2018	6.54	
6/27/2018	6.63	
8/7/2018	6.57	
10/22/2018	6.55	
12/4/2018	6.52	
2/5/2019	6.47	
2/26/2019	6.54	
8/20/2019	6.3	
4/15/2020	6.45	
8/25/2020	6.65	
3/24/2021	6.49	
10/11/2021		6.59
5/16/2022		6.16
10/25/2022		6.64
6/6/2023		6.63

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	6.54	
2/6/2018	6.39	
4/24/2018	6.02	
6/27/2018	6.07	
8/7/2018	6.28	
10/22/2018	6.3	
12/3/2018	6.38	
2/5/2019	5.83	
2/25/2019	5.93	
8/20/2019	5.73	
4/13/2020	5.83	
8/26/2020	5.87	
3/22/2021	5.51	
10/5/2021		5.76
5/10/2022		5.95
10/26/2022		5.97
6/5/2023		5.66

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	6.73	
2/6/2018	6.76	
4/24/2018	6.66	
6/26/2018	6.61	
8/6/2018	6.68	
10/22/2018	6.63	
12/3/2018	6.67	
2/5/2019	6.63	
2/26/2019	6.64	
8/20/2019	6.33	
4/15/2020	6.77	
8/26/2020	6.68	
3/24/2021	6.86	
10/5/2021		6.58
5/16/2022		6.61
10/26/2022		6.67
6/6/2023		6.74

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	6.32	
2/6/2018	6.27	
4/25/2018	6.14	
6/27/2018	6.15	
8/7/2018	6.18	
10/23/2018	6.15	
12/5/2018	6.15	
2/5/2019	6.08	
2/27/2019	6.11	
8/20/2019	6.11	
4/13/2020	6.18	
8/24/2020	6.11	
3/16/2021	6.22	
10/5/2021		6.24
5/9/2022		5.43
10/26/2022		6.44
6/7/2023		6.25

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	6.38	
2/8/2018	6.29	
4/25/2018	6.15	
6/26/2018	6.09	
8/7/2018	6.16	
10/23/2018	6.1	
12/3/2018	6.09	
2/5/2019	6.04	
2/26/2019	6.17	
8/20/2019	5.4	
4/13/2020	5.82	
8/26/2020	5.96	
3/17/2021	5.92	
10/5/2021		5.74
5/10/2022		5.51
10/26/2022		5.98
6/5/2023		5.68

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	6.62	
2/8/2018	6.39	
4/25/2018	6.17	
6/26/2018	6.38	
8/8/2018	6.56	
10/23/2018	6.54	
12/4/2018	6.33	
2/6/2019	6.13	
2/27/2019	6.12	
8/21/2019	5.97	
4/15/2020	6.16	
8/26/2020	6.11	
3/23/2021	6.04	
10/5/2021		6.06
5/10/2022		5.08
10/26/2022		6.44
6/13/2023		5.98

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	6.81	
2/8/2018	6.73	
4/25/2018	6.61	
6/26/2018	6.59	
8/8/2018	6.6	
10/23/2018	6.64	
12/4/2018	6.68	
2/6/2019	6.62	
2/27/2019	6.56	
8/21/2019	6.16	
4/14/2020	6.49	
8/26/2020	6.29	
3/23/2021	6.47	
10/12/2021		6.61
5/11/2022		6.25
10/26/2022		6.68
6/7/2023		6.37

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	6.93	
2/8/2018	6.96	
2/12/2018	6.88	
4/25/2018	6.89	
6/26/2018	6.85	
8/8/2018	6.94	
10/23/2018	6.93	
12/5/2018	6.94	
2/6/2019	6.73	
2/27/2019	6.85	
8/21/2019	6.61	
4/14/2020	7.02	
8/26/2020	6.75	
3/23/2021	6.85	
10/12/2021		6.9
5/11/2022		6.7
10/26/2022		7.07
6/12/2023		6.81

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	6.79	
7/18/2018	6.8	
8/7/2018	6.73	
9/5/2018	6.75	
9/24/2018	6.83	
10/22/2018	6.76	
12/3/2018	6.6	
2/5/2019	6.66	
2/25/2019	6.6	
8/20/2019	6.3	
4/13/2020	6.66	
8/24/2020	6.64	
3/24/2021	5.85	
10/5/2021		6.46
5/9/2022		6.03
10/26/2022		6.66
6/7/2023		5.9

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	5.81	
7/18/2018	5.74	
8/8/2018	5.7	
9/5/2018	5.61	
9/24/2018	5.59	
10/23/2018	5.6	
12/3/2018	5.73	
2/7/2019	5.44	
2/25/2019	5.46	
8/21/2019	5.13	
4/15/2020	5.31	
8/24/2020	4.65	
3/16/2021	5.47	
10/12/2021		5.33
5/10/2022		5.38
10/26/2022		5.31
6/13/2023		5.1

Prediction Limit

Constituent: pH (pH) Analysis Run 7/19/2023 1:01 PM View: Intrawell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	5.44	
7/18/2018	5.58	
8/8/2018	5.55	
9/5/2018	5.56	
9/24/2018	5.57	
10/23/2018	5.55	
12/3/2018	5.6	
2/7/2019	5.51	
2/25/2019	5.54	
8/21/2019	5.44	
4/15/2020	5.52	
8/24/2020	5.38	
3/16/2021	5.56	
10/12/2021		5.41
5/10/2022		5.57
10/26/2022		5.43
6/13/2023		5.15

FIGURE E.

Interwell Prediction Limit - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:03 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	0.1015	n/a	6/5/2023	0.88	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-11	0.1015	n/a	6/13/2023	0.143	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-2	0.1015	n/a	6/6/2023	0.367	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-3	0.1015	n/a	6/5/2023	0.858	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-4	0.1015	n/a	6/6/2023	0.415	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-5	0.1015	n/a	6/7/2023	0.234	Yes	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GSD-AP-MW-1	31.74	n/a	6/5/2023	166	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-10	31.74	n/a	6/13/2023	36.4	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-11	31.74	n/a	6/13/2023	94.5	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-12	31.74	n/a	6/13/2023	53.2	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-2	31.74	n/a	6/6/2023	60.7	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-3	31.74	n/a	6/5/2023	55.4	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-4	31.74	n/a	6/6/2023	39.8	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-5	31.74	n/a	6/7/2023	46.5	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-8	31.74	n/a	6/7/2023	56.3	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-9	31.74	n/a	6/12/2023	37.8	Yes	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-1	4.021	n/a	6/5/2023	6.12	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-10	4.021	n/a	6/13/2023	5.45	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-11	4.021	n/a	6/13/2023	5.51	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-12	4.021	n/a	6/13/2023	5.18	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-3	4.021	n/a	6/5/2023	4.57	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-4	4.021	n/a	6/6/2023	6.68	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-5	4.021	n/a	6/7/2023	6.81	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-6	4.021	n/a	6/5/2023	10.9	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-8	4.021	n/a	6/7/2023	5.02	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-9	4.021	n/a	6/12/2023	7.07	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-2	4.021	n/a	6/5/2023	5.7	Yes	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	GSD-AP-MW-1	207	n/a	6/5/2023	406	Yes	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-12	207	n/a	6/13/2023	212	Yes	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	276.7	n/a	6/5/2023	710	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	276.7	n/a	6/13/2023	374	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	276.7	n/a	6/13/2023	370	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	276.7	n/a	6/5/2023	334	Yes	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limit - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:03 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**0.1015**	**n/a**	**6/5/2023**	**0.88**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-10	0.1015	n/a	6/13/2023	0.0864J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-11**	**0.1015**	**n/a**	**6/13/2023**	**0.143**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-12	0.1015	n/a	6/13/2023	0.0902J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-2**	**0.1015**	**n/a**	**6/6/2023**	**0.367**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-3**	**0.1015**	**n/a**	**6/5/2023**	**0.858**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-4**	**0.1015**	**n/a**	**6/6/2023**	**0.415**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-5**	**0.1015**	**n/a**	**6/7/2023**	**0.234**	**Yes**	**52**	**n/a**	**n/a**	**57.69**	**n/a**	**n/a**	**0.0006777**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-6	0.1015	n/a	6/5/2023	0.0776J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-7	0.1015	n/a	6/13/2023	0.0428J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-8	0.1015	n/a	6/7/2023	0.0355J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-9	0.1015	n/a	6/12/2023	0.062J	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-1	0.1015	n/a	6/7/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-2	0.1015	n/a	6/5/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-5	0.1015	n/a	6/13/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-6	0.1015	n/a	6/13/2023	0.1015ND	No	52	n/a	n/a	57.69	n/a	n/a	0.0006777	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GSD-AP-MW-1**	**31.74**	**n/a**	**6/5/2023**	**166**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-10**	**31.74**	**n/a**	**6/13/2023**	**36.4**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-11**	**31.74**	**n/a**	**6/13/2023**	**94.5**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-12**	**31.74**	**n/a**	**6/13/2023**	**53.2**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-2**	**31.74**	**n/a**	**6/6/2023**	**60.7**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-3**	**31.74**	**n/a**	**6/5/2023**	**55.4**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-4**	**31.74**	**n/a**	**6/6/2023**	**39.8**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-5**	**31.74**	**n/a**	**6/7/2023**	**46.5**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-6	31.74	n/a	6/5/2023	10.6	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-7	31.74	n/a	6/13/2023	8.71	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-8**	**31.74**	**n/a**	**6/7/2023**	**56.3**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-9**	**31.74**	**n/a**	**6/12/2023**	**37.8**	**Yes**	**52**	**18.35**	**6.274**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-PZ-1	31.74	n/a	6/7/2023	20.9	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-2	31.74	n/a	6/5/2023	13.4	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-5	31.74	n/a	6/13/2023	2.82	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-6	31.74	n/a	6/13/2023	3.14	No	52	18.35	6.274	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-1**	**4.021**	**n/a**	**6/5/2023**	**6.12**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-10**	**4.021**	**n/a**	**6/13/2023**	**5.45**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-11**	**4.021**	**n/a**	**6/13/2023**	**5.51**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-12**	**4.021**	**n/a**	**6/13/2023**	**5.18**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-2	4.021	n/a	6/6/2023	2.02	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-3**	**4.021**	**n/a**	**6/5/2023**	**4.57**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-4**	**4.021**	**n/a**	**6/6/2023**	**6.68**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-5**	**4.021**	**n/a**	**6/7/2023**	**6.81**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-6**	**4.021**	**n/a**	**6/5/2023**	**10.9**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-7	4.021	n/a	6/13/2023	3.43	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-8**	**4.021**	**n/a**	**6/7/2023**	**5.02**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-9**	**4.021**	**n/a**	**6/12/2023**	**7.07**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-1	4.021	n/a	6/7/2023	3.37	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-PZ-2**	**4.021**	**n/a**	**6/5/2023**	**5.7**	**Yes**	**52**	**3.225**	**0.3731**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-5	4.021	n/a	6/13/2023	3.88	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-6	4.021	n/a	6/13/2023	3.38	No	52	3.225	0.3731	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-1**	**207**	**n/a**	**6/5/2023**	**406**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006777**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-10	207	n/a	6/13/2023	21.9	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-11	207	n/a	6/13/2023	150	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-12**	**207**	**n/a**	**6/13/2023**	**212**	**Yes**	**52**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0006777**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-2	207	n/a	6/6/2023	73.9	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-3	207	n/a	6/5/2023	171	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-4	207	n/a	6/6/2023	88.7	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-5	207	n/a	6/7/2023	27.5	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-6	207	n/a	6/5/2023	15.1	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-7	207	n/a	6/13/2023	6.16	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-8	207	n/a	6/7/2023	12.5	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-9	207	n/a	6/12/2023	18.9	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-1	207	n/a	6/7/2023	2.38	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-2	207	n/a	6/5/2023	1.31J	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-5	207	n/a	6/13/2023	1ND	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-6	207	n/a	6/13/2023	1.14J	No	52	n/a	n/a	0	n/a	n/a	0.0006777	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**276.7**	**n/a**	**6/5/2023**	**710**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-10	276.7	n/a	6/13/2023	199	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**276.7**	**n/a**	**6/13/2023**	**374**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-12**	**276.7**	**n/a**	**6/13/2023**	**370**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**

Interwell Prediction Limit - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/19/2023, 1:03 PM

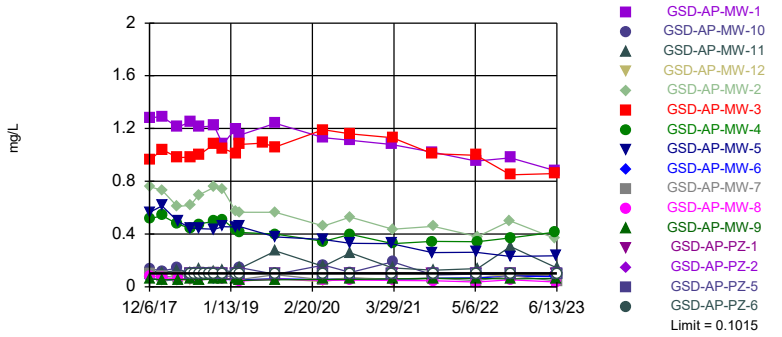
Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	276.7	n/a	6/6/2023	246	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**276.7**	**n/a**	**6/5/2023**	**334**	**Yes**	**52**	**168.8**	**50.6**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-4	276.7	n/a	6/6/2023	263	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-5	276.7	n/a	6/7/2023	202	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-6	276.7	n/a	6/5/2023	94	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-7	276.7	n/a	6/13/2023	74.7	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-8	276.7	n/a	6/7/2023	226	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-9	276.7	n/a	6/12/2023	185	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-1	276.7	n/a	6/7/2023	96.7	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-2	276.7	n/a	6/5/2023	84	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-5	276.7	n/a	6/13/2023	36.7	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-6	276.7	n/a	6/13/2023	36	No	52	168.8	50.6	0	None	No	0.0005016	Param Inter 1 of 2

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 52 background values. 57.69% NDs. Annual per-constituent alpha = 0.02013. Individual comparison alpha = 0.0006777 (1 of 2). Comparing 16 points to limit.

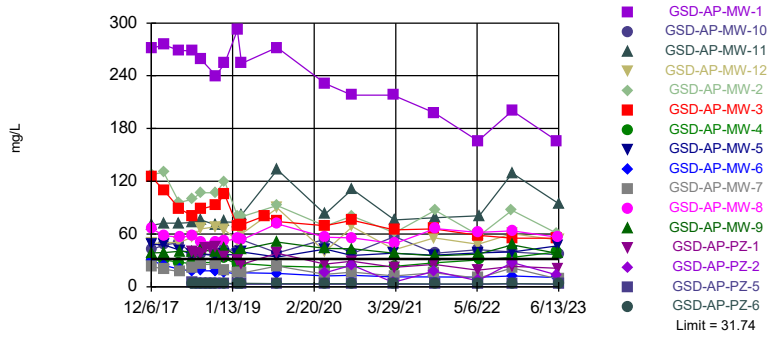
Constituent: Boron Analysis Run 7/19/2023 1:02 PM View: Interwell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4...

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=18.35, Std. Dev.=6.274, n=52. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9427, critical = 0.937. Kappa = 2.133 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 16 points to limit.

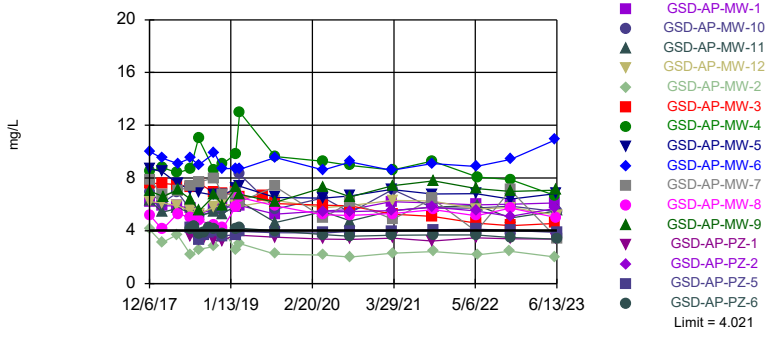
Constituent: Calcium Analysis Run 7/19/2023 1:02 PM View: Interwell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5...

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.225, Std. Dev.=0.3731, n=52. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9719, critical = 0.937. Kappa = 2.133 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 16 points to limit.

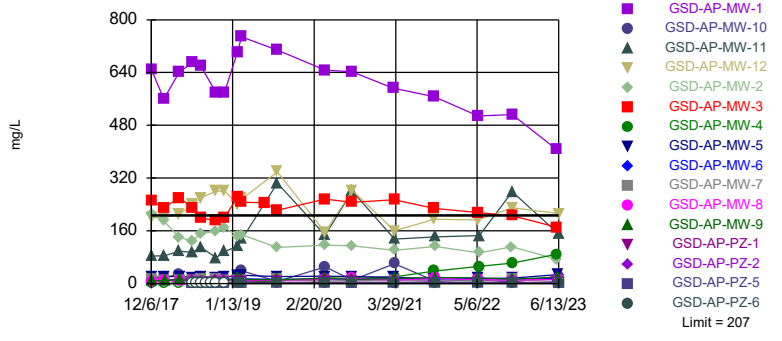
Constituent: Chloride Analysis Run 7/19/2023 1:02 PM View: Interwell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-12

Prediction Limit

Interwell Non-parametric



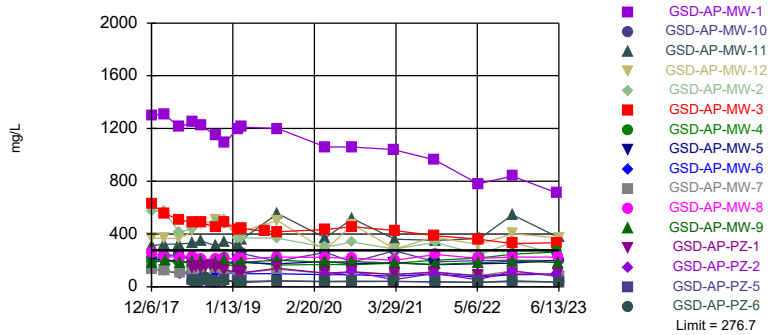
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 52 background values. Annual per-constituent alpha = 0.02013. Individual comparison alpha = 0.0006777 (1 of 2). Comparing 16 points to limit.

Constituent: Sulfate Analysis Run 7/19/2023 1:02 PM View: Interwell PL
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=168.8, Std. Dev.=50.6, n=52. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9711, critical = 0.937. Kappa = 2.133 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 16 points to limit.

Constituent: Total Dissolved Solids Analysis Run 7/19/2023 1:02 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
12/6/2017	1.28	0.0605 (J)	0.758	0.959	0.135	0.12			
12/7/2017							0.0828 (J)	0.566	0.063 (J)
2/6/2018	1.29		0.733	1.04				0.614	
2/7/2018					0.12	0.109			
2/8/2018		0.0527 (J)					0.0691 (J)		0.0508 (J)
4/23/2018	1.21		0.608						
4/24/2018		0.0476 (J)		0.979	0.144	0.124			
4/25/2018							0.0571 (J)	0.498	0.0548 (J)
6/26/2018	1.25						0.0634 (J)		0.0571 (J)
6/27/2018		0.0539 (J)	0.619	0.982	0.0903 (J)	0.111		0.446	
7/18/2018									
8/6/2018									
8/7/2018	1.21		0.697	1	0.106			0.442	0.0571 (J)
8/8/2018		0.0637 (J)				0.135	0.0659 (J)		
9/5/2018									
9/24/2018									
10/22/2018	1.22		0.754	1.08	0.107				
10/23/2018		0.0696 (J)				0.114	0.0666 (J)	0.436	0.0636 (J)
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				1.05					0.0568 (J)
12/4/2018	1.08		0.737		0.103	0.124	0.0617 (J)		
12/5/2018		0.0652 (J)						0.456	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	1.2		0.575	1.01				0.453	0.0509 (J)
2/6/2019		0.0511 (J)			0.105	0.112	0.0586 (J)		
2/7/2019									
2/25/2019				1.08					
2/26/2019	1.15		0.566		0.146				0.0527 (J)
2/27/2019		0.0494 (J)				0.14	0.0428 (J)	0.457	
2/28/2019									
6/18/2019				1.09					
6/24/2019									
8/19/2019									
8/20/2019			0.566	1.06				0.378	0.0608 (J)
8/21/2019	1.24						0.0569 (J)		
8/22/2019		0.0625 (J)			0.0951 (J)	0.272			
4/13/2020				1.19				0.359	0.0561 (J)
4/14/2020		0.0377 (J)				0.154	0.0474 (J)		
4/15/2020	1.13		0.461		0.164				
4/16/2020									
8/24/2020								0.329	
8/25/2020	1.11		0.528						
8/26/2020		0.0698 (J)		1.16	0.108	0.257	0.0501 (J)		0.0633 (J)
3/16/2021	1.08							0.328	
3/17/2021									0.0563 (J)
3/22/2021				1.13					
3/23/2021		0.0452 (J)			0.188	0.142	0.0476 (J)		
3/24/2021			0.437						

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
10/5/2021	1.02	0.0661 (J)		1.01				0.26	0.0649 (J)
10/6/2021									
10/11/2021			0.459		0.09 (J)				
10/12/2021						0.125	0.0462 (J)		
5/9/2022								0.261	
5/10/2022	0.954	0.066 (J)		0.998	0.097 (J)				0.0681 (J)
5/11/2022							0.037 (J)		
5/16/2022			0.381						
5/17/2022						0.139			
10/25/2022			0.5						
10/26/2022	0.977	0.0995 (J)		0.85	0.0868 (J)	0.306	0.0526 (J)	0.23	0.0788 (J)
6/5/2023	0.88			0.858					0.0776 (J)
6/6/2023			0.367						
6/7/2023							0.0355 (J)	0.234	
6/12/2023									
6/13/2023		0.0902 (J)			0.0864 (J)	0.143			

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017									
12/7/2017	0.0614 (J)	0.102	0.515						
2/6/2018			0.541						
2/7/2018									
2/8/2018	0.0531 (J)	0.0787 (J)							
4/23/2018									
4/24/2018			0.475						
4/25/2018	0.0551 (J)	0.0734 (J)							
6/26/2018	0.0568 (J)	0.094 (J)	0.444						
6/27/2018				<0.1015	<0.1015	<0.1015	<0.1015		
7/18/2018				<0.1015	<0.1015	<0.1015	<0.1015		
8/6/2018			0.474		<0.1015				
8/7/2018							<0.1015		
8/8/2018	0.0524 (J)	0.103		<0.1015		<0.1015			
9/5/2018				<0.1015	<0.1015	<0.1015	<0.1015		
9/24/2018				<0.1015	<0.1015	<0.1015	<0.1015		
10/22/2018			0.496				<0.1015		
10/23/2018	0.0576 (J)	0.106		<0.1015		<0.1015			
10/24/2018					<0.1015			0.0261 (J)	0.0357 (J)
11/14/2018								0.0209 (J)	0.0348 (J)
11/28/2018								0.0239 (J)	0.0313 (J)
12/3/2018			0.51	<0.1015		<0.1015	<0.1015		
12/4/2018		0.085 (J)							
12/5/2018	0.0561 (J)				<0.1015			<0.1015	0.0363 (J)
12/18/2018								<0.1015	0.033 (J)
1/3/2019								0.0209 (J)	0.036 (J)
1/24/2019								0.0271 (J)	0.0307 (J)
2/5/2019			0.43		<0.1015		<0.1015	0.0245 (J)	0.0306 (J)
2/6/2019	0.0627 (J)	0.0733 (J)							
2/7/2019				<0.1015		<0.1015			
2/25/2019				<0.1015		<0.1015	<0.1015		
2/26/2019			0.411						
2/27/2019	0.0474 (J)	0.0548 (J)							
2/28/2019					<0.1015			<0.1015	0.0206 (J)
6/18/2019									
6/24/2019								<0.1015	
8/19/2019								<0.1015	0.0341 (J)
8/20/2019			0.399		<0.1015		<0.1015		
8/21/2019	0.0524 (J)	0.091 (J)		<0.1015		<0.1015			
8/22/2019									
4/13/2020							<0.1015		
4/14/2020	0.0562 (J)								
4/15/2020		0.0534 (J)	0.344	<0.1015		<0.1015		<0.1015	
4/16/2020					<0.1015				0.0331 (J)
8/24/2020				<0.1015		<0.1015	<0.1015		0.0303 (J)
8/25/2020					<0.1015			<0.1015	
8/26/2020	0.0565 (J)	0.0665 (J)	0.398						
3/16/2021				<0.1015		<0.1015			
3/17/2021									
3/22/2021					<0.1015			<0.1015	0.0333 (J)
3/23/2021	0.0609 (J)	0.0587 (J)							
3/24/2021			0.326				<0.1015		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
10/5/2021		0.0673 (J)	0.344				<0.1015		
10/6/2021								<0.1015	0.0305 (J)
10/11/2021									
10/12/2021	0.0632 (J)			<0.1015	<0.1015	<0.1015			
5/9/2022					<0.1015		<0.1015		0.0347 (J)
5/10/2022		0.0465 (J)		<0.1015		<0.1015			
5/11/2022	0.0636 (J)								
5/16/2022			0.342						
5/17/2022								<0.1015	
10/25/2022								<0.1015	0.0308 (J)
10/26/2022	0.0595 (J)	0.0839 (J)	0.371	<0.1015	<0.1015	<0.1015	<0.1015		
6/5/2023									
6/6/2023			0.415		<0.1015			<0.1015	<0.1015
6/7/2023							<0.1015		
6/12/2023	0.062 (J)								
6/13/2023		0.0428 (J)		<0.1015		<0.1015			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
12/6/2017	
12/7/2017	
2/6/2018	
2/7/2018	
2/8/2018	
4/23/2018	
4/24/2018	
4/25/2018	
6/26/2018	
6/27/2018	
7/18/2018	
8/6/2018	
8/7/2018	
8/8/2018	
9/5/2018	
9/24/2018	
10/22/2018	
10/23/2018	
10/24/2018	
11/14/2018	
11/28/2018	
12/3/2018	
12/4/2018	
12/5/2018	
12/18/2018	
1/3/2019	
1/24/2019	
2/5/2019	
2/6/2019	
2/7/2019	
2/25/2019	
2/26/2019	
2/27/2019	
2/28/2019	
6/18/2019	
6/24/2019	
8/19/2019	
8/20/2019	
8/21/2019	
8/22/2019	
4/13/2020	<0.1015
4/14/2020	
4/15/2020	
4/16/2020	
8/24/2020	<0.1015
8/25/2020	
8/26/2020	
3/16/2021	
3/17/2021	<0.1015
3/22/2021	
3/23/2021	
3/24/2021	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
10/5/2021	<0.1015
10/6/2021	
10/11/2021	
10/12/2021	
5/9/2022	<0.1015
5/10/2022	
5/11/2022	
5/16/2022	
5/17/2022	
10/25/2022	
10/26/2022	<0.1015
6/5/2023	<0.1015
6/6/2023	
6/7/2023	
6/12/2023	
6/13/2023	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
12/6/2017	271	49	128	125	42	70			
12/7/2017							66.1	48.2	29.8
2/6/2018	275		130	110				47.8	
2/7/2018					47.6	72.4			
2/8/2018		50					58		24.3
4/23/2018	269		95.9						
4/24/2018		50.5		88.8	50.1	72.3			
4/25/2018							56.3	41.8	19.8
6/26/2018	268						57.7		17.8
6/27/2018		56.3	99.4	80.8	37.1	73.1		36.9	
7/18/2018									
8/6/2018									
8/7/2018	259		107	88.5	37.4			37.6	18.3
8/8/2018		65.7				76	51.2		
9/5/2018									
9/24/2018									
10/22/2018	240		107	92.7	36.3				
10/23/2018		68.3				70.2	50.9	35.3	18.1
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				105					16.6
12/4/2018	254		120		42.1	74	51.9		
12/5/2018		64.3						36.3	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	292		80.6	68.6				36.6	14.5
2/6/2019		52.2			41.3	73.1	55		
2/7/2019									
2/25/2019				70.6					
2/26/2019	254		79.6		53.3				16
2/27/2019		60.2				82.2	53.4	39.6	
2/28/2019									
6/18/2019				80.5					
6/24/2019									
8/19/2019									
8/20/2019			92.3	74.1				33.7	15.1
8/21/2019	272						71.5		
8/22/2019		89.4			38.5	133			
4/13/2020				69.5				43	12.5
4/14/2020		40				82.4	56.2		
4/15/2020	231		69.2		54.1				
4/16/2020									
8/24/2020								35.5	
8/25/2020	218		80.5						
8/26/2020		68.4		75.7	37.8	111	55.5		12.9
3/16/2021	218							38.1	
3/17/2021									11.3
3/22/2021				64.9					
3/23/2021		42			57	75.9	48.9		
3/24/2021			61.5						

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
10/5/2021	198	55.8		65.9				36	11.4
10/6/2021									
10/11/2021			87.1		38.2				
10/12/2021						78.6	66.3		
5/9/2022								38.4	
5/10/2022	166	48.2		58.5	42.2				10.8
5/11/2022							61.9		
5/16/2022			58.2						
5/17/2022						80.6			
10/25/2022			86.900002						
10/26/2022	200	60.200001		55.299999	39.5	129	63.700001	39.599998	12.2
6/5/2023	166			55.400002					10.6
6/6/2023			60.700001						
6/7/2023							56.299999	46.5	
6/12/2023									
6/13/2023		53.200001			36.400002	94.5			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017									
12/7/2017	38.7	23.4	30.1						
2/6/2018			30.6						
2/7/2018									
2/8/2018	38.8	20.1							
4/23/2018									
4/24/2018			27.8						
4/25/2018	40.3	17.4							
6/26/2018	39.9	21.8	26.2						
6/27/2018				4.56	16.6	3.89	39.4		
7/18/2018				3.92	15.3	3.8	38.4		
8/6/2018			27.5		13.8				
8/7/2018							36.7		
8/8/2018	42.3	25.4		3.74		3.89			
9/5/2018				3.38	12.1	3.78	43.6		
9/24/2018				3.25	11.8	3.73	44.5		
10/22/2018			27.7				45		
10/23/2018	39.8	25.6		3.37		3.79			
10/24/2018					10.2			18	28.3
11/14/2018								14.9	27.5
11/28/2018								14.8	20.7
12/3/2018			32.3	3.67		3.79	33.7		
12/4/2018		19							
12/5/2018	43.8				9.14			14.8	25.3
12/18/2018								16.4	20.9
1/3/2019								19.7	18.5
1/24/2019								19.6	17
2/5/2019			25.5		15.1		30.1	20.8	17.1
2/6/2019	34.9	16.4							
2/7/2019				2.89		3.75			
2/25/2019				2.95		3.81	25.6		
2/26/2019			26.4						
2/27/2019	42.5	15.6							
2/28/2019					21.4			21.5	18.6
6/18/2019									
6/24/2019								18.4	
8/19/2019								12.8	25.3
8/20/2019			23.5		14.4		38.3		
8/21/2019	50.9	23.5		3.04		3.71			
8/22/2019									
4/13/2020							25.9		
4/14/2020	43.6								
4/15/2020		14	22	2.93		3.56		13.1	
4/16/2020					20.1				30.7
8/24/2020				2.94		3.45	29		30.8
8/25/2020					13.1			12.2	
8/26/2020	43.2	16.7	22.8						
3/16/2021				2.9		3.44			
3/17/2021									
3/22/2021					12.2			18.4	31
3/23/2021	38.1	12.5							
3/24/2021			23.1				22.2		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
10/5/2021		15.9	27.4				25.4		
10/6/2021								13.4	31
10/11/2021									
10/12/2021	35.4			2.94	11.8	3.29			
5/9/2022					14.5		18.9		28.4
5/10/2022		9.95		2.87		3.24			
5/11/2022	36.9								
5/16/2022			30.7						
5/17/2022								19.7	
10/25/2022								8.46	30.700001
10/26/2022	47.700001	21.4	33.599998	3.09	8.97	3.42	23.1		
6/5/2023									
6/6/2023			39.799999		14.9			17.200001	23
6/7/2023							20.9		
6/12/2023	37.799999								
6/13/2023		8.71		2.82		3.14			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
12/6/2017	
12/7/2017	
2/6/2018	
2/7/2018	
2/8/2018	
4/23/2018	
4/24/2018	
4/25/2018	
6/26/2018	
6/27/2018	
7/18/2018	
8/6/2018	
8/7/2018	
8/8/2018	
9/5/2018	
9/24/2018	
10/22/2018	
10/23/2018	
10/24/2018	
11/14/2018	
11/28/2018	
12/3/2018	
12/4/2018	
12/5/2018	
12/18/2018	
1/3/2019	
1/24/2019	
2/5/2019	
2/6/2019	
2/7/2019	
2/25/2019	
2/26/2019	
2/27/2019	
2/28/2019	
6/18/2019	
6/24/2019	
8/19/2019	
8/20/2019	
8/21/2019	
8/22/2019	
4/13/2020	16.1
4/14/2020	
4/15/2020	
4/16/2020	
8/24/2020	24.8
8/25/2020	
8/26/2020	
3/16/2021	
3/17/2021	5.21
3/22/2021	
3/23/2021	
3/24/2021	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
10/5/2021	17.6
10/6/2021	
10/11/2021	
10/12/2021	
5/9/2022	7.02
5/10/2022	
5/11/2022	
5/16/2022	
5/17/2022	
10/25/2022	
10/26/2022	27.5
6/5/2023	13.4
6/6/2023	
6/7/2023	
6/12/2023	
6/13/2023	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
12/6/2017	6.2	6.2	4.1	7.6	6.9	6.3			
12/7/2017							5.2	8.7	10
2/6/2018	5.9		3.1	7.6				8.5	
2/7/2018					6.1	5.4			
2/8/2018		6.1					4.1		9.5
2/12/2018									
4/23/2018	5.9		3.7						
4/24/2018		5.9		7.5	6.9	5.7			
4/25/2018							5.3	7.6	9.1
6/26/2018	5.7						5		9.5
6/27/2018		5.5	2.2	7.3	5.6	5.4		7.1	
7/18/2018									
8/6/2018									
8/7/2018	5.3		2.6	7.6	5.1			6.9	9
8/8/2018		5.3				5.2	4.8		
9/5/2018									
9/24/2018									
10/22/2018	5.6		2.8	6.9	5.5				
10/23/2018		5.8				5.4	4.4	6.7	9.9
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				6.8					8.7
12/4/2018	5.8		4.1		5.6	5.3	4.2		
12/5/2018		6						6.7	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	5.8		2.56	6.95				7.24	8.73
2/6/2019		5.95			6.24	5.89	5.84		
2/7/2019									
2/25/2019				6.55					
2/26/2019	5.92		3.03		8.28				8.66
2/27/2019		5.88				6.2	6.52	7.38	
2/28/2019									
6/18/2019				6.62					
6/24/2019									
8/19/2019									
8/20/2019			2.24	6.07				6.53	9.55
8/21/2019	5.26						5.89		
8/22/2019		6.31			5.66	4.64			
4/13/2020				5.95				6.48	8.6
4/14/2020		5.74				5.46	5.21		
4/15/2020	5.5		2.16		6.49				
4/16/2020									
8/24/2020								6.64	
8/25/2020	5.59		2						
8/26/2020		5.91		5.89	5.39	4.74	5.16		9.21
3/16/2021	6.2							7.14	
3/17/2021									8.59
3/22/2021				5.26					
3/23/2021		6.3			7.14	5.54	5.3		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
3/24/2021			2.29						
10/5/2021	6.1	6.26		5.09				6.78	9.09
10/6/2021									
10/11/2021			2.43		5.72				
10/12/2021						5.8	5.6		
5/9/2022								6.81	
5/10/2022	5.97	5.64		4.59	5.72				8.87
5/11/2022							5.13		
5/16/2022			2.18						
5/17/2022						5.92			
10/25/2022			2.45						
10/26/2022	6.02	5.76		4.38	5.87	4.98	5.72	6.4	9.4
6/5/2023	6.12			4.57					10.9
6/6/2023			2.02						
6/7/2023							5.02	6.81	
6/12/2023									
6/13/2023		5.18			5.45	5.51			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017									
12/7/2017	7	7.9	8.5						
2/6/2018			8.8						
2/7/2018									
2/8/2018		6.7							
2/12/2018	6.6								
4/23/2018									
4/24/2018			8.4						
4/25/2018	7.1	7							
6/26/2018	6.4	7.4	8.7						
6/27/2018				4.2	3.1	4.1	3.6		
7/18/2018				4.1	3.4	4.3	3.8		
8/6/2018			11		2.8				
8/7/2018							3.3		
8/8/2018	5.5	7.7		3.3		3.8			
9/5/2018				3.7	2.8	3.9	3.4		
9/24/2018				3.9	3.1	4.2	3.8		
10/22/2018			8.6				3.3		
10/23/2018	6.7	8		4		4.1			
10/24/2018					2.8			3.3	4
11/14/2018								3.6	3.6
11/28/2018								3.5	3.5
12/3/2018			9.1	3.6		3.8	3.2		
12/4/2018		6.7							
12/5/2018	5.9				2.2			3.3	3.2
12/18/2018								3.6	3.4
1/3/2019								3.4	3.2
1/24/2019								3.91	3.15
2/5/2019			9.81		3.12		3.78	3.94	2.98
2/6/2019	7.26	6.84							
2/7/2019				3.72		4.15			
2/25/2019				3.95		4.2	3.66		
2/26/2019			13						
2/27/2019	6.77	6.21							
2/28/2019					3.45			4.15	3.05
6/18/2019									
6/24/2019								3.36 (D)	
8/19/2019								3.42	2.8
8/20/2019			9.62		3.27		3.52		
8/21/2019	6.16	7.35		3.85		4			
8/22/2019									
4/13/2020							3.36		
4/14/2020	7.27								
4/15/2020		4.99	9.27	3.83		3.71		3.39	
4/16/2020					3.74				2.93
8/24/2020				3.96		3.59	3.35		2.82
8/25/2020					3.03			2.94	
8/26/2020	6.57	6.19	8.96						
3/16/2021				3.98		3.66			
3/17/2021									
3/22/2021					3.15			3.61	2.94
3/23/2021	7.42	4.87							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
3/24/2021			8.61				3.45		
10/5/2021		6.43	9.3				3.23		
10/6/2021								3.17	2.98
10/11/2021									
10/12/2021	7.78			4.07	2.87	3.68			
5/9/2022					3		3.46		3.01
5/10/2022		3.96		4.12		3.68			
5/11/2022	7.2								
5/16/2022			8.07						
5/17/2022								3.58	
10/25/2022								3.24	2.88
10/26/2022	6.99	7.09	7.88	4.03	2.56	3.5	3.39		
6/5/2023									
6/6/2023			6.68		3.2			3.31	2.93
6/7/2023							3.37		
6/12/2023	7.07								
6/13/2023		3.43		3.88		3.38			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
12/6/2017	
12/7/2017	
2/6/2018	
2/7/2018	
2/8/2018	
2/12/2018	
4/23/2018	
4/24/2018	
4/25/2018	
6/26/2018	
6/27/2018	
7/18/2018	
8/6/2018	
8/7/2018	
8/8/2018	
9/5/2018	
9/24/2018	
10/22/2018	
10/23/2018	
10/24/2018	
11/14/2018	
11/28/2018	
12/3/2018	
12/4/2018	
12/5/2018	
12/18/2018	
1/3/2019	
1/24/2019	
2/5/2019	
2/6/2019	
2/7/2019	
2/25/2019	
2/26/2019	
2/27/2019	
2/28/2019	
6/18/2019	
6/24/2019	
8/19/2019	
8/20/2019	
8/21/2019	
8/22/2019	
4/13/2020	5.42
4/14/2020	
4/15/2020	
4/16/2020	
8/24/2020	5.46
8/25/2020	
8/26/2020	
3/16/2021	
3/17/2021	5.53
3/22/2021	
3/23/2021	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
3/24/2021	
10/5/2021	5.79
10/6/2021	
10/11/2021	
10/12/2021	
5/9/2022	5.51
5/10/2022	
5/11/2022	
5/16/2022	
5/17/2022	
10/25/2022	
10/26/2022	5.09
6/5/2023	5.7
6/6/2023	
6/7/2023	
6/12/2023	
6/13/2023	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
12/6/2017	650	200	210	250	11	83			
12/7/2017							6.5	19	10
2/6/2018	560		190	230				20	
2/7/2018					19	84			
2/8/2018		200					8.9		11
2/12/2018									
4/23/2018	640		140						
4/24/2018		210		260	27	98			
4/25/2018							7.9	22	13
6/26/2018	670						7.5		11
6/27/2018		240	130	230	<2	95		18	
7/18/2018									
8/6/2018									
8/7/2018	660		150	200	<2			20	12
8/8/2018		260				110	7.3		
9/5/2018									
9/24/2018									
10/22/2018	580		160	190	<2				
10/23/2018		280				78	7.8	18	11
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				200					12
12/4/2018	580		170		11	97	8.2		
12/5/2018		280						20	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	702		145	263				24.3	13.9
2/6/2019		239			16.8	113	9.53		
2/7/2019									
2/25/2019				246					
2/26/2019	748		148		38.4				14.1
2/27/2019		257				135	8.25	24.7	
2/28/2019									
6/18/2019				245					
6/24/2019									
8/19/2019									
8/20/2019			110	222				21.3	12.3
8/21/2019	708						10.8		
8/22/2019		339			6.74	305			
4/13/2020				256				21.9	13.9
4/14/2020		155				146	12.5		
4/15/2020	647		116		50.7				
4/16/2020									
8/24/2020								21.2	
8/25/2020	642		114						
8/26/2020		282		246	10.5	280	16.1		13.1
3/16/2021	593							18.8	
3/17/2021									13.7
3/22/2021				254					
3/23/2021		160			60.1	135	9.21		

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
3/24/2021			101						
10/5/2021	567	195		228				14.4	14.2
10/6/2021									
10/11/2021			112		7.75				
10/12/2021						142	16		
5/9/2022								15.5	
5/10/2022	508	193		215	11.6				14.8
5/11/2022							11.8		
5/16/2022			93.1						
5/17/2022						145			
10/25/2022			111						
10/26/2022	512	230		206	4.42	278	10.1	16.1	12.2
6/5/2023	406			171					15.1
6/6/2023			73.900002						
6/7/2023							12.5	27.5	
6/12/2023									
6/13/2023		212			21.9	150			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017									
12/7/2017	9	14	<2						
2/6/2018			<2						
2/7/2018									
2/8/2018		10							
2/12/2018	8.3								
4/23/2018									
4/24/2018			<2						
4/25/2018	12	11							
6/26/2018	8.5	11	<2						
6/27/2018				<2	120	<2	2.2 (J)		
7/18/2018				<2	120	<2	2.5 (J)		
8/6/2018			<2		110				
8/7/2018							<2		
8/8/2018	6.7	13		<2		<2			
9/5/2018				<2	86	<2	1.4 (J)		
9/24/2018				<2	80	<2	<2		
10/22/2018			<2				1.7 (J)		
10/23/2018	9.4	13		<2		<2			
10/24/2018					68			44	16
11/14/2018								44	13
11/28/2018								46	11
12/3/2018			<2	<2		<2	2.1 (J)		
12/4/2018		9.8							
12/5/2018	7.8				54			51	12
12/18/2018								76	11
1/3/2019								94	10
1/24/2019								135	10.2
2/5/2019			5.38		126		3.99	183	10.4
2/6/2019	17	10.8							
2/7/2019				0.639 (J)		1.69			
2/25/2019				<2		1.53	4.01		
2/26/2019			5.1						
2/27/2019	12.4	8.98							
2/28/2019					207			192	9.86
6/18/2019									
6/24/2019								129 (D)	
8/19/2019								66.6	8.74
8/20/2019			7.34		106		3.73		
8/21/2019	11.3	11.8		1.21		1.62			
8/22/2019									
4/13/2020							3.83		
4/14/2020	15.9								
4/15/2020		7.95	17.2	0.554 (J)		1.68		92.8	
4/16/2020					191				11.5
8/24/2020				<2		1.31	4.16		10
8/25/2020					98.4			74.1	
8/26/2020	12.9	9.19	15.5						
3/16/2021				1.02		1.7			
3/17/2021									
3/22/2021					83.8			128	10.6
3/23/2021	15.7	8.08							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
3/24/2021			19.9				2.88		
10/5/2021		9.19	37.8				2.17		
10/6/2021								93.5	10.2
10/11/2021									
10/12/2021	18			0.895 (J)	95.7	1.34			
5/9/2022					125		2.51		10
5/10/2022		7.13		1.02 (J)		1.28 (J)			
5/11/2022	17.7								
5/16/2022			51.8						
5/17/2022								139	
10/25/2022								37.099998	9.25
10/26/2022	13.8	11.4	61.799999	0.992 (J)	50.700001	1.7 (J)	3.43		
6/5/2023									
6/6/2023			88.699997		116			121	12.4
6/7/2023							2.38		
6/12/2023	18.9								
6/13/2023		6.16		<2		1.14 (J)			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
12/6/2017	
12/7/2017	
2/6/2018	
2/7/2018	
2/8/2018	
2/12/2018	
4/23/2018	
4/24/2018	
4/25/2018	
6/26/2018	
6/27/2018	
7/18/2018	
8/6/2018	
8/7/2018	
8/8/2018	
9/5/2018	
9/24/2018	
10/22/2018	
10/23/2018	
10/24/2018	
11/14/2018	
11/28/2018	
12/3/2018	
12/4/2018	
12/5/2018	
12/18/2018	
1/3/2019	
1/24/2019	
2/5/2019	
2/6/2019	
2/7/2019	
2/25/2019	
2/26/2019	
2/27/2019	
2/28/2019	
6/18/2019	
6/24/2019	
8/19/2019	
8/20/2019	
8/21/2019	
8/22/2019	
4/13/2020	1.48
4/14/2020	
4/15/2020	
4/16/2020	
8/24/2020	3.88
8/25/2020	
8/26/2020	
3/16/2021	
3/17/2021	1.64
3/22/2021	
3/23/2021	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
3/24/2021	
10/5/2021	5.29
10/6/2021	
10/11/2021	
10/12/2021	
5/9/2022	1.15 (J)
5/10/2022	
5/11/2022	
5/16/2022	
5/17/2022	
10/25/2022	
10/26/2022	3.32
6/5/2023	1.31 (J)
6/6/2023	
6/7/2023	
6/12/2023	
6/13/2023	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
12/6/2017	1300	371	574	628	215	312			
12/7/2017							253	215	136
2/6/2018	1310		572	556				204	
2/7/2018					237	323			
2/8/2018		367					229		122
2/12/2018									
4/23/2018	1210		414						
4/24/2018		365		510	242	324			
4/25/2018							223	192	102
6/26/2018	1250						232		106
6/27/2018		421	440	486	194	333		180	
7/18/2018									
8/6/2018									
8/7/2018	1220		485	487	195			183	71.3
8/8/2018		479				346	208		
9/5/2018									
9/24/2018									
10/22/2018	1150		484	450	184				
10/23/2018		507				311	209	169	105
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				492					102
12/4/2018	1090		504		215	343	213		
12/5/2018		479						177	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	1200		366	428				198	107
2/6/2019		399			208	317	212		
2/7/2019									
2/25/2019				441					
2/26/2019	1210		372		252				99.3
2/27/2019		422				360	211	185	
2/28/2019									
6/18/2019				422					
6/24/2019									
8/19/2019									
8/20/2019			369	416				174	98.7
8/21/2019	1200						226		
8/22/2019		501			194	555			
4/13/2020				433				192	90.7
4/14/2020		278				372	222		
4/15/2020	1060		300		262				
4/16/2020									
8/24/2020								175	
8/25/2020	1060		339						
8/26/2020		472		455	186	517	215		91.3
3/16/2021	1040							184	
3/17/2021									80
3/22/2021				427					
3/23/2021		286			273	361	200		

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-8	GSD-AP-MW-5	GSD-AP-MW-6
3/24/2021			287						
10/5/2021	964	378		389				168	96.7
10/6/2021									
10/11/2021			337		190				
10/12/2021						352	245		
5/9/2022								174	
5/10/2022	780	319		362	199				73.3
5/11/2022							216		
5/16/2022			244						
5/17/2022						367			
10/25/2022			337						
10/26/2022	840	402		328	202	545	226	178	91.300003
6/5/2023	710			334					94
6/6/2023			246						
6/7/2023							226	202	
6/12/2023									
6/13/2023		370			199	374			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017									
12/7/2017	183	137	189						
2/6/2018			206						
2/7/2018									
2/8/2018		124							
2/12/2018	201								
4/23/2018									
4/24/2018			193						
4/25/2018	180	106							
6/26/2018	191	129	180						
6/27/2018				48.7	219	44	144		
7/18/2018				46	195	42.7	156		
8/6/2018			182		175				
8/7/2018							140		
8/8/2018	192	142		48		46			
9/5/2018				47.3	153	67.3	154		
9/24/2018				44.7	127	49.3	165		
10/22/2018			204				148		
10/23/2018	185	142		35.3		31.3			
10/24/2018					125			107	184
11/14/2018								96.7	170
11/28/2018								102	167
12/3/2018			168	48.7		46	127		
12/4/2018		121							
12/5/2018	200				101			103	185
12/18/2018								126	164
1/3/2019								191	167
1/24/2019								212	137
2/5/2019			158		180		113	269	138
2/6/2019	151	108							
2/7/2019				42.7		32.7			
2/25/2019				40.7		31.3	106		
2/26/2019			191						
2/27/2019	186	103							
2/28/2019					287			261	140
6/18/2019									
6/24/2019								203.5 (D)	
8/19/2019								121	240
8/20/2019			164		265		141		
8/21/2019	200	133		46		42.7			
8/22/2019									
4/13/2020							104		
4/14/2020	187								
4/15/2020		102	170	41.3		37.3		155	
4/16/2020					280				166
8/24/2020				42.7		37.3	114		162
8/25/2020					160			131	
8/26/2020	192	109	168						
3/16/2021				42		41.3			
3/17/2021									
3/22/2021					126			204	157
3/23/2021	178	92.7							

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-7	GSD-AP-MW-4	GSD-AP-PZ-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-1	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
3/24/2021			180				94		
10/5/2021		113	200				108		
10/6/2021								136	182
10/11/2021									
10/12/2021	169			38.7	142	35.3			
5/9/2022					185		85.3		152
5/10/2022		82.7		33.3		33.3			
5/11/2022	181								
5/16/2022			218						
5/17/2022								226	
10/25/2022								72.699997	159
10/26/2022	194	121	247	45.299999	98	38	96		
6/5/2023									
6/6/2023			263		214			220	138
6/7/2023							96.699997		
6/12/2023	185								
6/13/2023		74.699997		36.700001		36			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
12/6/2017	
12/7/2017	
2/6/2018	
2/7/2018	
2/8/2018	
2/12/2018	
4/23/2018	
4/24/2018	
4/25/2018	
6/26/2018	
6/27/2018	
7/18/2018	
8/6/2018	
8/7/2018	
8/8/2018	
9/5/2018	
9/24/2018	
10/22/2018	
10/23/2018	
10/24/2018	
11/14/2018	
11/28/2018	
12/3/2018	
12/4/2018	
12/5/2018	
12/18/2018	
1/3/2019	
1/24/2019	
2/5/2019	
2/6/2019	
2/7/2019	
2/25/2019	
2/26/2019	
2/27/2019	
2/28/2019	
6/18/2019	
6/24/2019	
8/19/2019	
8/20/2019	
8/21/2019	
8/22/2019	
4/13/2020	88
4/14/2020	
4/15/2020	
4/16/2020	
8/24/2020	115
8/25/2020	
8/26/2020	
3/16/2021	
3/17/2021	53.3
3/22/2021	
3/23/2021	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/19/2023 1:03 PM View: Interwell PL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-2
3/24/2021	
10/5/2021	101
10/6/2021	
10/11/2021	
10/12/2021	
5/9/2022	53.3
5/10/2022	
5/11/2022	
5/16/2022	
5/17/2022	
10/25/2022	
10/26/2022	119
6/5/2023	84
6/6/2023	
6/7/2023	
6/12/2023	
6/13/2023	

FIGURE F.

Trend Test - Prediction Limit Exceedances - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2023, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06545**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-11**	**0.008031**	**71**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-2**	**-0.06555**	**-101**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.03648**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0587**	**-108**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.38**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-11**	**4.222**	**81**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-2**	**-10.61**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-8.07**	**-113**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.1806**	**-89**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.6787**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.238**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-94.39**	**-111**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.06**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-37.84**	**-119**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test - Prediction Limit Exceedances - All Results

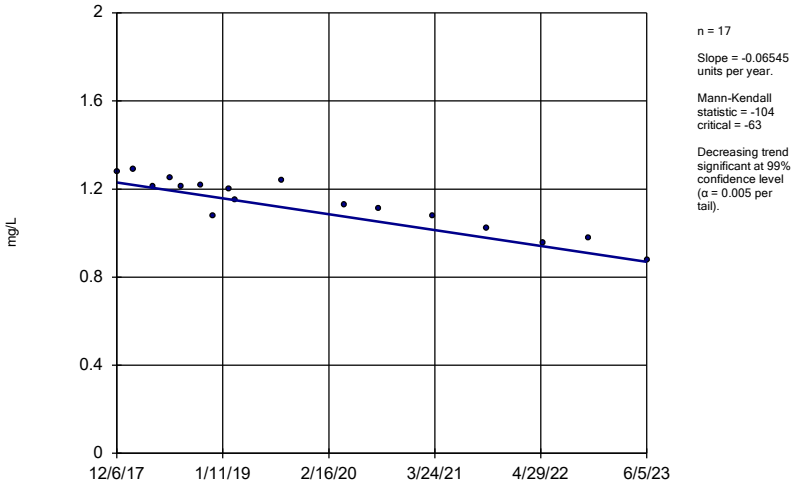
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2023, 4:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06545**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-11**	**0.008031**	**71**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0	62	68	No	18	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.0004276	-18	-63	No	17	5.882	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.06555**	**-101**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-3	0.01315	19	68	No	18	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-4**	**-0.03648**	**-87**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0587**	**-108**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.38**	**-95**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	-0.1406	-2	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**4.222**	**81**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	0.562	7	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-0.4521	-21	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.5496	-18	-68	No	18	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.075	35	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-10.61**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-8.07**	**-113**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-4	-0.1087	-4	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-5	-0.3422	-11	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	0.2938	7	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.3991	4	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	0.04212	23	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	-0.04095	-9	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	-0.02352	-5	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	-0.04669	-20	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.007055	4	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.03593	-23	-68	No	18	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.1806**	**-89**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.6787**	**-138**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	-0.1751	-22	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.2008	-62	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-6	-0.06986	-23	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.1052	25	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.1355	38	63	No	17	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-14 (bg)	-0.02092	-34	-63	No	17	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.238**	**-83**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.2195	-43	-63	No	17	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-PZ-6	-0.03315	-48	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-1	-28.25	-45	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-12	-1.336	-4	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-2.347	-13	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	16.58	42	68	No	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-0.5792	-51	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-94.39**	**-111**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.06**	**80**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	-6.947	-15	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-6.913	-14	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	17.09	43	68	No	18	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-4.49	-44	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-37.84**	**-119**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 17

Slope = -0.06545 units per year.

Mann-Kendall statistic = -104
critical = -63

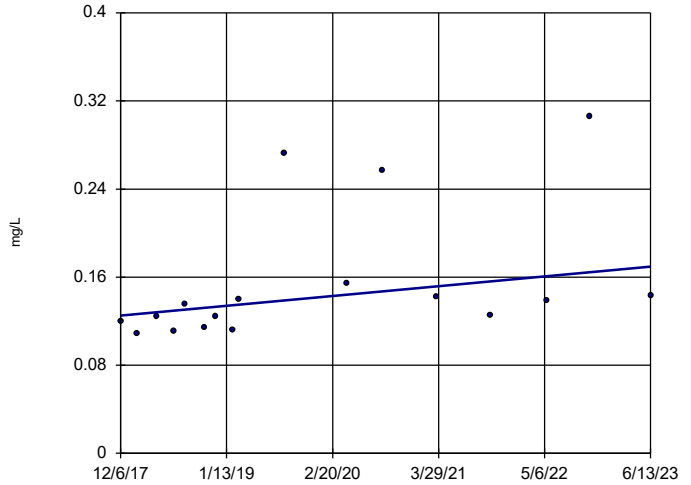
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 17

Slope = 0.008031 units per year.

Mann-Kendall statistic = 71
critical = 63

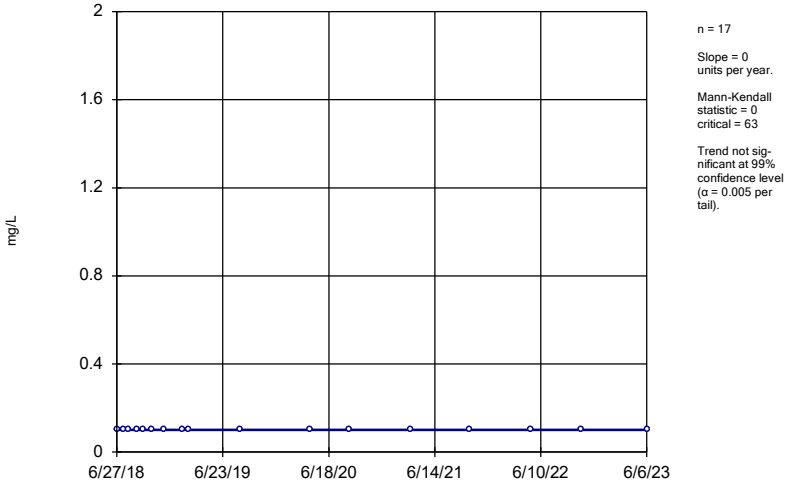
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 63

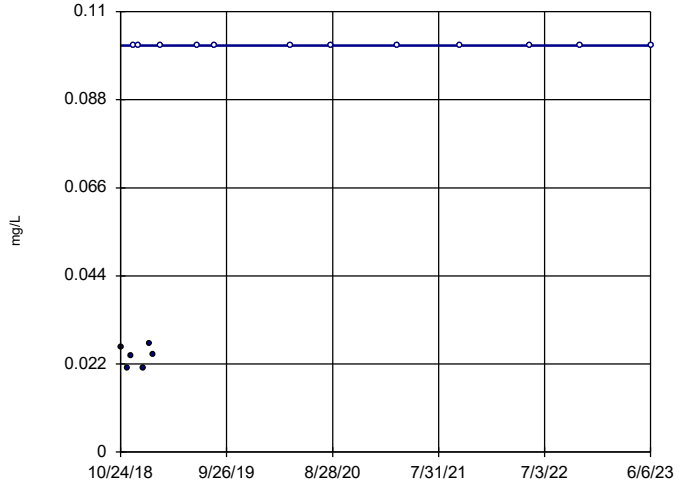
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 62
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

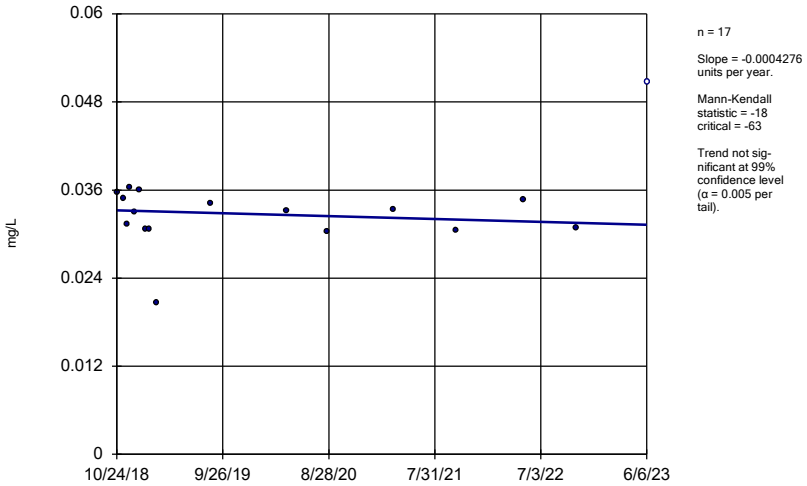
Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 17

Slope = -0.0004276 units per year.

Mann-Kendall statistic = -18
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

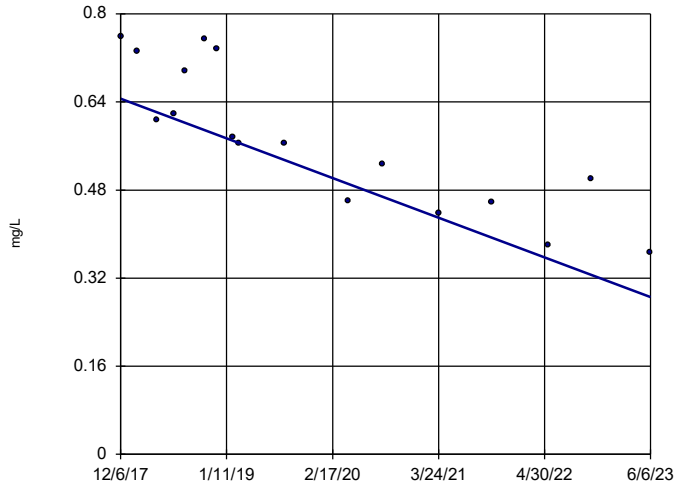
Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-2



n = 17

Slope = -0.06555 units per year.

Mann-Kendall statistic = -101
critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

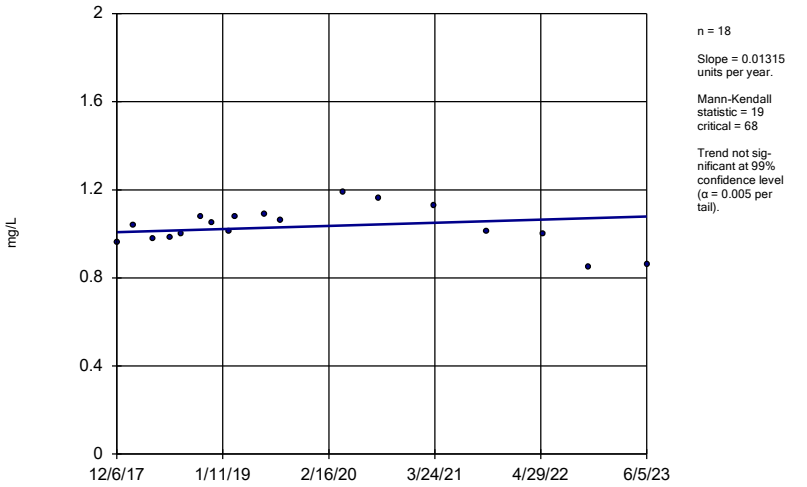
Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 18

Slope = 0.01315 units per year.

Mann-Kendall statistic = 19
critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

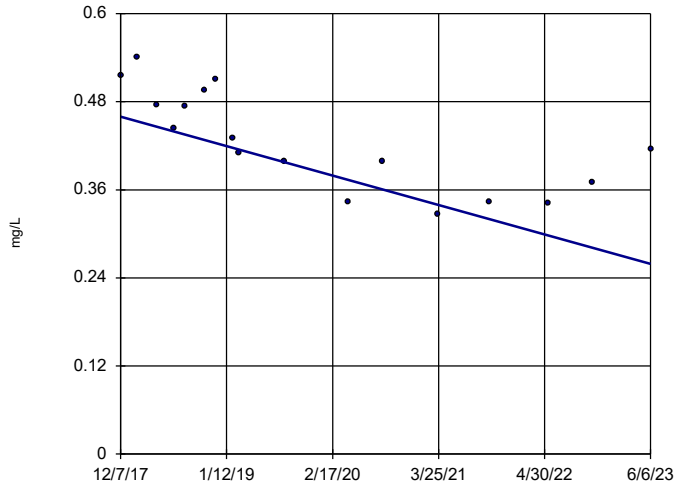
Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 17

Slope = -0.03648 units per year.

Mann-Kendall statistic = -87
critical = -63

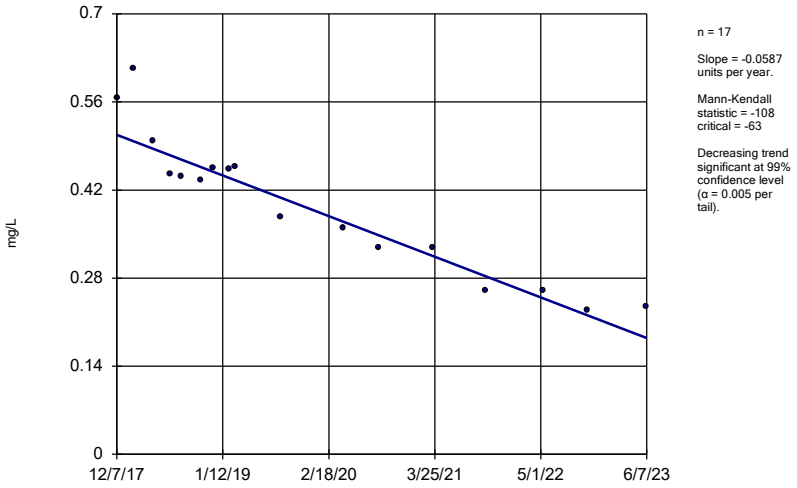
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-5



n = 17

Slope = -0.0587 units per year.

Mann-Kendall statistic = -108
critical = -63

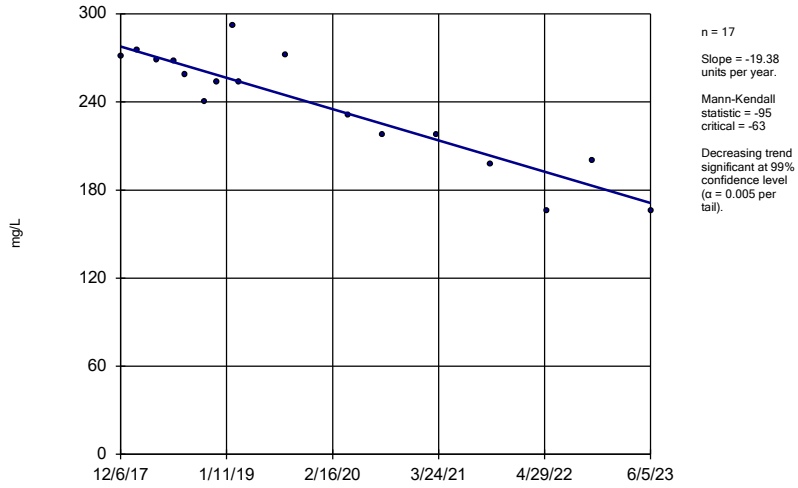
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 17

Slope = -19.38 units per year.

Mann-Kendall statistic = -95
critical = -63

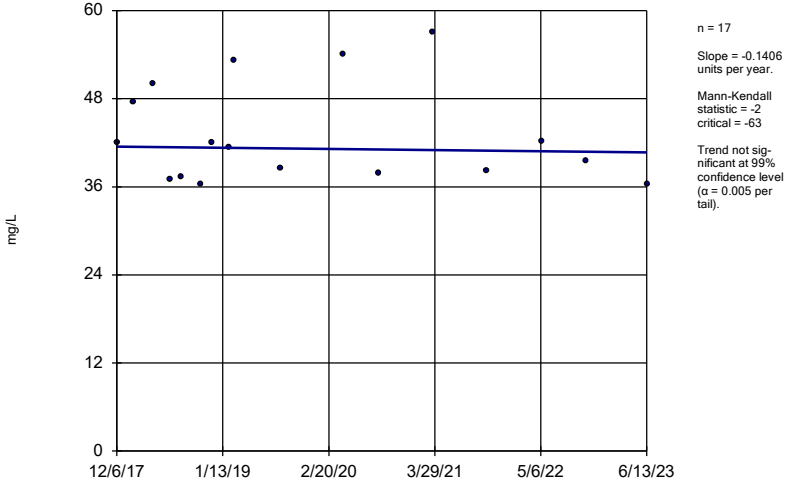
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 17

Slope = -0.1406 units per year.

Mann-Kendall statistic = -2
critical = -63

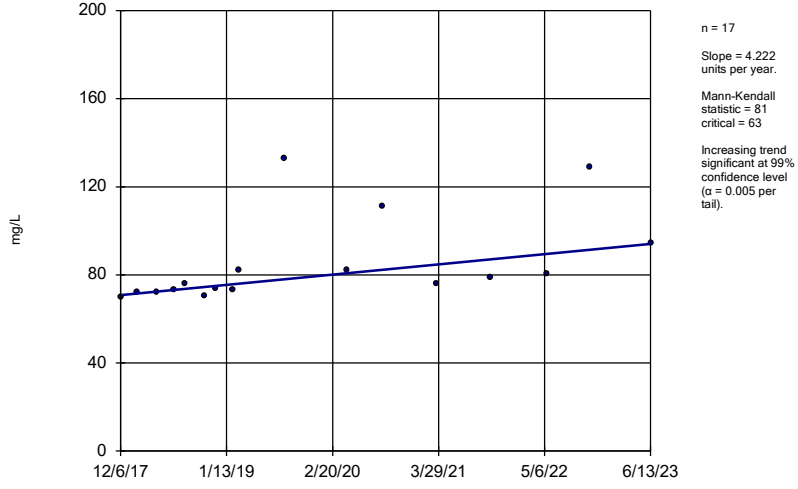
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 17

Slope = 4.222 units per year.

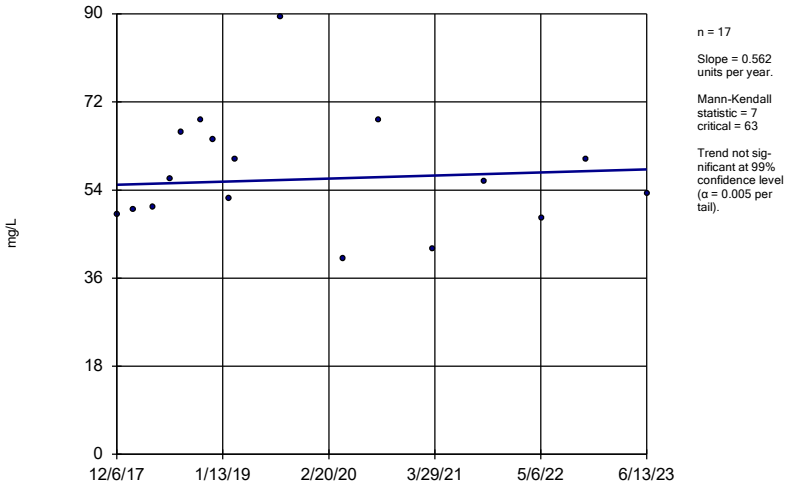
Mann-Kendall statistic = 81
critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-12



n = 17

Slope = 0.562 units per year.

Mann-Kendall statistic = 7 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

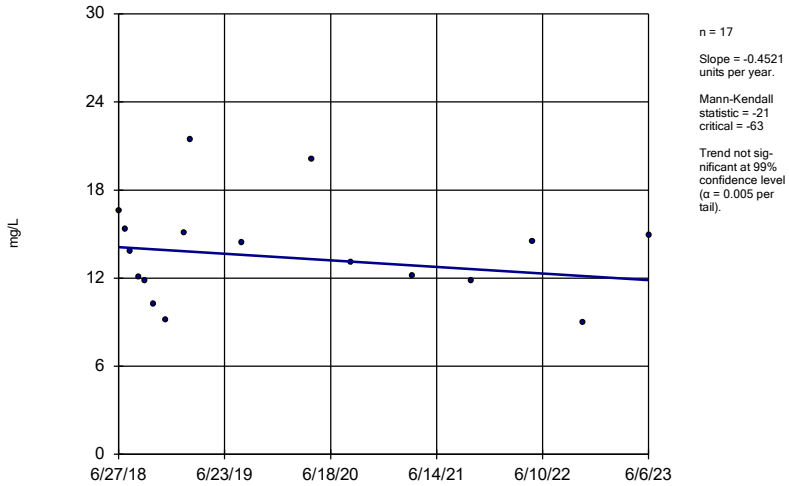
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 17

Slope = -0.4521 units per year.

Mann-Kendall statistic = -21 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

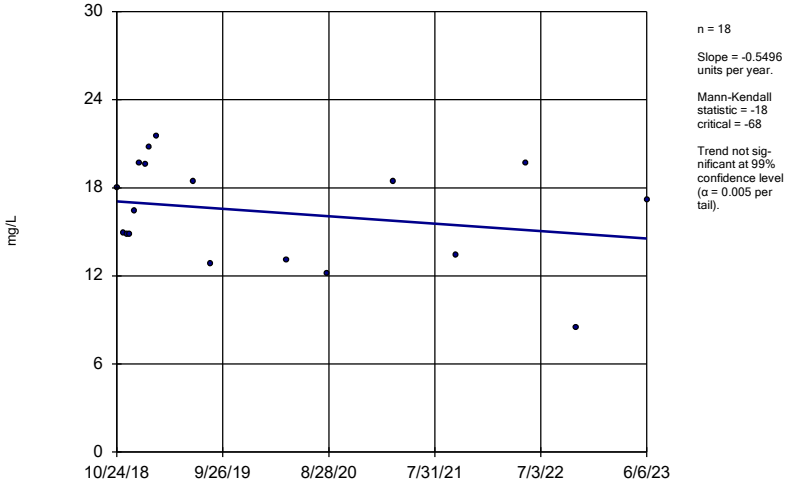
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 18

Slope = -0.5496 units per year.

Mann-Kendall statistic = -18 critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

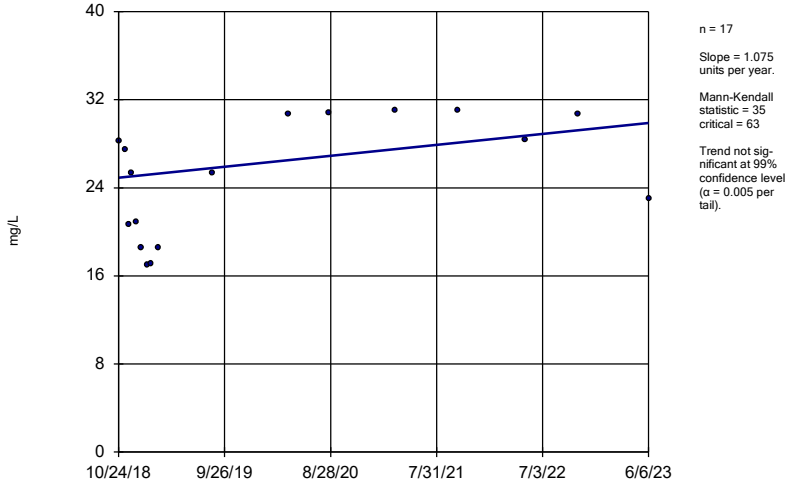
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 17

Slope = 1.075 units per year.

Mann-Kendall statistic = 35 critical = 63

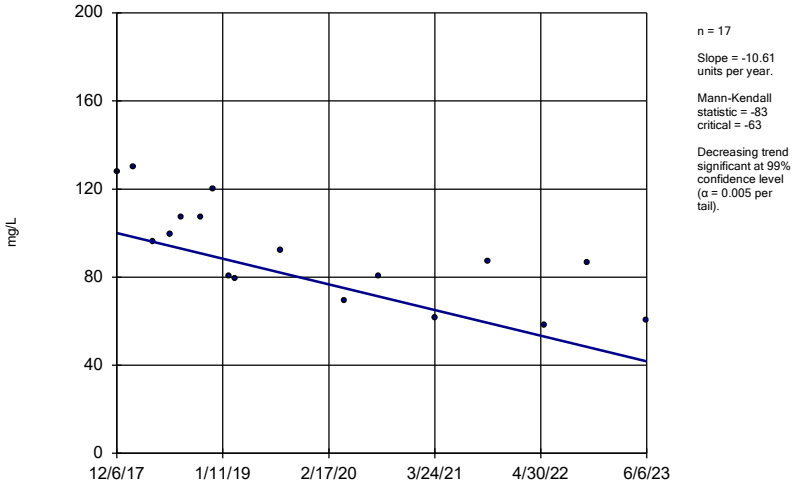
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-2



n = 17

Slope = -10.61 units per year.

Mann-Kendall statistic = -83 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

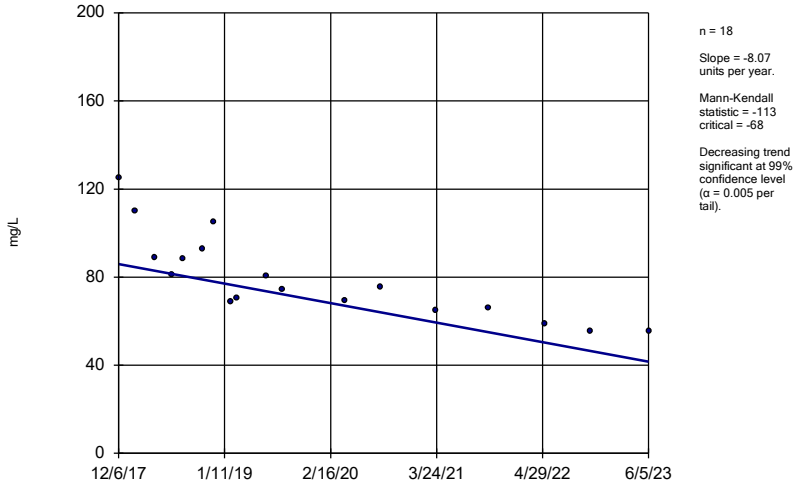
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 18

Slope = -8.07 units per year.

Mann-Kendall statistic = -113 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

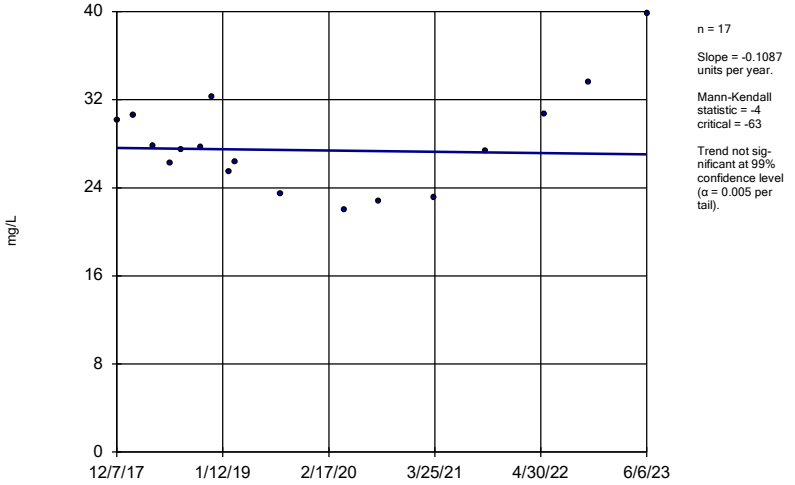
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 17

Slope = -0.1087 units per year.

Mann-Kendall statistic = -4 critical = -63

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

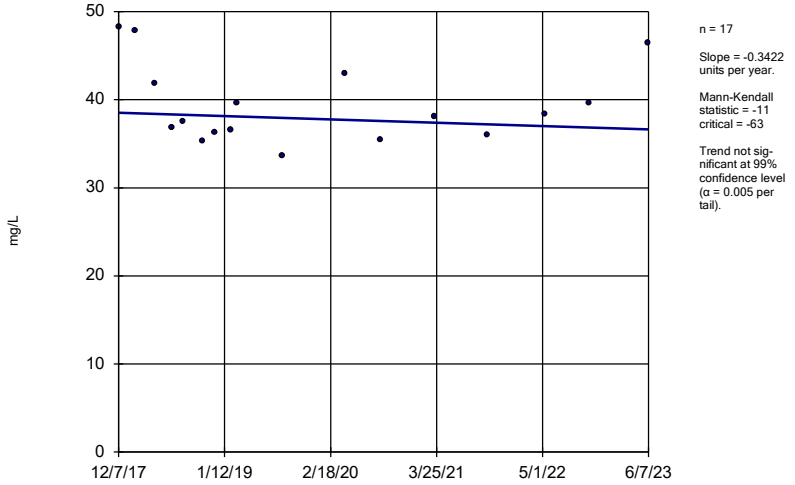
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 17

Slope = -0.3422 units per year.

Mann-Kendall statistic = -11 critical = -63

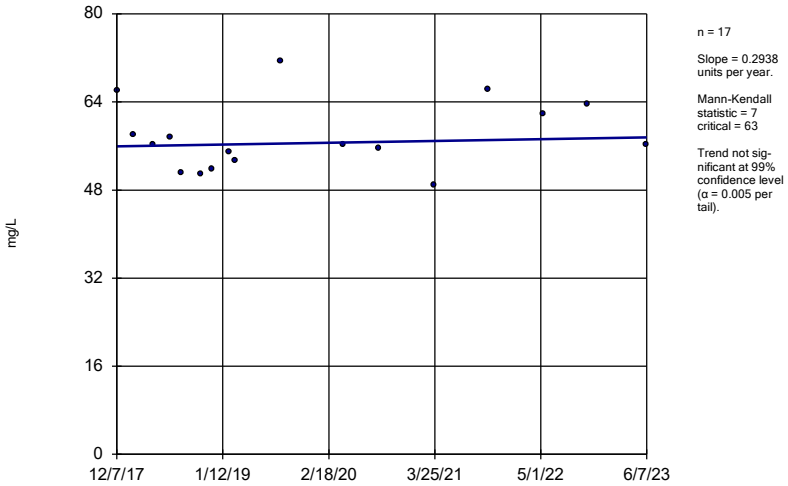
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-8



n = 17

Slope = 0.2938 units per year.

Mann-Kendall statistic = 7 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

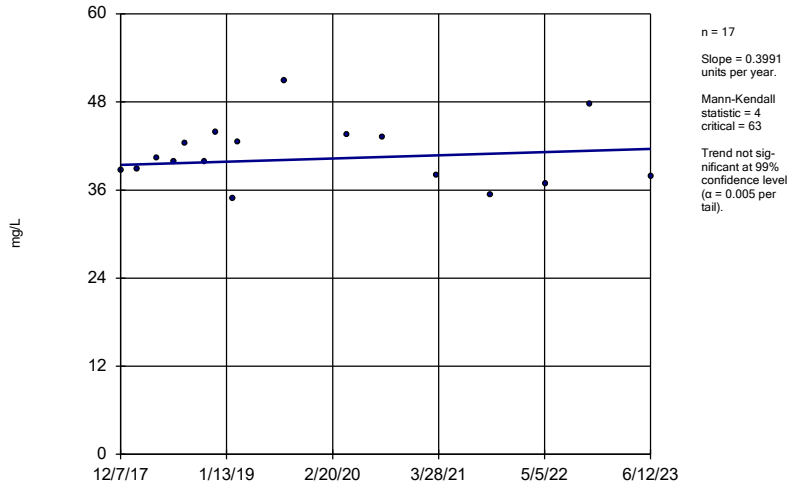
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 17

Slope = 0.3991 units per year.

Mann-Kendall statistic = 4 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

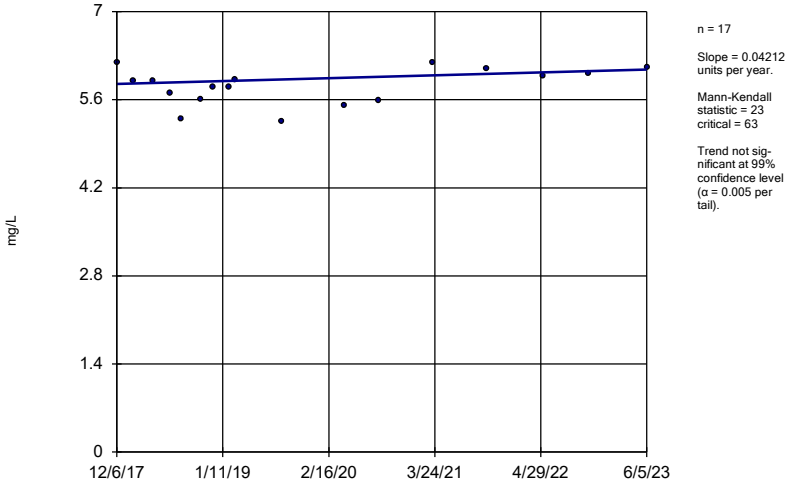
Constituent: Calcium Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 17

Slope = 0.04212 units per year.

Mann-Kendall statistic = 23 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

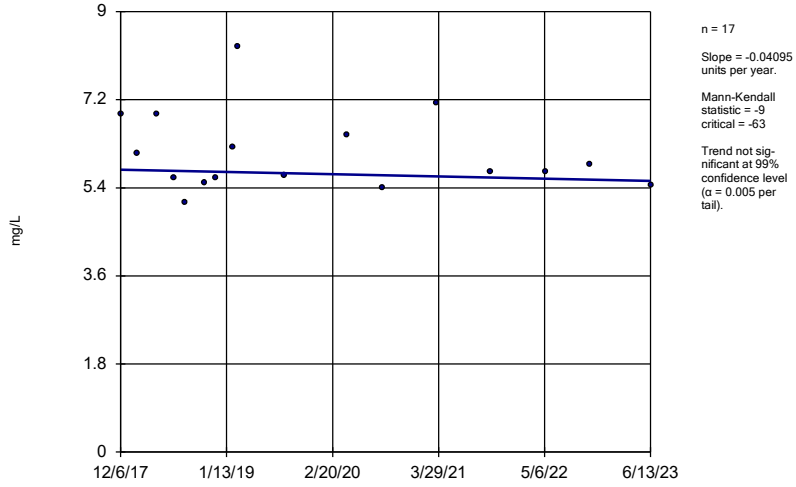
Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 17

Slope = -0.04095 units per year.

Mann-Kendall statistic = -9 critical = -63

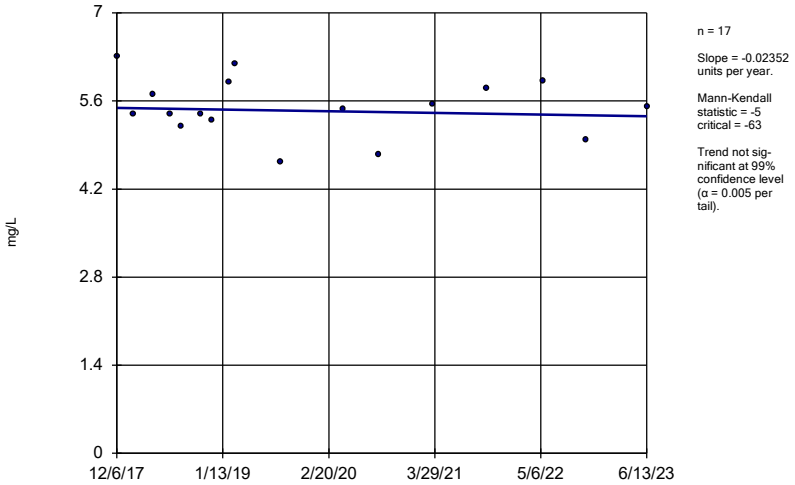
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-11



n = 17

Slope = -0.02352 units per year.

Mann-Kendall statistic = -5
critical = -63

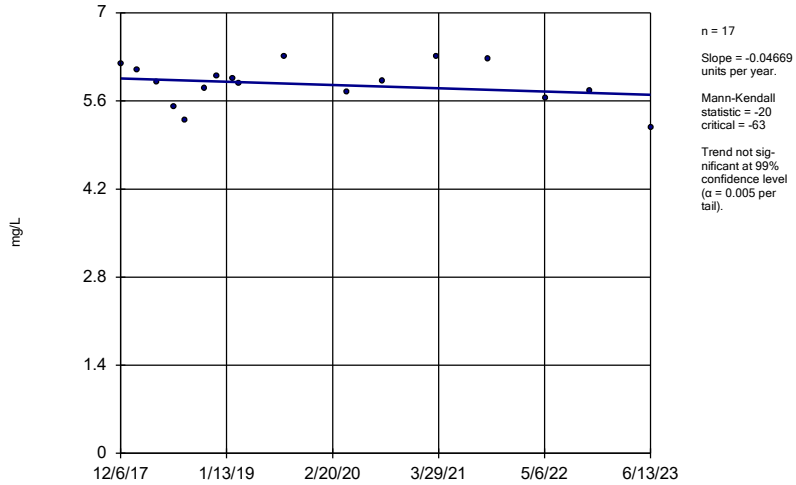
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 17

Slope = -0.04669 units per year.

Mann-Kendall statistic = -20
critical = -63

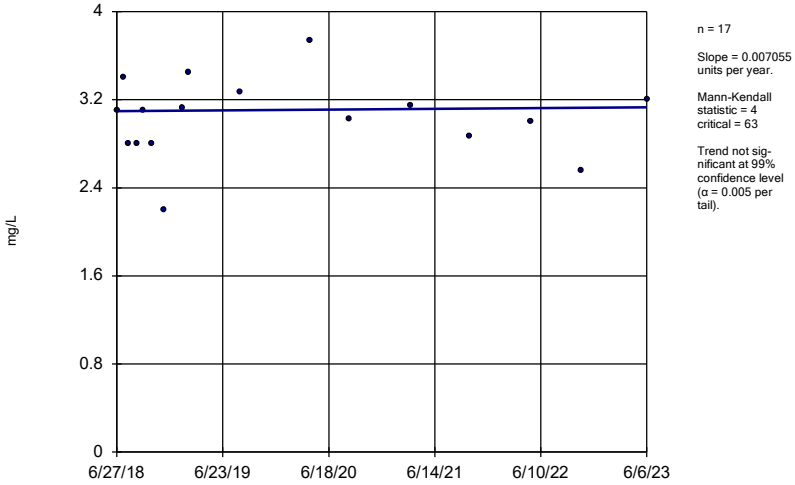
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 17

Slope = 0.007055 units per year.

Mann-Kendall statistic = 4
critical = 63

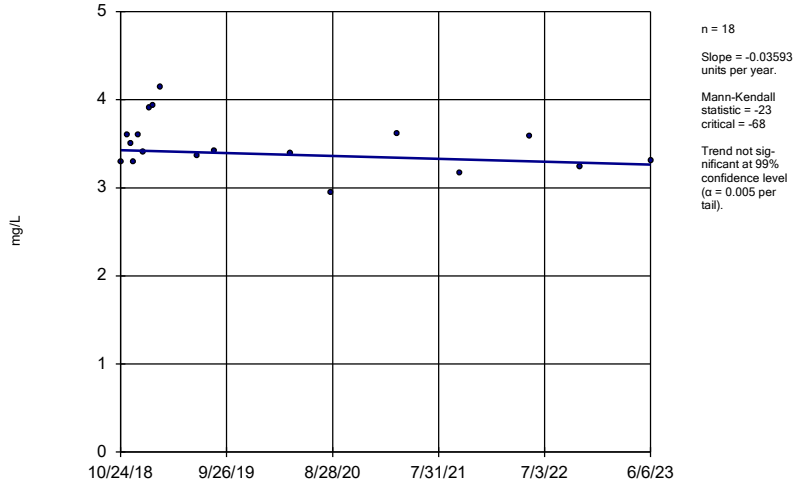
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 18

Slope = -0.03593 units per year.

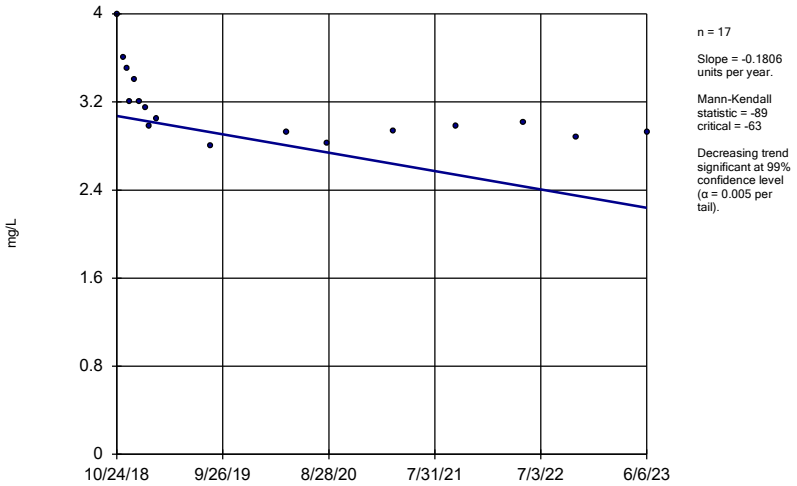
Mann-Kendall statistic = -23
critical = -68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 17

Slope = -0.1806 units per year.

Mann-Kendall statistic = -89 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

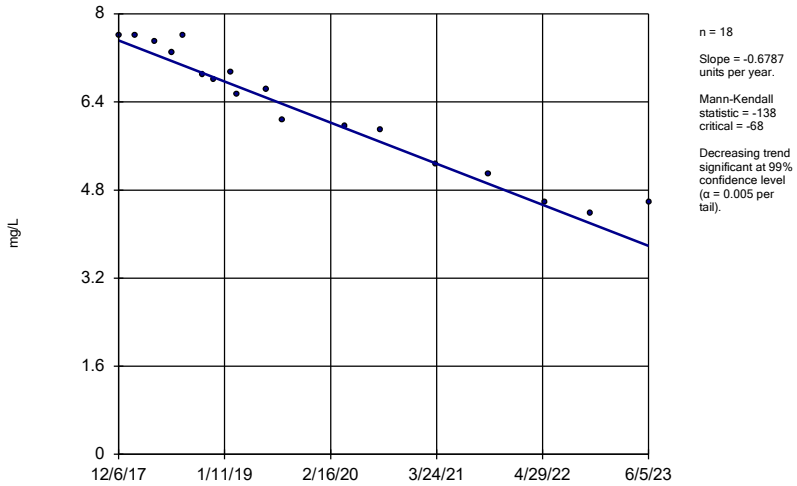
Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 18

Slope = -0.6787 units per year.

Mann-Kendall statistic = -138 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

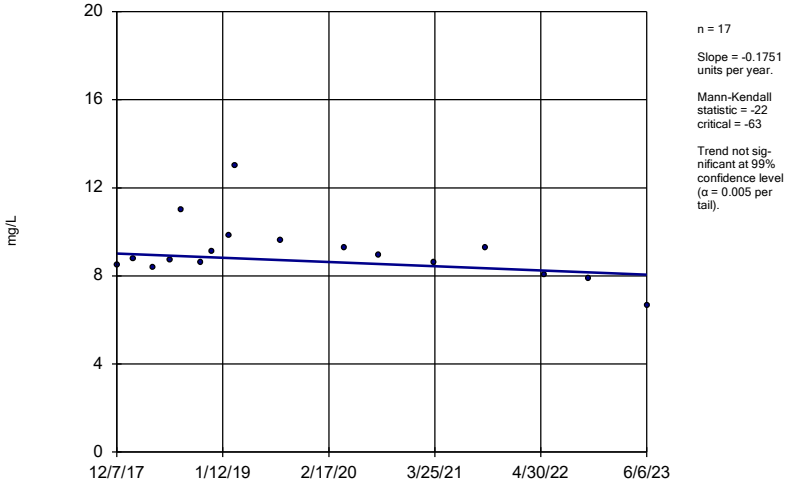
Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 17

Slope = -0.1751 units per year.

Mann-Kendall statistic = -22 critical = -63

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

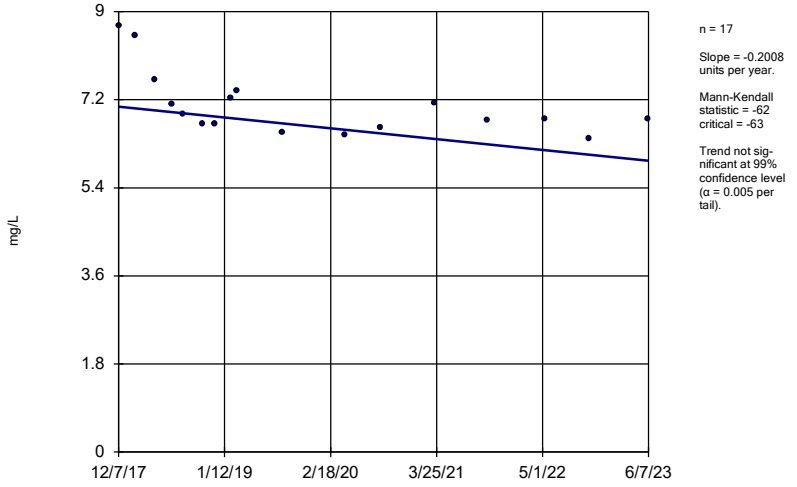
Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 17

Slope = -0.2008 units per year.

Mann-Kendall statistic = -62 critical = -63

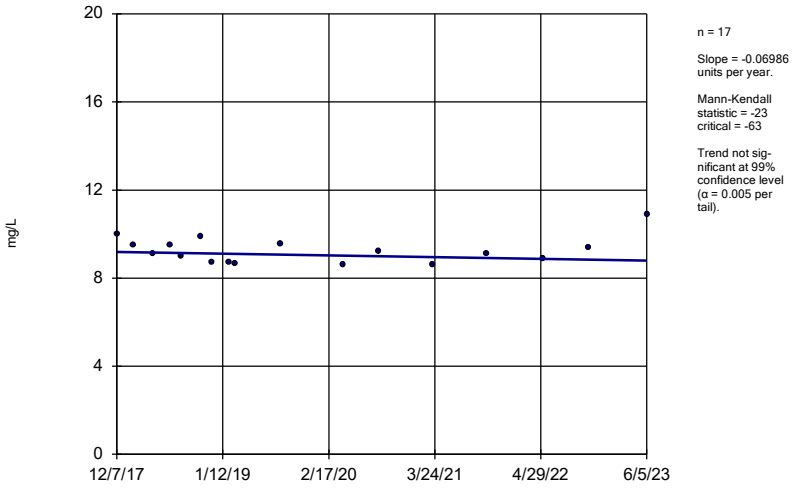
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-6



n = 17

Slope = -0.06986 units per year.

Mann-Kendall statistic = -23
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

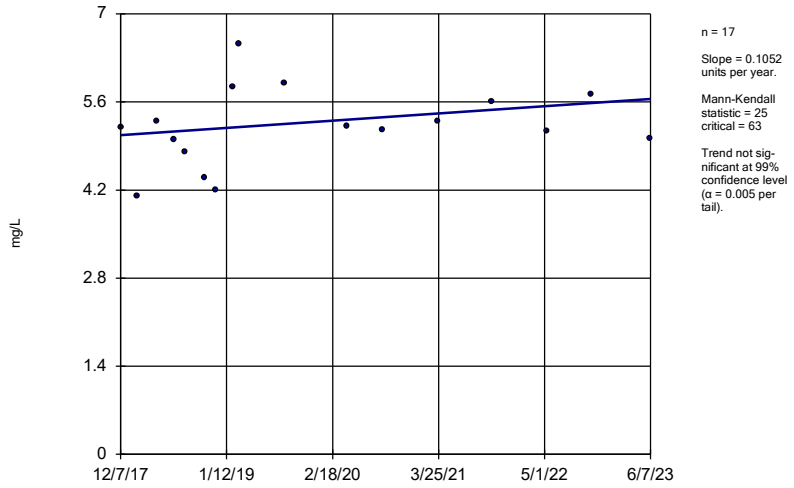
Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-8



n = 17

Slope = 0.1052 units per year.

Mann-Kendall statistic = 25
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

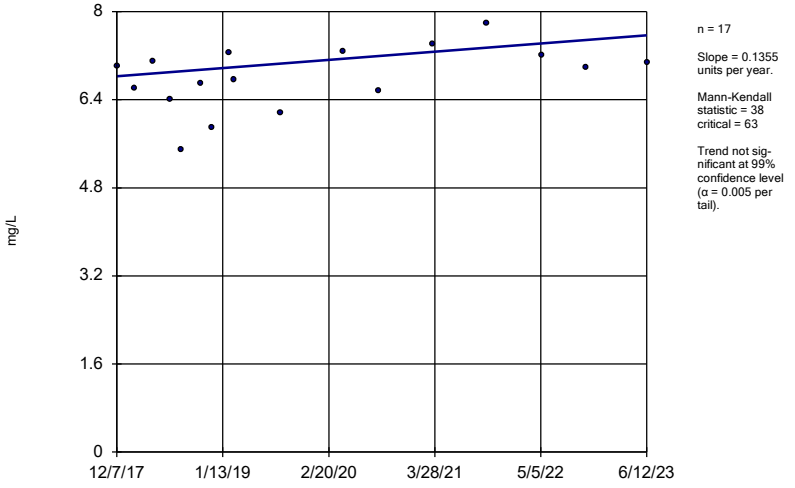
Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 17

Slope = 0.1355 units per year.

Mann-Kendall statistic = 38
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

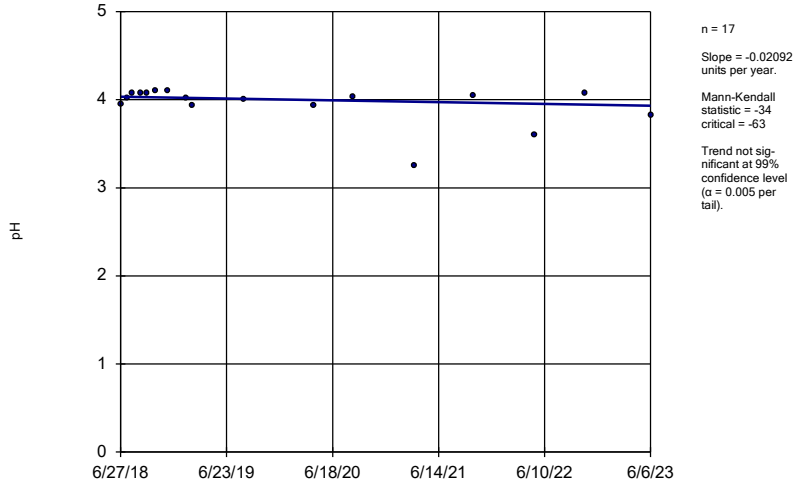
Constituent: Chloride Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 17

Slope = -0.02092 units per year.

Mann-Kendall statistic = -34
critical = -63

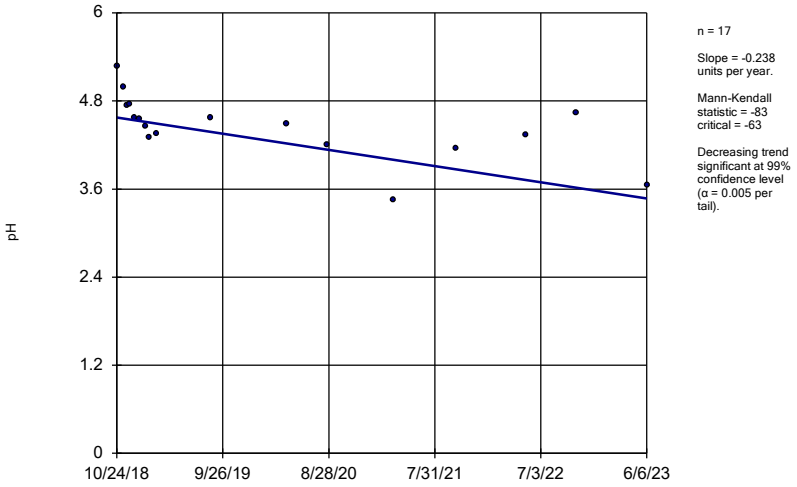
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 17

Slope = -0.238 units per year.

Mann-Kendall statistic = -83 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

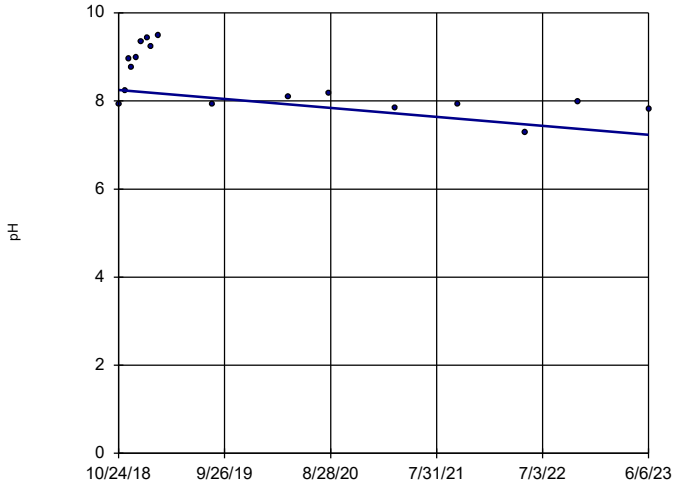
Constituent: pH Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 17

Slope = -0.2195 units per year.

Mann-Kendall statistic = -43 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

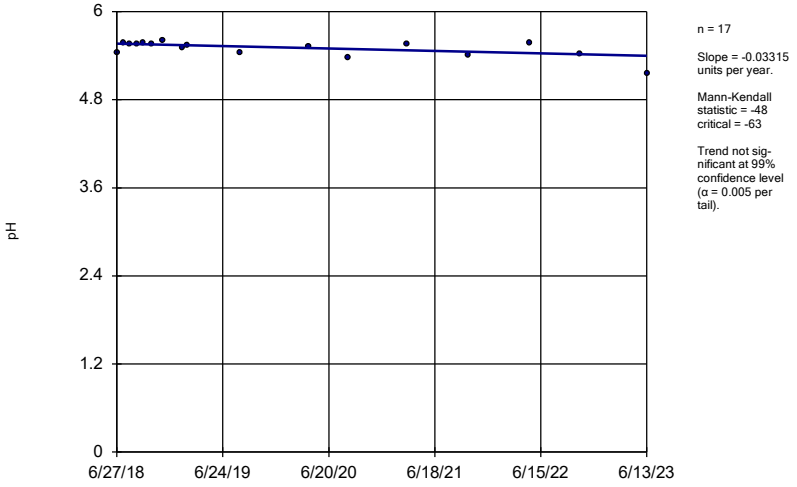
Constituent: pH Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-PZ-6



n = 17

Slope = -0.03315 units per year.

Mann-Kendall statistic = -48 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

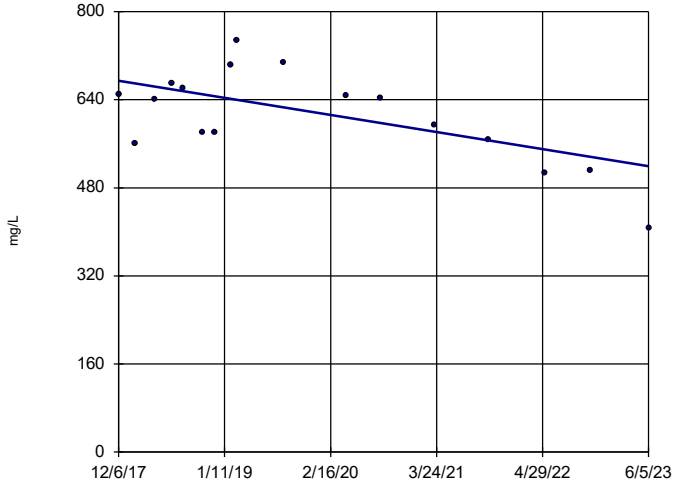
Constituent: pH Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 17

Slope = -28.25 units per year.

Mann-Kendall statistic = -45 critical = -63

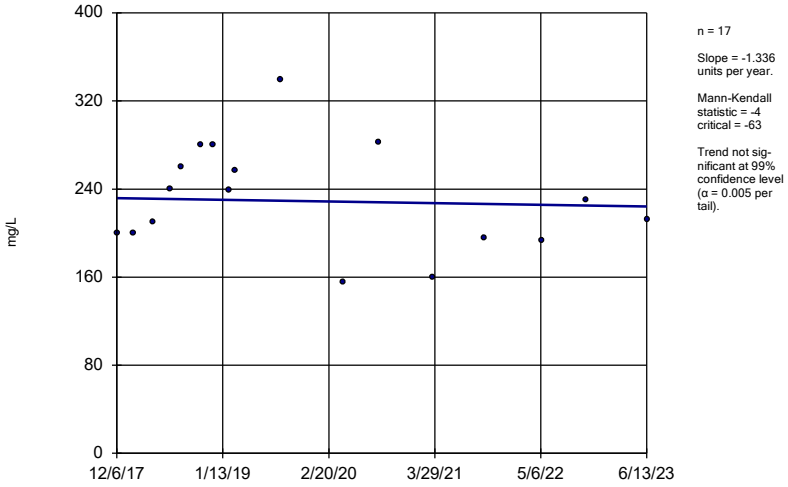
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-12



n = 17

Slope = -1.336 units per year.

Mann-Kendall statistic = -4 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

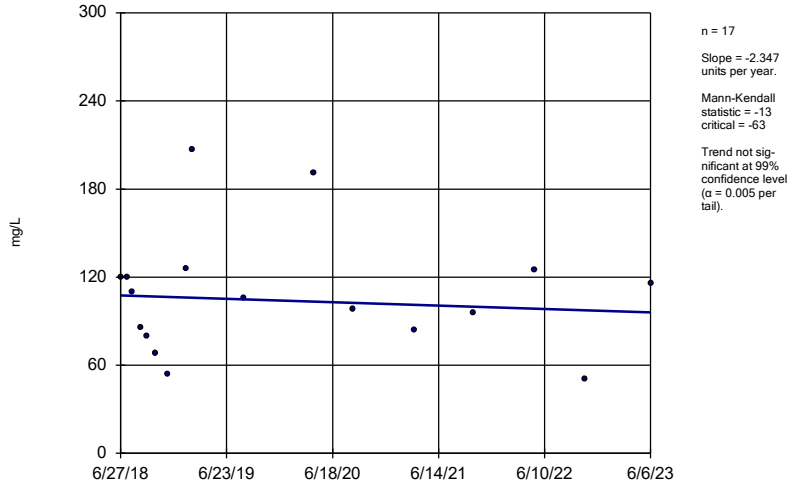
Constituent: Sulfate Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 17

Slope = -2.347 units per year.

Mann-Kendall statistic = -13 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

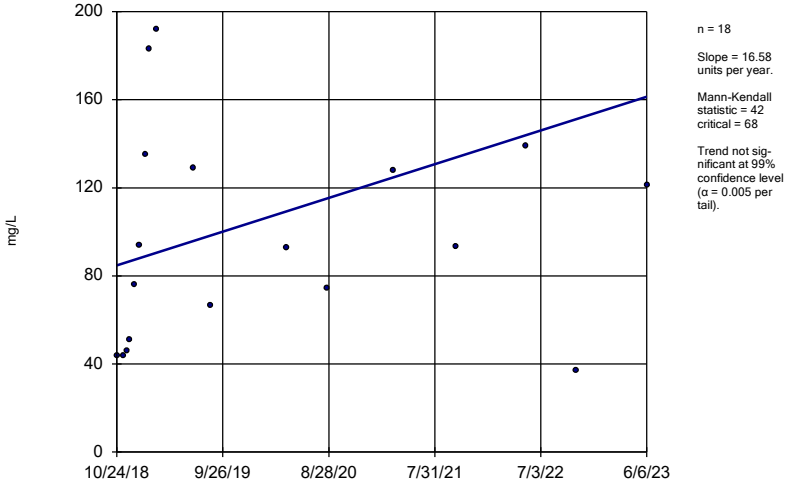
Constituent: Sulfate Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 18

Slope = 16.58 units per year.

Mann-Kendall statistic = 42 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

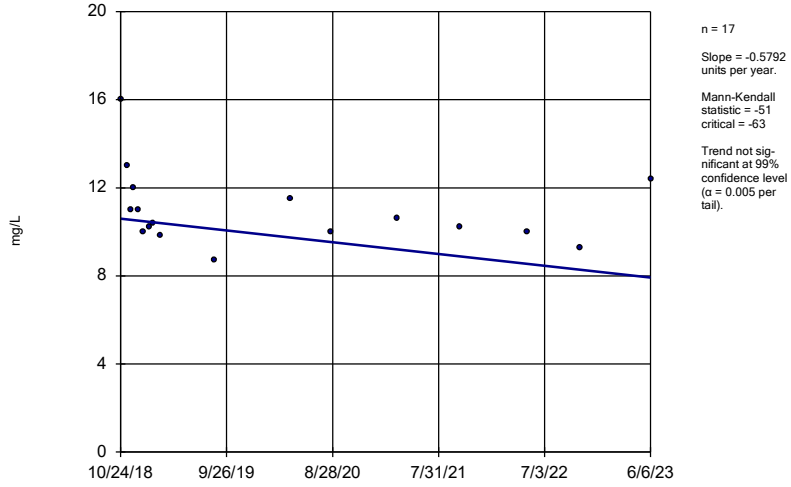
Constituent: Sulfate Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 17

Slope = -0.5792 units per year.

Mann-Kendall statistic = -51 critical = -63

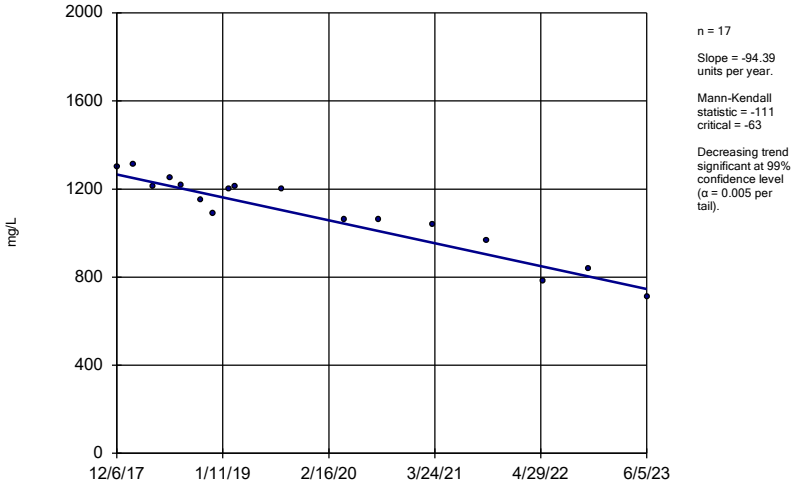
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-1



n = 17

Slope = -94.39 units per year.

Mann-Kendall statistic = -111
critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

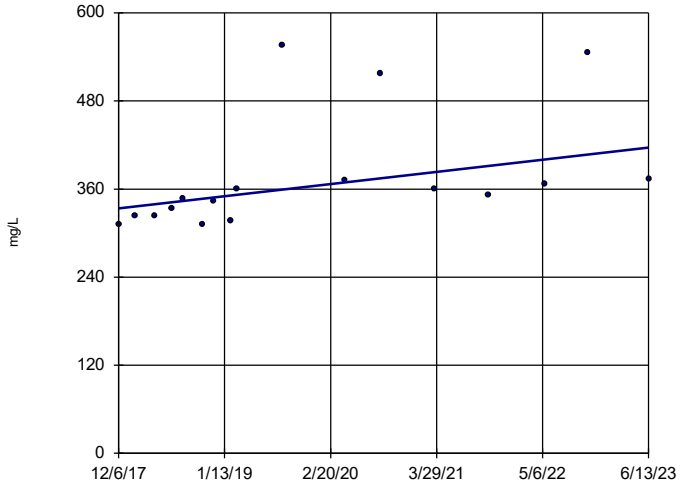
Constituent: Total Dissolved Solids Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 17

Slope = 15.06 units per year.

Mann-Kendall statistic = 80
critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

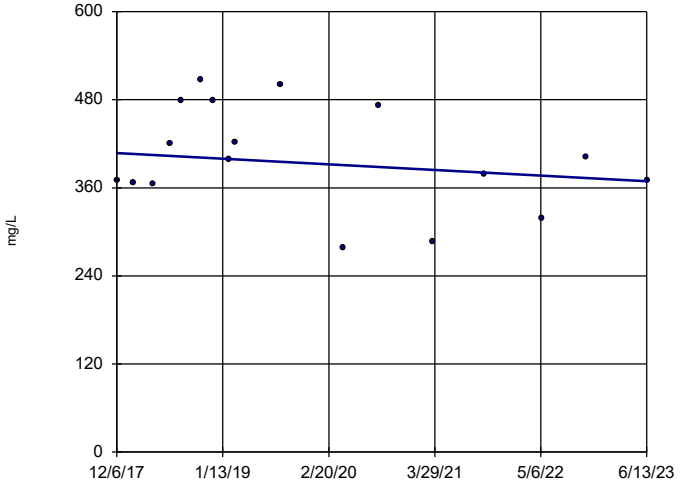
Constituent: Total Dissolved Solids Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 17

Slope = -6.947 units per year.

Mann-Kendall statistic = -15
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

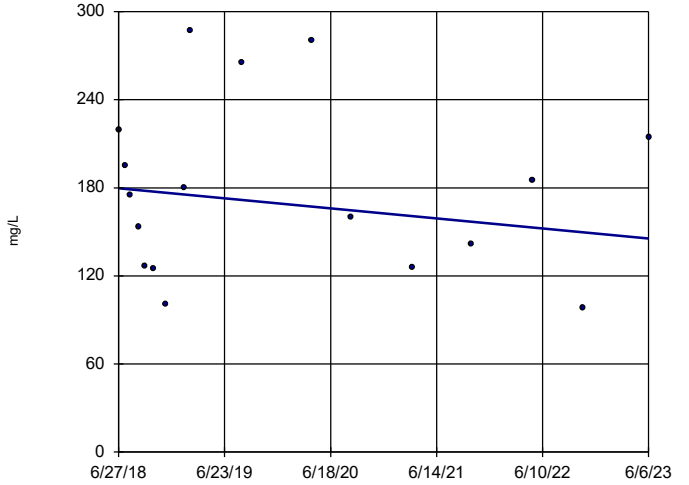
Constituent: Total Dissolved Solids Analysis Run 7/18/2023 4:50 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 17

Slope = -6.913 units per year.

Mann-Kendall statistic = -14
critical = -63

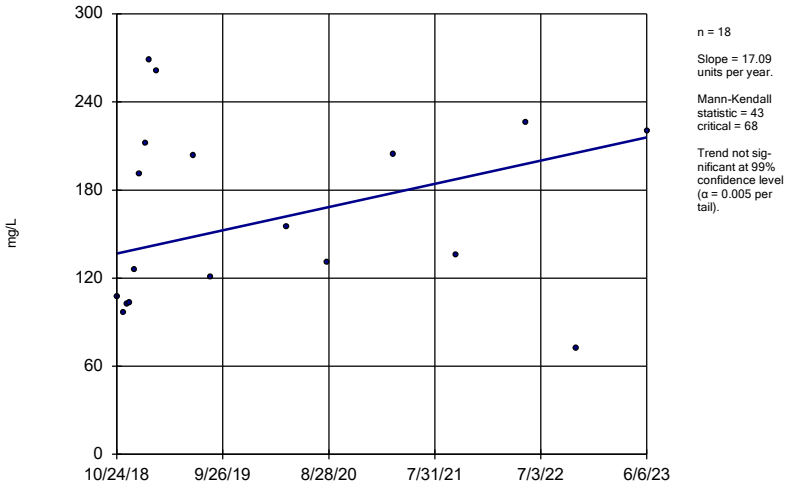
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 7/18/2023 4:51 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 18

Slope = 17.09 units per year.

Mann-Kendall statistic = 43 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

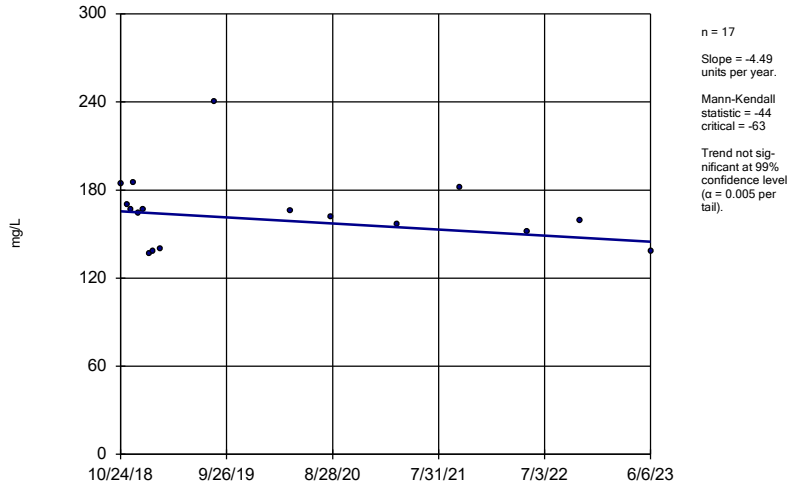
Constituent: Total Dissolved Solids Analysis Run 7/18/2023 4:51 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 17

Slope = -4.49 units per year.

Mann-Kendall statistic = -44 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

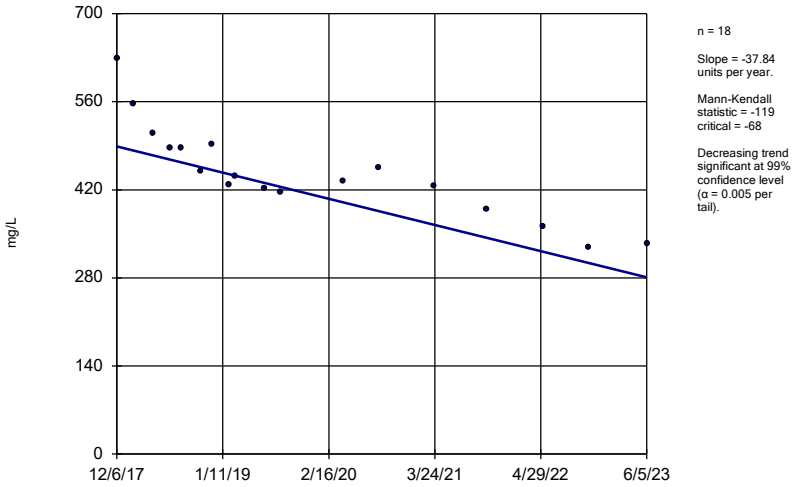
Constituent: Total Dissolved Solids Analysis Run 7/18/2023 4:51 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37a Sanitas software utilized by Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 18

Slope = -37.84 units per year.

Mann-Kendall statistic = -119 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 7/18/2023 4:51 PM View: Trend Test

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE G.

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

FIGURE H.

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00101	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.056	0.056
Combined Radium-226/228	pCi/L	2.01	5
Fluoride	mg/L	0.23	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

FIGURE I.

Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/20/2023, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7603**	**0.4772**	**0.01**	**Yes**	**8**	**0.6188**	**0.1335**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01454**	**0.01189**	**0.01**	**Yes**	**8**	**0.01321**	**0.001252**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/20/2023, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-MW-2	0.001015	0.000538	0.006	No	8	0.0009554	0.0001686	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.00412	0.002028	0.01	No	8	0.003074	0.0009869	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004233	0.002734	0.01	No	8	0.003446	0.0009387	0	None	x^3	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002885	0.002327	0.01	No	8	0.002609	0.0002723	0	None	x^2	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-12	0.000203	0.000102	0.01	No	8	0.0001904	0.00003571	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7603**	**0.4772**	**0.01**	**Yes**	**8**	**0.6188**	**0.1335**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.000311	0.00016	0.01	No	8	0.0002116	0.00004305	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01454**	**0.01189**	**0.01**	**Yes**	**8**	**0.01321**	**0.001252**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.00025	0.00008	0.01	No	8	0.0001692	0.00006352	50	None	No	0.004	NP (selected)
Arsenic (mg/L)	GSD-AP-MW-6	0.000203	0.000151	0.01	No	8	0.0001965	0.00001838	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.000203	0.00007	0.01	No	8	0.0001741	0.00005428	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003204	0.002856	0.01	No	8	0.00303	0.0001646	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.005	0.000545	0.01	No	8	0.00177	0.002004	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-1	0.000203	0.000164	0.01	No	8	0.0001981	0.00001379	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-2	0.000203	0.0000826	0.01	No	7	0.0001528	0.00005839	42.86	None	No	0.008	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.000203	0.0000808	0.01	No	8	0.0001877	0.0000432	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-6	0.000203	0.00015	0.01	No	8	0.0001964	0.00001874	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.03552	0.02746	2	No	8	0.03149	0.003802	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3591	0.2787	2	No	8	0.3189	0.03793	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.1994	0.1316	2	No	8	0.1655	0.03201	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-12	0.04618	0.03077	2	No	8	0.03848	0.007267	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.1013	0.06363	2	No	8	0.08249	0.01779	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.03802	0.02938	2	No	8	0.0337	0.004079	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-4	0.2395	0.1665	2	No	8	0.203	0.03443	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2403	0.2217	2	No	8	0.231	0.008816	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07882	0.06635	2	No	8	0.07259	0.005882	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08758	0.05454	2	No	8	0.07106	0.01559	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.2963	0.2012	2	No	8	0.2488	0.04486	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1888	0.1449	2	No	8	0.1669	0.0207	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.08446	0.05191	2	No	8	0.06819	0.01535	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1353	0.05232	2	No	7	0.09381	0.03494	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.085	0.0456	2	No	8	0.0553	0.01259	0	None	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.03117	0.02838	2	No	8	0.02978	0.001316	0	None	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.0002106	0.00007919	0.005	No	8	0.0001795	0.00006233	37.5	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-12	0.0006026	0.0002878	0.005	No	8	0.000442	0.0001606	0	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.000203	0.0000688	0.005	No	8	0.0001862	0.00004745	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.0003714	0.0001265	0.005	No	8	0.0002864	0.0001076	25	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-7	0.000203	0.000097	0.005	No	8	0.000188	0.00003709	75	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.000203	0.00007	0.005	No	8	0.0001714	0.00005862	75	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.000203	0.00008	0.005	No	8	0.0001876	0.00004349	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.001015	0.00023	0.1	No	8	0.0005616	0.0003781	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-10	0.001015	0.000207	0.1	No	8	0.0005663	0.0003742	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-11	0.0004714	0.0002936	0.1	No	8	0.000619	0.0003356	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GSD-AP-MW-12	0.001015	0.000276	0.1	No	8	0.0006233	0.0003302	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-2	0.0004727	0.000259	0.1	No	8	0.0006085	0.0003468	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	GSD-AP-MW-3	0.001015	0.00023	0.1	No	8	0.0005496	0.0003859	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-4	0.001015	0.000206	0.1	No	8	0.0007293	0.0003958	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.001015	0.000272	0.1	No	8	0.0006924	0.0003539	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-6	0.001015	0.000222	0.1	No	8	0.0006403	0.000402	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-7	0.001015	0.00025	0.1	No	8	0.0006618	0.0003808	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-8	0.001015	0.00022	0.1	No	8	0.00073	0.0003939	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.001015	0.00021	0.1	No	8	0.0006684	0.000375	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-PZ-1	0.001015	0.00027	0.1	No	8	0.0006815	0.0003596	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-PZ-2	0.0007364	0.0002756	0.1	No	7	0.0007241	0.0003148	42.86	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.0004976	0.0002877	0.1	No	8	0.0006254	0.0003332	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-6	0.0004496	0.0002442	0.1	No	8	0.0005968	0.0003575	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-1	0.02118	0.01312	0.056	No	8	0.01715	0.003806	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.00091	0.000203	0.056	No	8	0.000569	0.0003512	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-11	0.006281	0.0001587	0.056	No	8	0.003033	0.003801	12.5	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-12	0.006229	0.003906	0.056	No	8	0.005068	0.001095	0	None	No	0.01	Param.

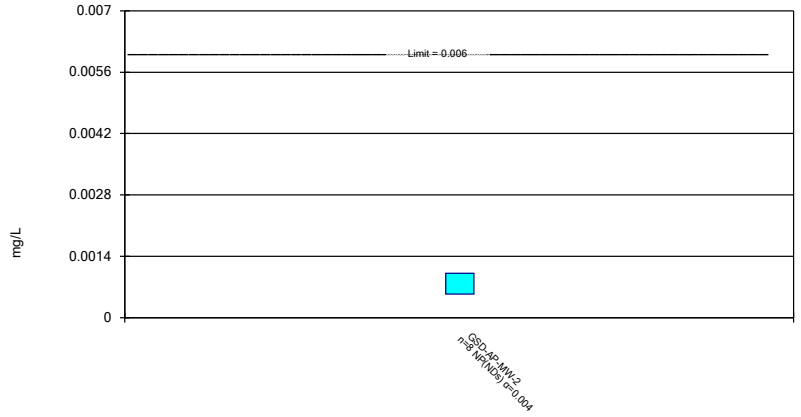
Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/20/2023, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-MW-2	0.03925	0.02417	0.056	No	8	0.03171	0.007114	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02225	0.01267	0.056	No	8	0.01746	0.004521	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.02975	0.02417	0.056	No	8	0.02696	0.002633	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.001984	0.0004487	0.056	No	8	0.001217	0.0007245	12.5	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-6	0.001158	0.0005829	0.056	No	8	0.0007674	0.0004707	37.5	Kaplan-Meier	x^4	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-7	0.00463	0.00016	0.056	No	8	0.0008749	0.001544	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-8	0.004063	0.002702	0.056	No	8	0.003375	0.0006634	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.001037	0.0003195	0.056	No	8	0.0006706	0.0003991	37.5	Kaplan-Meier	x^2	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.00014	0.056	No	8	0.0002248	0.00008972	75	Kaplan-Meier	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.006483	0.002014	0.056	No	7	0.004249	0.001881	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00225	0.00008	0.056	No	8	0.0004535	0.0007311	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-PZ-6	0.0001303	0.00008198	0.056	No	8	0.0001424	0.00005381	37.5	Kaplan-Meier	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	1.036	0.4257	5	No	8	0.7308	0.2878	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	3.076	0.007785	5	No	8	1.301	2.15	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.285	0.6568	5	No	8	0.9711	0.2965	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.176	0.2683	5	No	8	0.7044	0.4531	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.506	0.2875	5	No	8	0.8705	0.6687	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.531	0.1411	5	No	8	0.8079	1.006	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.363	0.1769	5	No	8	0.7701	0.5596	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.303	0.4195	5	No	8	0.8613	0.4168	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	0.9253	-0.03704	5	No	8	0.4441	0.454	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	1.061	0.2294	5	No	8	0.6452	0.3923	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.6761	0.3664	5	No	8	0.5213	0.1461	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.17	0.1815	5	No	8	0.6758	0.4663	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	1.402	-0.0365	5	No	8	0.6826	0.6785	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	0.9617	0.1125	5	No	7	0.5371	0.3575	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.9271	0.3452	5	No	8	0.6361	0.2745	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.15	0.003834	5	No	8	0.4553	0.4964	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.125	0.0601	4	No	8	0.1169	0.02295	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.201	0.0805	4	No	8	0.1079	0.03892	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-11	0.1131	0.07075	4	No	8	0.1066	0.02434	37.5	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-12	0.125	0.0795	4	No	8	0.1193	0.01609	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-2	0.2815	0.2063	4	No	8	0.2439	0.03548	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.125	0.0592	4	No	8	0.1101	0.02783	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2618	0.1895	4	No	8	0.2256	0.0341	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.122	0.0567	4	No	8	0.07355	0.02126	12.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-7	0.128	0.0627	4	No	8	0.1006	0.02834	37.5	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-8	0.1146	0.06397	4	No	8	0.08929	0.02389	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.1411	0.1083	4	No	8	0.1247	0.01549	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1078	0.07653	4	No	8	0.1045	0.02107	37.5	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GSD-AP-MW-2	0.000203	0.00009	0.015	No	8	0.0001889	0.00003995	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.0002824	0.0001178	0.015	No	7	0.0002134	0.00008493	42.86	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	GSD-AP-PZ-5	0.000203	0.000078	0.015	No	8	0.0001783	0.00004789	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.000203	0.0000835	0.015	No	8	0.0001673	0.00005053	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.047	0.02238	0.04	No	8	0.03469	0.01161	0	None	No	0.01	Param.
Mercury (mg/L)	GSD-AP-PZ-6	0.00286	0.0005	0.002	No	8	0.000795	0.0008344	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-1	0.01015	0.000198	0.1	No	8	0.008906	0.003519	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.01015	0.000204	0.1	No	8	0.00527	0.005217	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-11	0.01015	0.00012	0.1	No	8	0.006393	0.005185	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.027	0.0164	0.1	No	8	0.02144	0.003652	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-4	0.01015	0.00106	0.1	No	8	0.005646	0.004815	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-5	0.01015	0.00011	0.1	No	8	0.006423	0.005145	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.01015	0.0001	0.1	No	8	0.007646	0.004636	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.01015	0.00032	0.1	No	8	0.005262	0.005225	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-9	0.01015	0.00018	0.1	No	8	0.005196	0.005296	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.01015	0.00007	0.1	No	8	0.007634	0.004659	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.01015	0.00022	0.1	No	7	0.007321	0.004831	71.43	None	No	0.008	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.000203	0.000101	0.002	No	8	0.0001698	0.00004655	62.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.0004043	0.0003064	0.002	No	8	0.0003554	0.00004619	0	None	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.000203	0.000104	0.002	No	8	0.0001493	0.00004579	37.5	None	No	0.004	NP (normality)

Non-Parametric Confidence Interval

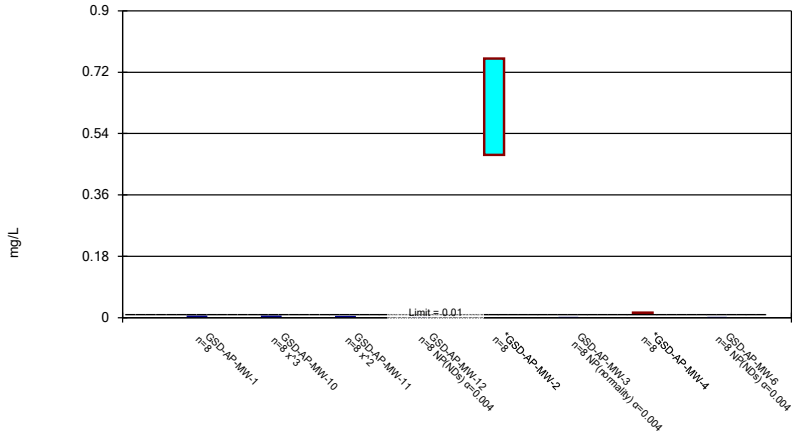
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

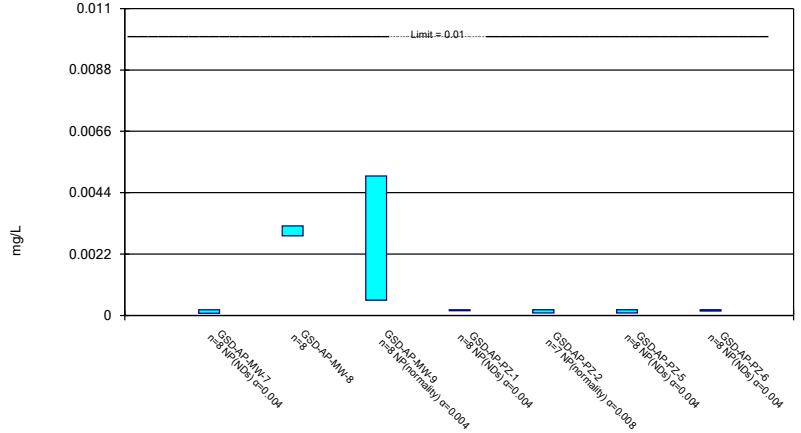
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

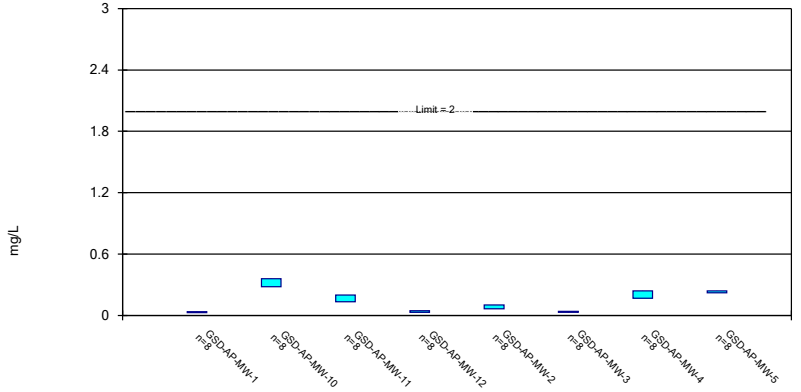
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric Confidence Interval

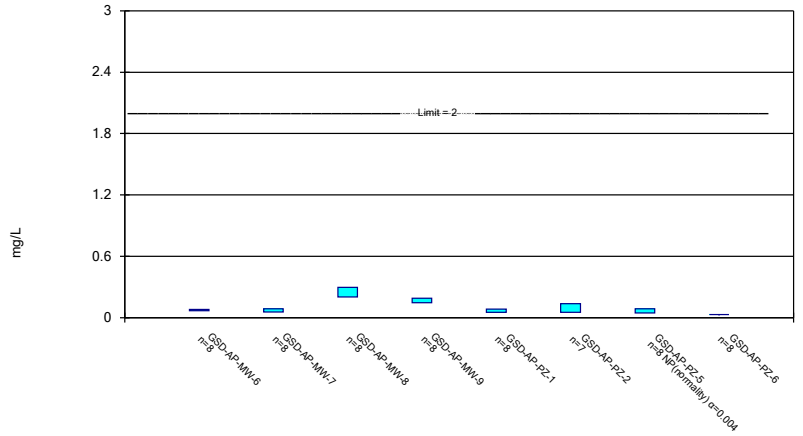
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

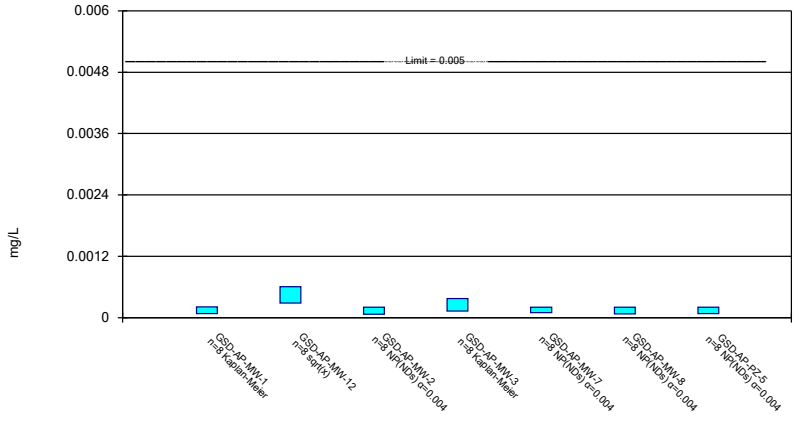


Constituent: Barium Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

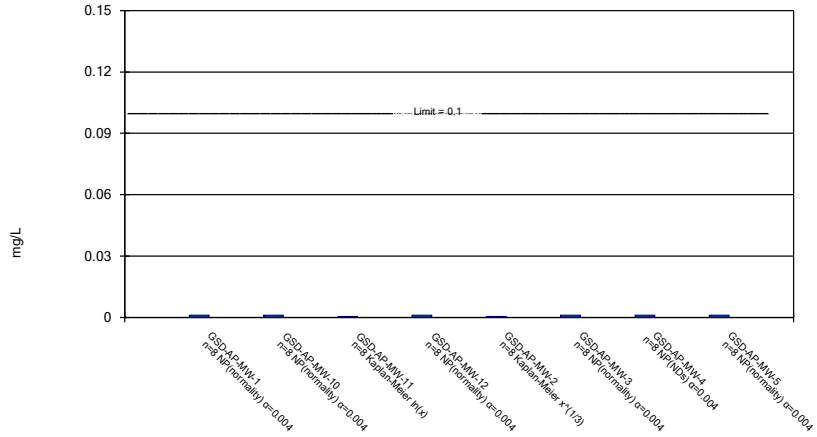


Constituent: Cadmium Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

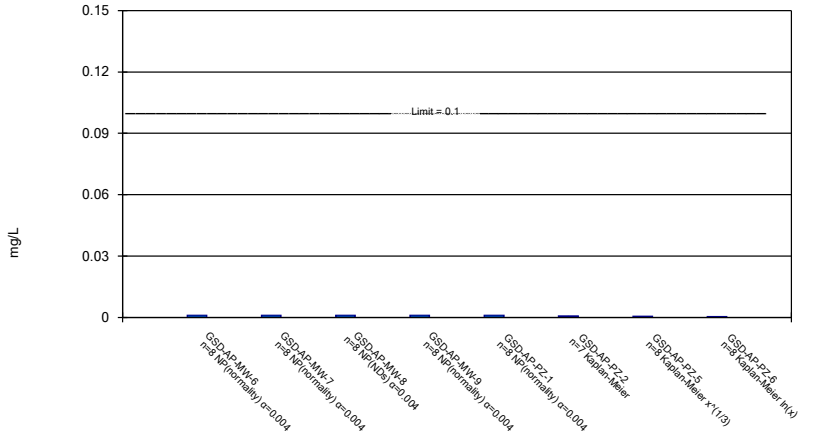


Constituent: Chromium Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

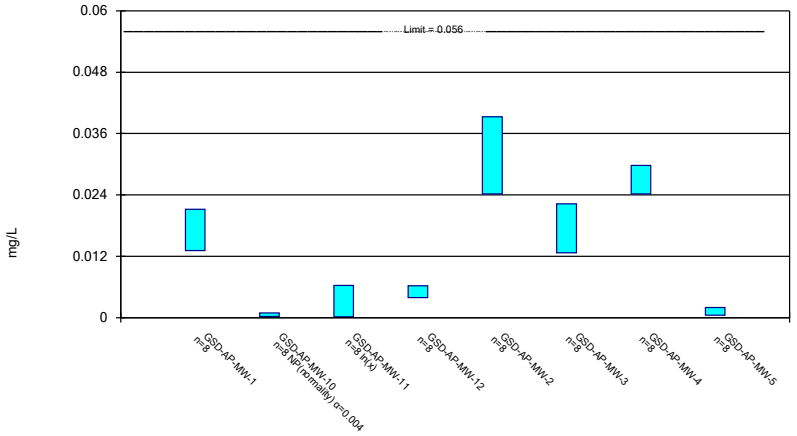
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

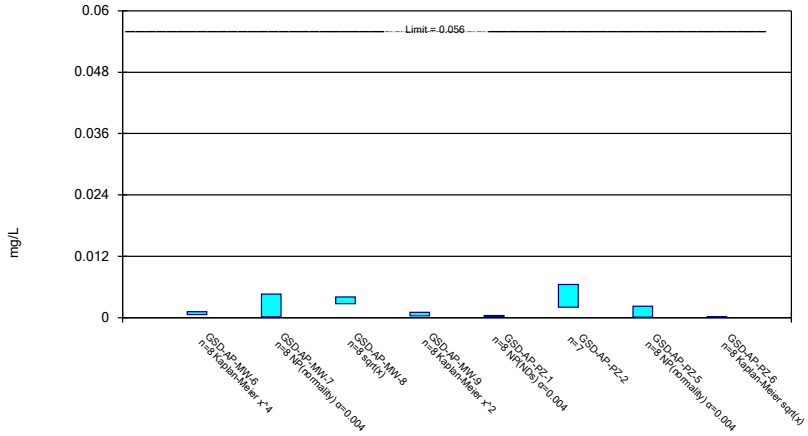


Constituent: Cobalt Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

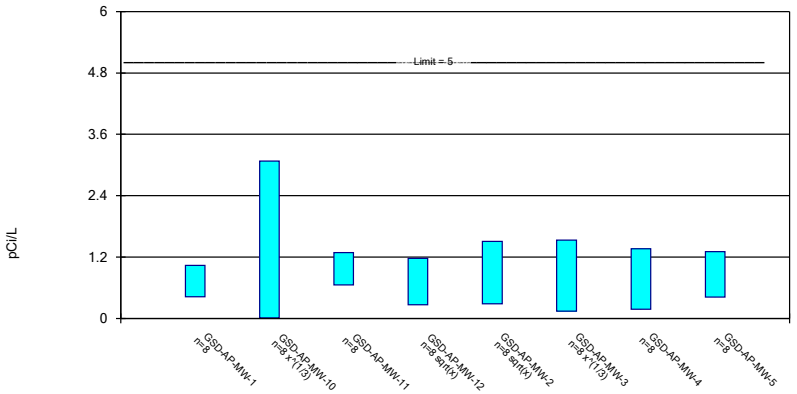


Constituent: Cobalt Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

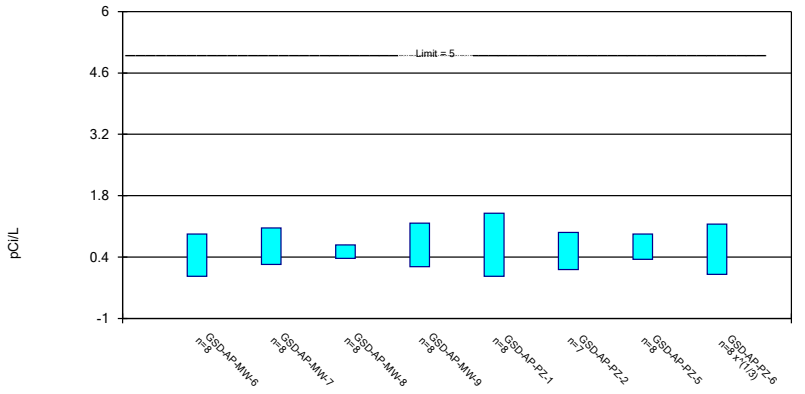


Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

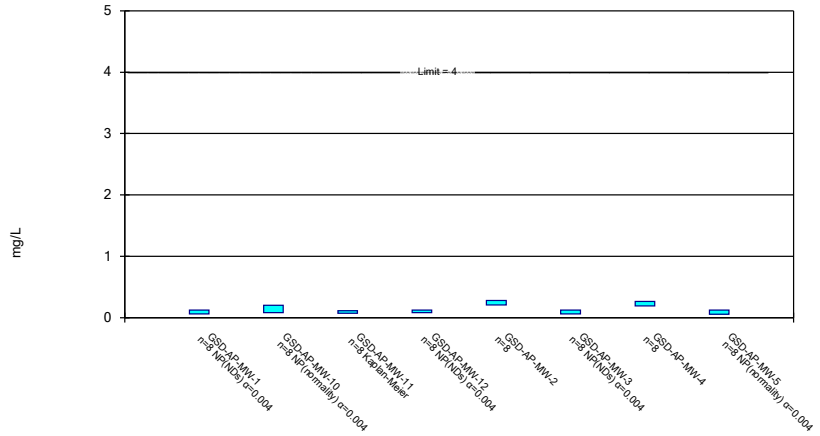
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

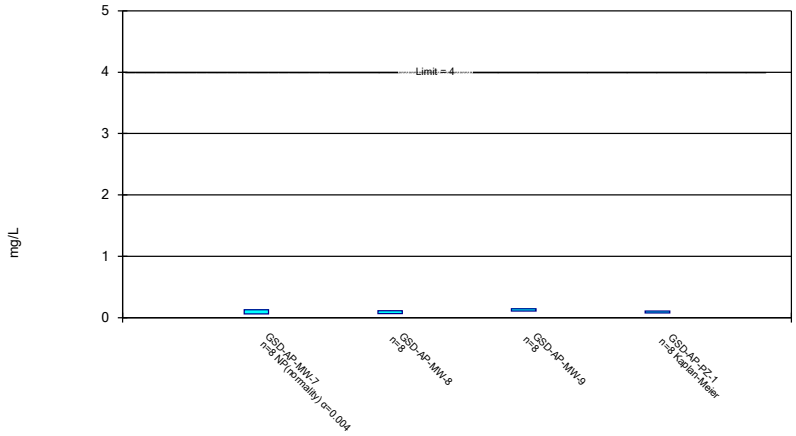


Constituent: Fluoride Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

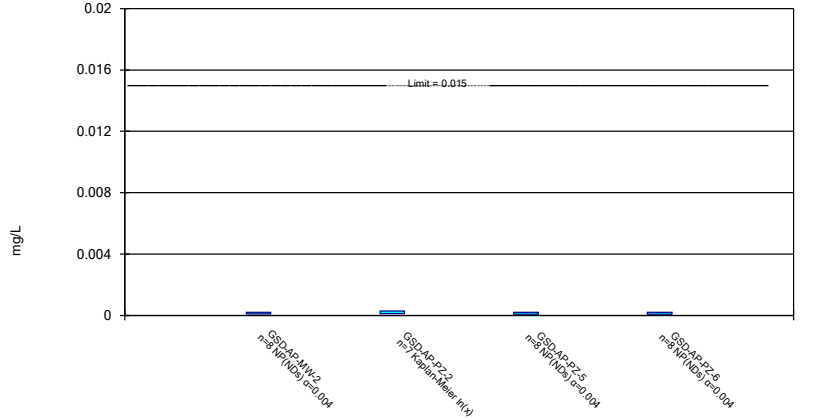


Constituent: Fluoride Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

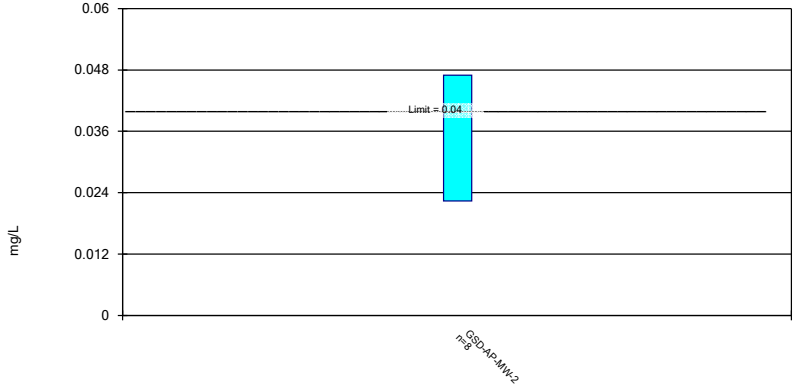


Constituent: Lead Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

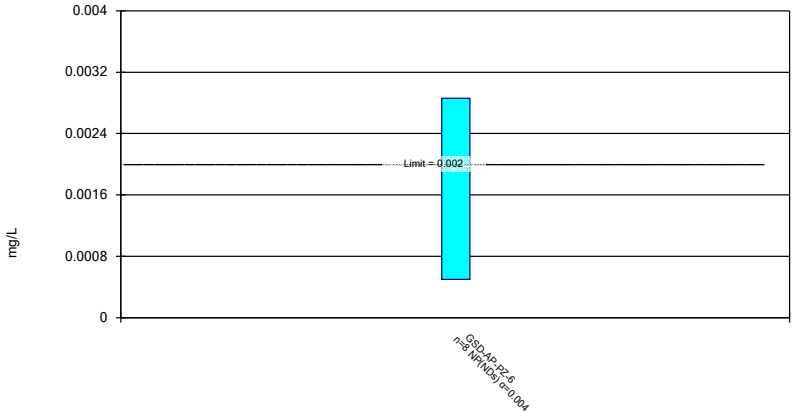
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

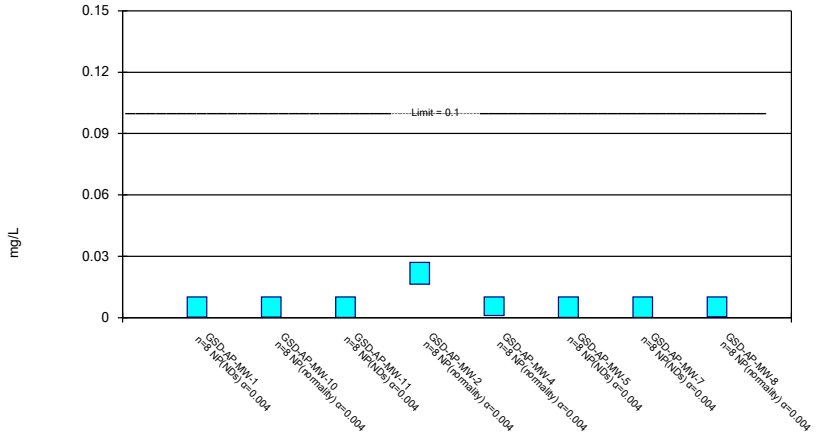


Constituent: Mercury Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

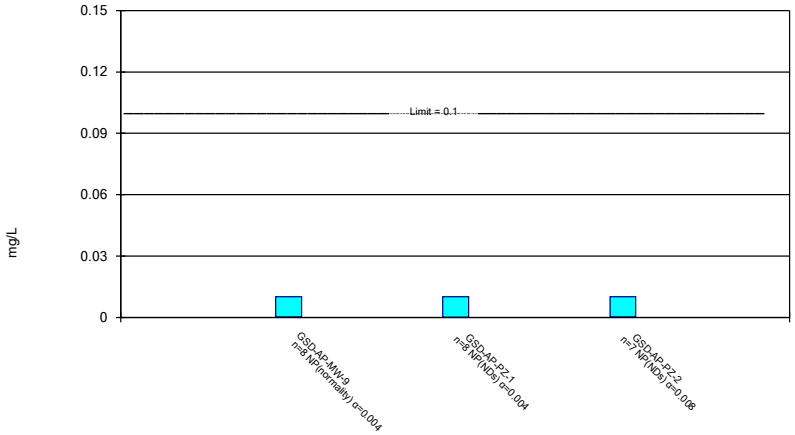


Constituent: Molybdenum Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

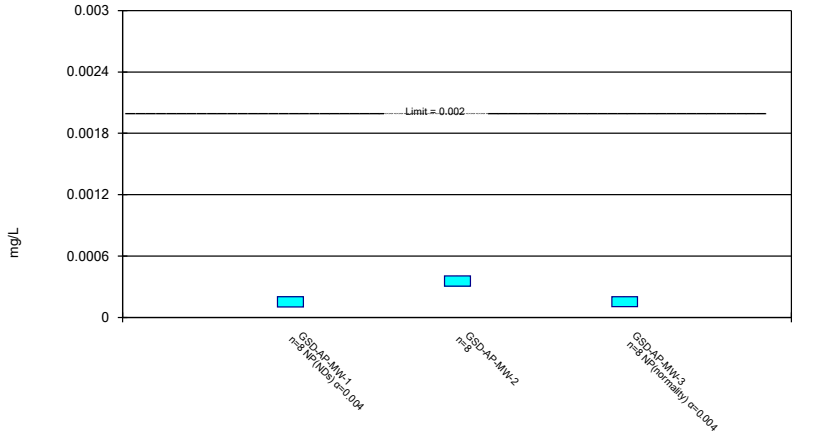


Constituent: Molybdenum Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 7/20/2023 11:57 AM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2
8/20/2019	<0.001015
4/15/2020	<0.001015
8/25/2020	<0.001015
3/24/2021	<0.001015
10/11/2021	<0.001015
5/16/2022	<0.001015
10/25/2022	0.000538 (J)
6/6/2023	<0.001015
Mean	0.0009554
Std. Dev.	0.0001686
Upper Lim.	0.001015
Lower Lim.	0.000538

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-6
8/20/2019					0.825	<0.000203	0.0141	<0.000203
8/21/2019	0.00444 (J)							
8/22/2019		0.00394 (J)	0.00229 (J)	<0.000203				
4/13/2020						<0.000203		<0.000203
4/14/2020			0.00286 (J)	<0.000203				
4/15/2020	0.00309 (J)	0.00236 (J)			0.709		0.0121	
8/25/2020	0.00435 (J)				0.727			
8/26/2020		0.00422 (J)	0.00246 (J)	<0.000203		<0.000203	0.0133	<0.000203
3/16/2021	0.0029							
3/17/2021								<0.000203
3/22/2021						0.0002 (J)		
3/23/2021		0.00163	0.00275	<0.000203				
3/24/2021					0.489		0.011	
10/5/2021	0.00356			<0.000203		0.00021	0.0147	<0.000203
10/11/2021		0.0037			0.424			
10/12/2021			0.00272					
5/10/2022	0.00221	0.00361		<0.000203		0.00016 (J)		<0.000203
5/16/2022					0.569		0.0132	
5/17/2022			0.00281					
10/25/2022					0.555			
10/26/2022	0.00223	0.00414	0.00215	0.000102 (J)		0.000311	0.0145	0.000151 (J)
6/5/2023	0.00181					<0.000203		<0.000203
6/6/2023					0.652		0.0128	
6/13/2023		0.00397	0.00283	<0.000203				
Mean	0.003074	0.003446	0.002609	0.0001904	0.6188	0.0002116	0.01321	0.0001965
Std. Dev.	0.0009869	0.0009387	0.0002723	3.571E-05	0.1335	4.305E-05	0.001252	1.838E-05
Upper Lim.	0.00412	0.004233	0.002885	0.000203	0.7603	0.000311	0.01454	0.000203
Lower Lim.	0.002028	0.002734	0.002327	0.000102	0.4772	0.00016	0.01189	0.000151

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
8/20/2019				<0.000203			
8/21/2019	<0.000203	0.00302 (J)	<0.005			<0.000203	<0.000203
4/13/2020				<0.000203	<0.000203		
4/14/2020		0.00295 (J)	0.00118 (J)				
4/15/2020	<0.000203					<0.000203	<0.000203
8/24/2020				<0.000203	<0.000203	<0.000203	<0.000203
8/26/2020	<0.000203	0.00304 (J)	<0.005				
3/16/2021						8.08E-05 (J)	<0.000203
3/17/2021					8.26E-05 (J)		
3/23/2021	<0.000203	0.00282	0.00063				
3/24/2021				<0.000203			
10/5/2021	7E-05 (J)			<0.000203	9E-05 (J)		
10/12/2021		0.00287	0.00064			<0.000203	<0.000203
5/9/2022				<0.000203	0.0001 (J)		
5/10/2022	<0.000203					<0.000203	<0.000203
5/11/2022		0.00323	0.00055				
10/26/2022	0.000105 (J)	0.0033	0.000618	0.000164 (J)	0.000188 (J)	<0.000203	0.00015 (J)
6/5/2023					<0.000203		
6/7/2023		0.00301		<0.000203			
6/12/2023			0.000545				
6/13/2023	<0.000203					<0.000203	<0.000203
Mean	0.0001741	0.00303	0.00177	0.0001981	0.0001528	0.0001877	0.0001964
Std. Dev.	5.428E-05	0.0001646	0.002004	1.379E-05	5.839E-05	4.32E-05	1.874E-05
Upper Lim.	0.000203	0.003204	0.005	0.000203	0.000203	0.000203	0.000203
Lower Lim.	7E-05	0.002856	0.000545	0.000164	8.26E-05	8.08E-05	0.00015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
8/20/2019					0.0685	0.0405	0.188	0.238
8/21/2019	0.037							
8/22/2019		0.302	0.214	0.0455				
4/13/2020						0.0349		0.241
4/14/2020			0.168	0.0279				
4/15/2020	0.0329	0.35			0.0607		0.159	
8/24/2020								0.238
8/25/2020	0.0358				0.0812			
8/26/2020		0.322	0.165	0.0503		0.0363	0.181	
3/16/2021	0.0331							0.217
3/22/2021						0.0354		
3/23/2021		0.395	0.169	0.0315				
3/24/2021					0.0676		0.171	
10/5/2021	0.0304			0.0417		0.0344	0.202	0.221
10/11/2021		0.292			0.0807			
10/12/2021			0.17					
5/9/2022								0.236
5/10/2022	0.0275	0.318		0.0377		0.0287		
5/16/2022					0.0974		0.23	
5/17/2022			0.195					
10/25/2022					0.0888			
10/26/2022	0.028	0.278	0.117	0.0376		0.0306	0.239	0.231
6/5/2023	0.0272					0.0288		
6/6/2023					0.115		0.254	
6/7/2023								0.226
6/13/2023		0.294	0.126	0.0356				
Mean	0.03149	0.3189	0.1655	0.03848	0.08249	0.0337	0.203	0.231
Std. Dev.	0.003802	0.03793	0.03201	0.007267	0.01779	0.004079	0.03443	0.008816
Upper Lim.	0.03552	0.3591	0.1994	0.04618	0.1013	0.03802	0.2395	0.2403
Lower Lim.	0.02746	0.2787	0.1316	0.03077	0.06363	0.02938	0.1665	0.2217

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
8/20/2019	0.0731				0.097			
8/21/2019		0.0946	0.194	0.183			0.085	0.0312
4/13/2020	0.0635				0.0529	0.0832		
4/14/2020			0.262	0.186				
4/15/2020		0.0653					0.0535	0.0296
8/24/2020					0.0733	0.132	0.0565	0.031
8/26/2020	0.0771	0.0845	0.235	0.202				
3/16/2021							0.0553	0.0293
3/17/2021	0.0656					0.045		
3/23/2021		0.0602	0.249	0.157				
3/24/2021					0.0525			
10/5/2021	0.0741	0.0716			0.0811	0.118		
10/12/2021			0.203	0.147			0.0494	0.0303
5/9/2022					0.057	0.0593		
5/10/2022	0.0762	0.0527					0.0497	0.0309
5/11/2022			0.32	0.16				
10/26/2022	0.0702	0.0852	0.224	0.154	0.0682	0.133	0.0474	0.0282
6/5/2023	0.0809					0.0862		
6/7/2023			0.303		0.0635			
6/12/2023				0.146				
6/13/2023		0.0544					0.0456	0.0277
Mean	0.07259	0.07106	0.2488	0.1669	0.06819	0.09381	0.0553	0.02978
Std. Dev.	0.005882	0.01559	0.04486	0.0207	0.01535	0.03494	0.01259	0.001316
Upper Lim.	0.07882	0.08758	0.2963	0.1888	0.08446	0.1353	0.085	0.03117
Lower Lim.	0.06635	0.05454	0.2012	0.1449	0.05191	0.05232	0.0456	0.02838

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-PZ-5
8/20/2019			<0.000203	<0.000203			
8/21/2019	<0.000203				<0.000203	<0.000203	<0.000203
8/22/2019		0.000755 (J)					
4/13/2020				0.000438 (J)			
4/14/2020		0.000425 (J)				<0.000203	
4/15/2020	<0.000203		<0.000203		<0.000203		<0.000203
8/24/2020							<0.000203
8/25/2020	<0.000203		<0.000203				
8/26/2020		0.000618 (J)		<0.000203	<0.000203	<0.000203	
3/16/2021	0.000102 (J)						<0.000203
3/22/2021				0.00039			
3/23/2021		0.000405			9.7E-05 (J)	8.32E-05 (J)	
3/24/2021			6.88E-05 (J)				
10/5/2021	0.0001 (J)	0.00037		0.00021	<0.000203		
10/11/2021			<0.000203				
10/12/2021						<0.000203	8E-05 (J)
5/10/2022	0.00022	0.00033		0.00035	<0.000203		<0.000203
5/11/2022						7E-05 (J)	
5/16/2022			<0.000203				
10/25/2022			<0.000203				
10/26/2022	0.00013 (J)	0.000299		0.000147 (J)	<0.000203	<0.000203	<0.000203
6/5/2023	0.000275			0.00035			
6/6/2023			<0.000203				
6/7/2023						<0.000203	
6/13/2023		0.000334			0.000189 (J)		<0.000203
Mean	0.0001795	0.000442	0.0001862	0.0002864	0.000188	0.0001714	0.0001876
Std. Dev.	6.233E-05	0.0001606	4.745E-05	0.0001076	3.709E-05	5.862E-05	4.349E-05
Upper Lim.	0.0002106	0.0006026	0.000203	0.0003714	0.000203	0.000203	0.000203
Lower Lim.	7.919E-05	0.0002878	6.88E-05	0.0001265	9.7E-05	7E-05	8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
8/20/2019					<0.001015	<0.001015	<0.001015	<0.001015
8/21/2019	<0.001015							
8/22/2019		<0.001015	<0.001015	<0.001015				
4/13/2020						<0.001015		<0.001015
4/14/2020			<0.001015	<0.001015				
4/15/2020	<0.001015	<0.001015			<0.001015		<0.001015	
8/24/2020								<0.001015
8/25/2020	<0.001015				<0.001015			
8/26/2020		<0.001015	<0.001015	<0.001015		<0.001015	<0.001015	
3/16/2021	0.000376 (J)							0.000397 (J)
3/22/2021						0.000293 (J)		
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)				
3/24/2021					0.00047 (J)		0.000323 (J)	
10/5/2021	0.00023 (J)			0.00034 (J)		0.00023 (J)	<0.001015	0.00028 (J)
10/11/2021		0.00028 (J)			0.00048 (J)			
10/12/2021			0.00027 (J)					
5/9/2022								0.00053 (J)
5/10/2022	0.00025 (J)	0.0003 (J)		0.00041 (J)		0.00029 (J)		
5/16/2022					0.00034 (J)		0.00023 (J)	
5/17/2022			0.00038 (J)					
10/25/2022					0.00022 (J)			
10/26/2022	0.000321 (J)	0.000207 (J)	0.000318 (J)	0.000276 (J)		0.000276 (J)	<0.001015	<0.001015
6/5/2023	0.000271 (J)					0.000263 (J)		
6/6/2023					0.000313 (J)		0.000206 (J)	
6/7/2023								0.000272 (J)
6/13/2023		0.000348 (J)	0.000426 (J)	0.000484 (J)				
Mean	0.0005616	0.0005663	0.000619	0.0006233	0.0006085	0.0005496	0.0007293	0.0006924
Std. Dev.	0.0003781	0.0003742	0.0003356	0.0003302	0.0003468	0.0003859	0.0003958	0.0003539
Upper Lim.	0.001015	0.001015	0.0004714	0.001015	0.0004727	0.001015	0.001015	0.001015
Lower Lim.	0.00023	0.000207	0.0002936	0.000276	0.000259	0.00023	0.000206	0.000272

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
8/20/2019	<0.001015				<0.001015			
8/21/2019		<0.001015	<0.001015	<0.001015			<0.001015	<0.001015
4/13/2020	<0.001015				<0.001015	<0.001015		
4/14/2020			<0.001015	<0.001015				
4/15/2020		<0.001015					<0.001015	<0.001015
8/24/2020					<0.001015	<0.001015	<0.001015	<0.001015
8/26/2020	<0.001015	<0.001015	<0.001015	<0.001015				
3/16/2021							0.000534 (J)	0.000534 (J)
3/17/2021	0.000338 (J)					0.000764 (J)		
3/23/2021		0.000406 (J)	0.0003 (J)	0.000422 (J)				
3/24/2021					0.000442 (J)			
10/5/2021	0.00025 (J)	0.00025 (J)			0.00035 (J)	0.00035 (J)		
10/12/2021			<0.001015	0.00031 (J)			0.00034 (J)	0.00031 (J)
5/9/2022					0.00027 (J)	0.00062 (J)		
5/10/2022	<0.001015	0.00025 (J)					0.00037 (J)	0.00037 (J)
5/11/2022			0.00022 (J)	0.00021 (J)				
10/26/2022	0.000222 (J)	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	0.000251 (J)	0.000224 (J)
6/5/2023	0.000252 (J)					0.00029 (J)		
6/7/2023			0.000245 (J)		0.00033 (J)			
6/12/2023				0.000345 (J)				
6/13/2023		0.000328 (J)					0.000463 (J)	0.000291 (J)
Mean	0.0006403	0.0006618	0.00073	0.0006684	0.0006815	0.0007241	0.0006254	0.0005968
Std. Dev.	0.000402	0.0003808	0.0003939	0.000375	0.0003596	0.0003148	0.0003332	0.0003575
Upper Lim.	0.001015	0.001015	0.001015	0.001015	0.001015	0.0007364	0.0004976	0.0004496
Lower Lim.	0.000222	0.00025	0.00022	0.00021	0.00027	0.0002756	0.0002877	0.0002442

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
8/20/2019					0.0366	0.0257	0.0293	0.00223 (J)
8/21/2019	0.0242							
8/22/2019		<0.000203	0.00756	0.00658				
4/13/2020						0.0209		<0.000203
4/14/2020			<0.000203	0.0035 (J)				
4/15/2020	0.0178	<0.000203			0.0324		0.0252	
8/24/2020								0.00222 (J)
8/25/2020	0.0193				0.0298			
8/26/2020		<0.000203	0.00599	0.00547		0.0191	0.0231	
3/16/2021	0.0184							0.00136
3/22/2021						0.0183		
3/23/2021		0.00037	0.000388	0.00378				
3/24/2021					0.0316		0.0268	
10/5/2021	0.0169			0.00448		0.016	0.0238	0.00116
10/11/2021		0.00089			0.0165			
10/12/2021			0.00027					
5/9/2022								0.00101
5/10/2022	0.0136	0.00091		0.0049		0.0147		
5/16/2022					0.0366		0.0289	
5/17/2022			0.00044					
10/25/2022					0.0302			
10/26/2022	0.0152	0.000907	0.009	0.00603		0.0132	0.0289	0.000936
6/5/2023	0.0118					0.0118		
6/6/2023					0.04		0.0297	
6/7/2023								0.000715
6/13/2023		0.000866	0.000517	0.0058				
Mean	0.01715	0.000569	0.003033	0.005068	0.03171	0.01746	0.02696	0.001217
Std. Dev.	0.003806	0.0003512	0.003801	0.001095	0.007114	0.004521	0.002633	0.0007245
Upper Lim.	0.02118	0.00091	0.006281	0.006229	0.03925	0.02225	0.02975	0.001984
Lower Lim.	0.01312	0.000203	0.0001587	0.003906	0.02417	0.01267	0.02417	0.0004487

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
8/20/2019	<0.000203				<0.000203			
8/21/2019		<0.000203	0.00303 (J)	<0.000203			0.00225 (J)	<0.000203
4/13/2020	<0.000203				<0.000203	0.00489 (J)		
4/14/2020			0.00385 (J)	<0.000203				
4/15/2020		<0.000203					<0.000203	<0.000203
8/24/2020					<0.000203	0.00237 (J)	<0.000203	<0.000203
8/26/2020	<0.000203	<0.000203	0.00388 (J)	<0.000203				
3/16/2021							0.000384	0.000108 (J)
3/17/2021	0.00102					0.00616		
3/23/2021		0.00102	0.003	0.00103				
3/24/2021					<0.000203			
10/5/2021	0.00104	0.00018 (J)			0.00044	0.00287		
10/12/2021			0.00298	0.00113			8E-05 (J)	0.00014 (J)
5/9/2022					0.00014 (J)	0.00691		
5/10/2022	0.00114	0.0004					0.00015 (J)	0.00012 (J)
5/11/2022			0.00461	0.00091				
10/26/2022	0.0012	0.00016 (J)	0.00266	0.000812	<0.000203	0.0021	<0.000203	7.8E-05 (J)
6/5/2023	0.00113					0.00444		
6/7/2023			0.00299		<0.000203			
6/12/2023				0.000874				
6/13/2023		0.00463					0.000155 (J)	8.4E-05 (J)
Mean	0.0007674	0.0008749	0.003375	0.0006706	0.0002248	0.004249	0.0004535	0.0001424
Std. Dev.	0.0004707	0.001544	0.0006634	0.0003991	8.972E-05	0.001881	0.0007311	5.381E-05
Upper Lim.	0.001158	0.00463	0.004063	0.001037	0.00044	0.006483	0.00225	0.0001303
Lower Lim.	0.0005829	0.00016	0.002702	0.0003195	0.00014	0.002014	8E-05	8.198E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
8/20/2019					0.553 (U)	0.709 (U)	0.814	0.206 (U)
8/21/2019	0.643 (U)							
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)				
4/13/2020						0.942 (U)		1.19
4/14/2020			0.922 (U)	0.643 (U)				
4/15/2020	0.538 (U)	0.64 (U)			0.182 (U)		-0.0841 (U)	
8/24/2020								0.482 (U)
8/25/2020	0.502 (U)				0.43 (U)			
8/26/2020		0.221 (U)	1.28	1.31		0.177 (U)	0.26 (U)	
3/16/2021	0.722 (U)							0.709 (U)
3/22/2021						0.263 (U)		
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)				
3/24/2021					0.769 (U)		0.664 (U)	
10/5/2021	1.21			1.48		3.21	1.75	1.44
10/11/2021		6.52			2.38			
10/12/2021			1.02 (U)					
5/9/2022								1.16
5/10/2022	0.761 (U)	0.421 (U)		0.531 (U)		0.189 (U)		
5/16/2022					1.06		0.978	
5/17/2022			1.01 (U)					
10/25/2022					0.683 (U)			
10/26/2022	0.38 (U)	0.42 (U)	0.505 (U)	0.446 (U)		0.551 (U)	0.609 (U)	0.643 (U)
6/5/2023	1.09 (U)					0.422 (U)		
6/6/2023					0.907 (U)		1.17 (U)	
6/7/2023								1.06 (U)
6/13/2023		1.38	1.1 (U)	0.515 (U)				
Mean	0.7308	1.301	0.9711	0.7044	0.8705	0.8079	0.7701	0.8613
Std. Dev.	0.2878	2.15	0.2965	0.4531	0.6687	1.006	0.5596	0.4168
Upper Lim.	1.036	3.076	1.285	1.176	1.506	1.531	1.363	1.303
Lower Lim.	0.4257	0.007785	0.6568	0.2683	0.2875	0.1411	0.1769	0.4195

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
8/20/2019	-0.086 (U)				0.663			
8/21/2019		-0.0134 (U)	0.552 (U)	1.53 (U)			0.442 (U)	-0.00256 (U)
4/13/2020	0.0901 (U)				-0.129 (U)	0.472 (U)		
4/14/2020			0.641 (U)	0.119 (U)				
4/15/2020		0.526 (U)					0.432 (U)	0.000738 (U)
8/24/2020					0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)
8/26/2020	0.416 (U)	0.691 (U)	0.339 (U)	1.18				
3/16/2021							0.32 (U)	0.589 (U)
3/17/2021	0.539 (U)					0.756 (U)		
3/23/2021		0.45 (U)	0.662 (U)	0.694 (U)				
3/24/2021					0.245 (U)			
10/5/2021	1.36	1.27			2.07	1.13		
10/12/2021			0.291 (U)	0.311 (U)			0.963 (U)	1.57
5/9/2022					0.784 (U)	0.352 (U)		
5/10/2022	0.0979 (U)	0.599 (U)					0.659 (U)	0.468 (U)
5/11/2022			0.475 (U)	0.605 (U)				
10/26/2022	0.432 (U)	0.559 (U)	0.528 (U)	0.572 (U)	0.561 (U)	0.391 (U)	1.08	0.283 (U)
6/5/2023	0.704 (U)					0.662 (U)		
6/7/2023			0.682 (U)		1.09 (U)			
6/12/2023				0.395 (U)				
6/13/2023		1.08					0.739 (U)	0.33 (U)
Mean	0.4441	0.6452	0.5213	0.6758	0.6826	0.5371	0.6361	0.4553
Std. Dev.	0.454	0.3923	0.1461	0.4663	0.6785	0.3575	0.2745	0.4964
Upper Lim.	0.9253	1.061	0.6761	1.17	1.402	0.9617	0.9271	1.15
Lower Lim.	-0.03704	0.2294	0.3664	0.1815	-0.0365	0.1125	0.3452	0.003834

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
8/20/2019					0.252	0.0592 (J)	0.197	0.0567 (J)
8/21/2019	<0.125							
8/22/2019		0.084 (J)	<0.125	<0.125				
4/13/2020						<0.125		0.0688 (J)
4/14/2020			0.0878 (J)	<0.125				
4/15/2020	<0.125	0.112			0.21		0.238	
8/24/2020								0.0607 (J)
8/25/2020	<0.125				0.273			
8/26/2020		0.0997 (J)	<0.125	<0.125		<0.125	0.251	
3/16/2021	<0.125							0.065 (J)
3/22/2021						<0.125		
3/23/2021		0.101	0.0819 (J)	<0.125				
3/24/2021					0.194		0.227	
10/5/2021	0.0601 (J)			<0.125		<0.125	0.214	0.122
10/11/2021		0.201			0.283			
10/12/2021			0.134					
5/9/2022								0.0682 (J)
5/10/2022	<0.125	0.0918 (J)		<0.125		0.0714 (J)		
5/16/2022					0.264		0.17	
5/17/2022			<0.125					
10/25/2022					0.271			
10/26/2022	<0.125	0.0929 (J)	0.069 (J)	<0.125		<0.125	0.283	0.0845 (J)
6/5/2023	<0.125					<0.125		
6/6/2023					0.204		0.225	
6/7/2023								<0.125
6/13/2023		0.0805 (J)	0.105 (J)	0.0795 (J)				
Mean	0.1169	0.1079	0.1066	0.1193	0.2439	0.1101	0.2256	0.07355
Std. Dev.	0.02295	0.03892	0.02434	0.01609	0.03548	0.02783	0.0341	0.02126
Upper Lim.	0.125	0.201	0.1131	0.125	0.2815	0.125	0.2618	0.122
Lower Lim.	0.0601	0.0805	0.07075	0.0795	0.2063	0.0592	0.1895	0.0567

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1
8/20/2019				0.0889 (J)
8/21/2019	0.068 (J)	0.0648 (J)	0.0984 (J)	
4/13/2020				0.103
4/14/2020		0.0845 (J)	0.133	
4/15/2020	0.0775 (J)			
8/24/2020				0.114
8/26/2020	<0.125	0.0732 (J)	0.13	
3/23/2021	<0.125	0.0802 (J)	0.132	
3/24/2021				0.0725 (J)
10/5/2021	0.0933 (J)			<0.125
10/12/2021		0.123	0.147	
5/9/2022				0.0824 (J)
5/10/2022	0.0627 (J)			
5/11/2022		0.0695 (J)	0.108 (J)	
10/26/2022	0.128	0.0911 (J)	0.119 (J)	<0.125
6/7/2023		0.128		<0.125
6/12/2023			0.13	
6/13/2023	<0.125			
Mean	0.1006	0.08929	0.1247	0.1045
Std. Dev.	0.02834	0.02389	0.01549	0.02107
Upper Lim.	0.128	0.1146	0.1411	0.1078
Lower Lim.	0.0627	0.06397	0.1083	0.07653

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
8/20/2019	<0.000203			
8/21/2019			<0.000203	<0.000203
4/13/2020		<0.000203		
4/15/2020	<0.000203		<0.000203	<0.000203
8/24/2020		<0.000203	<0.000203	<0.000203
8/25/2020	<0.000203			
3/16/2021			0.00013 (J)	8.35E-05 (J)
3/17/2021		0.000191 (J)		
3/24/2021	<0.000203			
10/5/2021		0.00012 (J)		
10/11/2021	9E-05 (J)			
10/12/2021			<0.000203	0.00012 (J)
5/9/2022		0.00018 (J)		
5/10/2022			<0.000203	0.00012 (J)
5/16/2022	<0.000203			
10/25/2022	<0.000203			
10/26/2022		<0.000203	<0.000203	<0.000203
6/5/2023		0.000394		
6/6/2023	<0.000203			
6/13/2023			7.8E-05 (J)	<0.000203
Mean	0.0001889	0.0002134	0.0001783	0.0001673
Std. Dev.	3.995E-05	8.493E-05	4.789E-05	5.053E-05
Upper Lim.	0.000203	0.0002824	0.000203	0.000203
Lower Lim.	9E-05	0.0001178	7.8E-05	8.35E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2
8/20/2019	0.0583
4/15/2020	0.0406
8/25/2020	0.041
3/24/2021	0.0318
10/11/2021	0.0225
5/16/2022	0.0271
10/25/2022	0.0304
6/6/2023	0.0258
Mean	0.03469
Std. Dev.	0.01161
Upper Lim.	0.047
Lower Lim.	0.02238

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6
8/21/2019	<0.0005
4/15/2020	<0.0005
8/24/2020	<0.0005
3/16/2021	<0.0005
10/12/2021	<0.0005
5/10/2022	0.00286
10/26/2022	<0.0005
6/13/2023	<0.0005
Mean	0.000795
Std. Dev.	0.0008344
Upper Lim.	0.00286
Lower Lim.	0.0005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-2	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-7	GSD-AP-MW-8
8/20/2019				0.027	<0.01015	<0.01015		
8/21/2019	<0.01015						<0.01015	<0.01015
8/22/2019		<0.01015	<0.01015					
4/13/2020						<0.01015		
4/14/2020			<0.01015					<0.01015
4/15/2020	<0.01015	<0.01015		0.0202	<0.01015		<0.01015	
8/24/2020						<0.01015		
8/25/2020	<0.01015			0.0269				
8/26/2020		<0.01015	<0.01015		<0.01015		<0.01015	<0.01015
3/16/2021	<0.01015					<0.01015		
3/23/2021		0.000204	0.000124 (J)				<0.01015	0.000357
3/24/2021				0.0164	0.00118			
10/5/2021	<0.01015				0.00111	0.00015 (J)	0.0001 (J)	
10/11/2021		0.00045		0.0204				
10/12/2021			0.00015 (J)					0.00032
5/9/2022						0.00011 (J)		
5/10/2022	<0.01015	0.00047					<0.01015	
5/11/2022								0.0004
5/16/2022				0.0201	0.00122			
5/17/2022			0.00012 (J)					
10/25/2022				0.0202				
10/26/2022	0.000198 (J)	0.000438	<0.01015		0.00106	0.000371	0.000169 (J)	0.000422
6/5/2023	<0.01015							
6/6/2023				0.0203	<0.01015			
6/7/2023						<0.01015		<0.01015
6/13/2023		<0.01015	<0.01015				<0.01015	
Mean	0.008906	0.00527	0.006393	0.02144	0.005646	0.006423	0.007646	0.005262
Std. Dev.	0.003519	0.005217	0.005185	0.003652	0.004815	0.005145	0.004636	0.005225
Upper Lim.	0.01015	0.01015	0.01015	0.027	0.01015	0.01015	0.01015	0.01015
Lower Lim.	0.000198	0.000204	0.00012	0.0164	0.00106	0.00011	0.0001	0.00032

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2
8/20/2019		<0.01015	
8/21/2019	<0.01015		
4/13/2020		<0.01015	<0.01015
4/14/2020	<0.01015		
8/24/2020		<0.01015	<0.01015
8/26/2020	<0.01015		
3/17/2021			<0.01015
3/23/2021	0.00027		
3/24/2021		9.88E-05 (J)	
10/5/2021		7E-05 (J)	0.00028
10/12/2021	0.00018 (J)		
5/9/2022		<0.01015	<0.01015
5/11/2022	0.00024		
10/26/2022	0.000276	<0.01015	0.00022
6/5/2023			<0.01015
6/7/2023		<0.01015	
6/12/2023	<0.01015		
Mean	0.005196	0.007634	0.007321
Std. Dev.	0.005296	0.004659	0.004831
Upper Lim.	0.01015	0.01015	0.01015
Lower Lim.	0.00018	7E-05	0.00022

ND substitution: RL or RL/2 if <15% NDs.

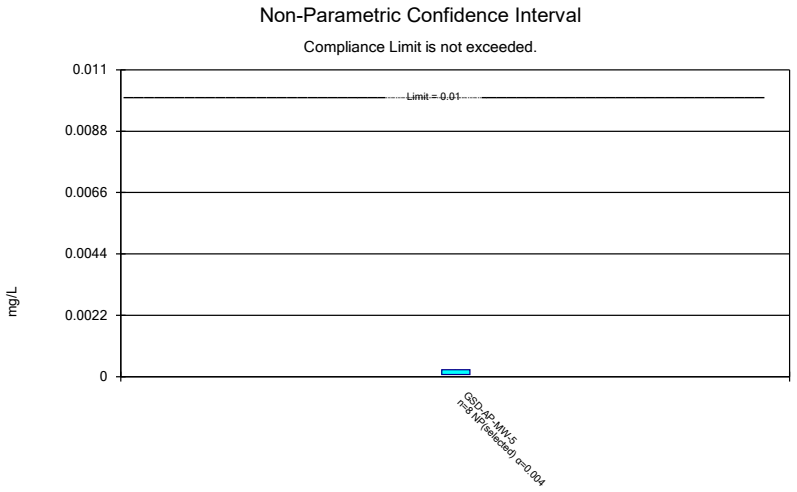
Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-3
8/20/2019		0.000322 (J)	<0.000203
8/21/2019	<0.000203		
4/13/2020			<0.000203
4/15/2020	<0.000203	0.000318 (J)	
8/25/2020	<0.000203	0.000347 (J)	
8/26/2020			<0.000203
3/16/2021	0.000112 (J)		
3/22/2021			0.000121 (J)
3/24/2021		0.00037	
10/5/2021	<0.000203		0.00014 (J)
10/11/2021		0.00029	
5/10/2022	0.00013 (J)		0.00011 (J)
5/16/2022		0.00041	
10/25/2022		0.000361	
10/26/2022	<0.000203		0.00011 (J)
6/5/2023	0.000101 (J)		0.000104 (J)
6/6/2023		0.000425	
Mean	0.0001698	0.0003554	0.0001493
Std. Dev.	4.655E-05	4.619E-05	4.579E-05
Upper Lim.	0.000203	0.0004043	0.000203
Lower Lim.	0.000101	0.0003064	0.000104

ND substitution: RL or RL/2 if <15% NDs.



Normality testing disabled.

Constituent: Arsenic Analysis Run 7/20/2023 11:59 AM View: Confidence Intervals Nonparametric

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/20/2023 12:00 PM View: Confidence Intervals Nonparametric

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5
8/20/2019	<0.000203
4/13/2020	<0.000203
8/24/2020	<0.000203
3/16/2021	8.17E-05 (J)
10/5/2021	0.00013 (J)
5/9/2022	8E-05 (J)
10/26/2022	0.00025
6/7/2023	<0.000203
Mean	0.0001692
Std. Dev.	6.352E-05
Upper Lim.	0.00025
Lower Lim.	8E-05

ND substitution: RL or RL/2 if <15% NDs.

GROUNDWATER STATS CONSULTING

December 28, 2022

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gadsden Ash Pond
1st 2022 Semi-Annual Analysis – October 2022

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the October 2022 1st 2022 semi-annual sample event for Alabama Power Company's Plant Gadsden Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in December 2017, and at least 8 background samples have been collected at each of the groundwater monitoring wells.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GSD-AP-MW-14, GSD-AP-MW-16, and GSD-AP-MW-17
- **Downgradient wells:** GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6

- **Delineation wells:** GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-4V, GSD-AP-MW-18H, GSD-AP-MW-19H, GSD-AP-MW-20H, GSD-AP-MW-21VC, and GSD-AP-MW-22VB
- **Piezometers:** GSD-AP-MW-2V

Note that delineation wells did not require statistics; therefore, data for these wells were plotted only on time series and box plots. Downgradient well GSD-AP-PZ-2 has recently been converted from a piezometer to a downgradient well. Since this well has the required minimum of 4 samples, data from this well are evaluated with confidence intervals for Appendix IV constituents. Prediction limits will be used to evaluate Appendix III constituents when a minimum of 8 samples are available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Founder and Senior Statistician of Groundwater Stats Consulting.

The CCR program consists of the following constituents:

Appendix III (Detection Monitoring) – boron, calcium, chloride, fluoride, pH, sulfate, and TDS
Appendix IV (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Previously flagged outliers may be seen in a lighter font and as a disconnected symbol on the graphs, and a summary of all flagged outliers follows this report (Figure C).

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility;

and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 13
- # Background Samples (Interwell): 49
- # Constituents: 7
- # Downgradient wells: 15

Note that while the 1-of-3 resample plan was initially recommended for parameters that use intrawell statistical methods due to the sample size; the power curves included in this analysis demonstrate that the increased number of samples in background provide sufficient power using the 1-of-2 resample plan.

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for fluoride and pH
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new samples are available to determine whether earlier concentrations are representative of present-day groundwater quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in April 2019

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, two outliers were identified. A summary of those findings was included with the 2019 background screening. While this is not the case in the present data set, when the most recent value is identified as an outlier, values are not

flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e., measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one value was flagged as an outlier in the database since the other value was similar to remaining measurements within the same well and neighboring wells. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Testing

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed several statistically significant decreasing and increasing trends for the Appendix III parameters and were included with the 2019

background screening. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short with less than two years of record, making it difficult to separate trends from normal year-to-year variation; therefore, no adjustments were made to the data sets. If the observed decreasing or increasing trends persist over a longer time frame, some records may need to be truncated.

Appendix III – Evaluation of Statistical Approaches

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

Based on the results of the 2019 background screening for Appendix III parameters, intrawell methods were recommended for fluoride and pH, and interwell methods were recommended for boron, calcium, chloride, sulfate, and TDS. If further evaluation confirms natural variation in groundwater, intrawell methods will be considered for parameters currently recommended for interwell methods.

Summary of Background Update – Fall 2021

Outlier Analysis

Prior to performing prediction limits, proposed background data through March 2021 were reviewed through visual screening to identify any newly suspected outliers at all wells for fluoride and pH and at upgradient wells for boron, calcium, chloride, sulfate, and TDS. When identified as outliers, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. No suspected outliers were identified for Appendix III parameters. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages.

Mann-Whitney Test of Medians

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through February 7, 2019, to compliance data through March 2021. When the medians of the two groups are not statistically significantly different at the 99% confidence level, background data sets are updated to include the newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

Increase:

- Fluoride: GSD-AP-MW-1

Decrease:

- pH: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects a naturally occurring shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

While a statistically significant increase in median concentrations was identified for fluoride in well GSD-AP-MW-1, this record was updated with more recent data because the compliance data contained 100% non-detects. Although statistically significant decreases in median concentrations were identified for pH in wells GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11, the magnitude of the decreases were marginal compared to the historical concentrations. Therefore, all of the records with statistically significant Mann-Whitney results for CCR Appendix III constituents that use intrawell methods were updated.

All records will be re-evaluated during the next background update and if future concentrations are similar to those observed currently, the earlier portion of the records may require deselection so only more recent data are used to construct statistical limits which are reflective of present-day water quality conditions. If, however, concentrations return to historical lower levels, more recent higher measurements may be flagged as outliers and deselected prior to construction of statistical limits.

Trend Tests – Upgradient Wells

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data may require deselection prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. The following upgradient well/constituent pairs were found to have statistically significant trends:

Increasing

- None

Decreasing

- Chloride: GSD-AP-MW-17

The slope for chloride at well GSD-AP-MW-17 is influenced by several similar and slightly higher values earlier in the record, but the median slope for the overall record was small relative to average concentrations at these wells and reported measurements were similar across all upgradient wells. Therefore, no adjustments were required.

Evaluation of Appendix III Parameters – October 2022

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Background data are re-evaluated when a minimum of 4 compliance samples are available.

Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

For some well/constituent pairs containing <15% non-detects in background, parametric prediction limits slightly changed compared to those established during the background update. An update was made to the Sanitas™ statistical software in October 2022 that determines the percentage of non-detects within a given background record rather than

all records evaluated for a given constituent. Simple substitution of ½ the reporting limit is applied when the percentage of non-detects in background is <15% in accordance with the USEPA EPA Unified Guidance (2009). No significant changes resulted from this implementation.

Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for fluoride and pH using screened background data through March 2021 at each well (Figure D). The October 2022 sample at each well was compared to its respective intrawell prediction limit. Note that during this event, the reporting limit for fluoride increased from 0.1 mg/L to 0.125 mg/L and resulted in a slight change in the prediction limit for well GSD-AP-MW-3. Previously flagged outliers may be seen in a lighter font and as a disconnected symbol on the graphs, and a summary of all flagged outliers follows this report.

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, sulfate, and TDS (Figure E).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter (pages 16-20). The following exceedances were noted for the intrawell and interwell prediction limits:

Intrawell

- Fluoride: GSD-AP-MW-7
- pH: GSD-AP-MW-5 and GSD-AP-MW-11

Interwell

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, and GSD-AP-MW-11
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12

- Chloride: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12
- Sulfate: GSD-AP-MW-1, GSD-AP-MW-11, and GSD-AP-MW-12
- TDS: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-11, and GSD-AP-MW-12

Trend Tests

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter (pages 21-22). Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: GSD-AP-MW-11
- Calcium: GSD-AP-MW-11
- Sulfate: GSD-AP-MW-11
- TDS: GSD-AP-MW-11

Decreasing:

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-4, and GSD-AP-MW-5
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, and GSD-AP-MW-3
- Chloride: GSD-AP-MW-17 (upgradient), GSD-AP-MW-3, and GSD-AP-MW-5
- pH: GSD-AP-MW-16 (upgradient) and GSD-AP-MW-11
- Sulfate: GSD-AP-MW-17 (upgradient)
- TDS: GSD-AP-MW-1, GSD-AP-MW-2, and GSD-AP-MW-3

Evaluation of Appendix IV Parameters – October 2022

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis and no new values were flagged as outliers. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during the 2021 1st semi-annual statistical analysis. The GWPS will be updated again during the 2023 1st semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using tolerance limits constructed from pooled upgradient well data through October 2021 (Figure G). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed. A summary table of the upper tolerance limits follows this report (page 23).

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H, page 24)) in the confidence interval comparisons described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through October 2022 for each of the Appendix IV parameters (Figure I). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects.

As mentioned above, well/constituent pairs containing 100% non-detects did not require statistics and were, therefore, deselected prior to construction confidence intervals. A list of deselected well/constituent pairs also follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (pages 25-27). No exceedances were noted for any of the well/constituent pairs.

- Arsenic: GSD-AP-MW-2 and GSD-AP-MW-4

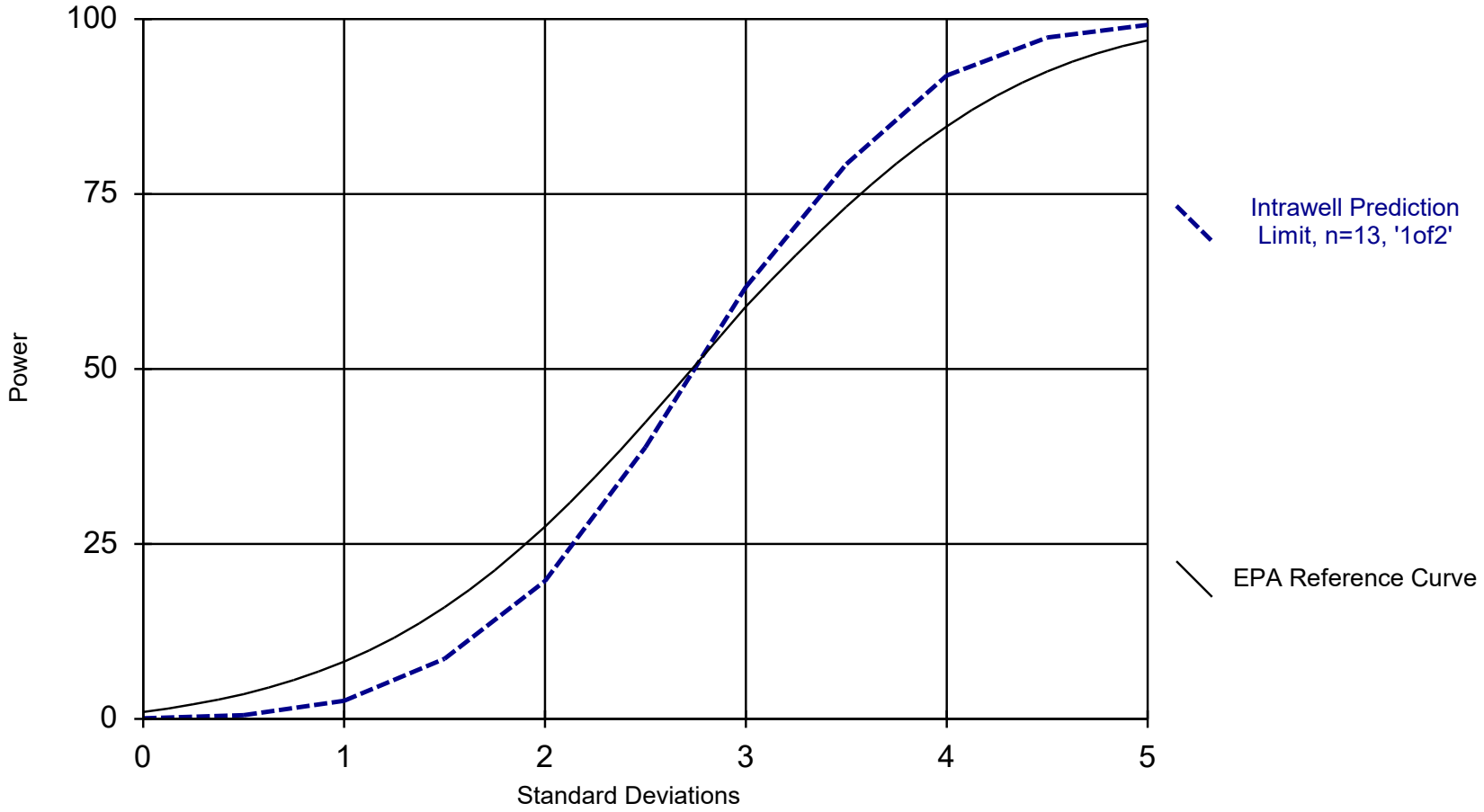
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Gadsden Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Senior Statistician

Intrawell Power Curve

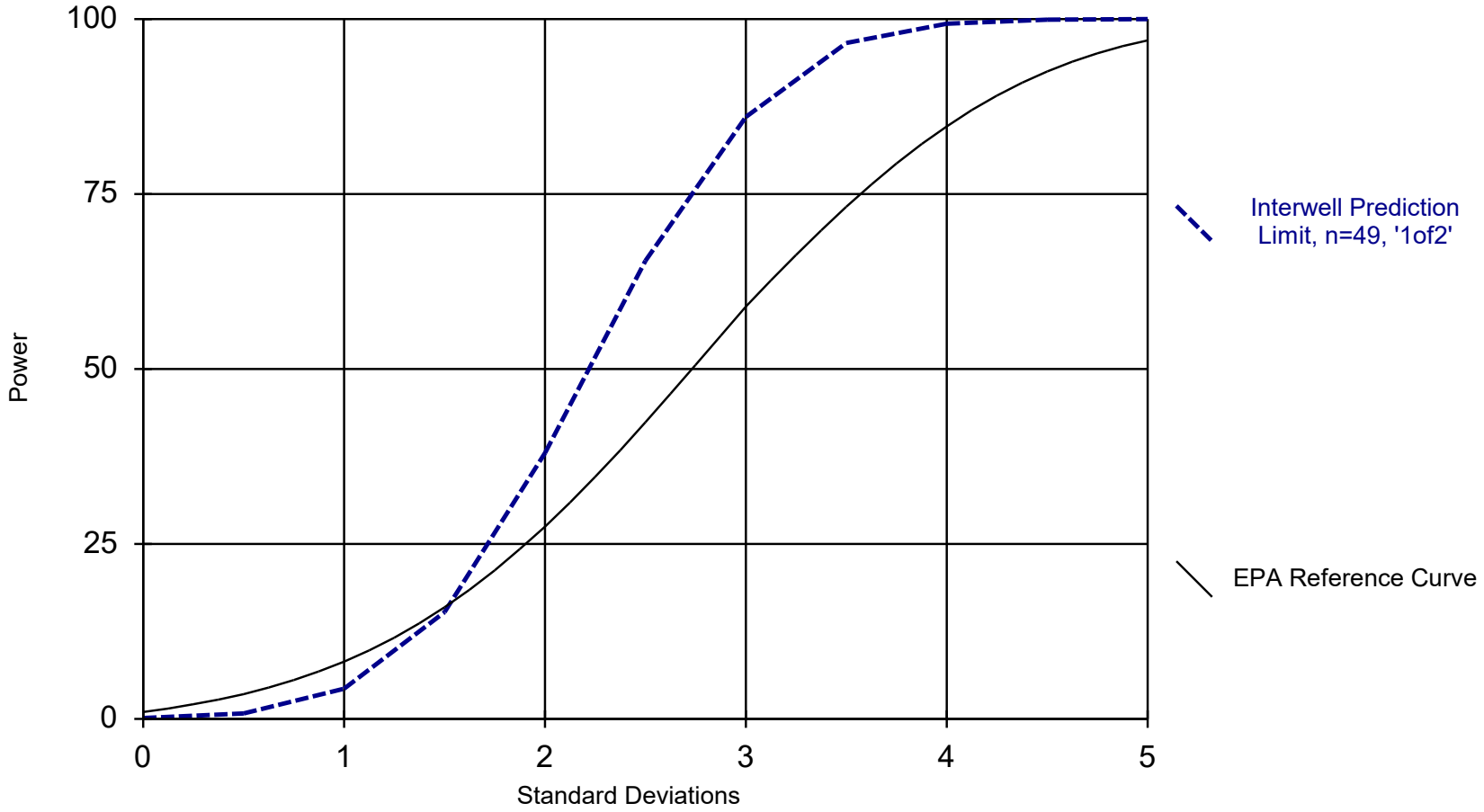


Kappa = 2.711, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 12/28/2022 7:41 AM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Interwell Power Curve



Kappa = 2.142, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 12/28/2022 7:40 AM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

100% Non-Detects: Appendix IV Downgradient

Analysis Run 12/27/2022 7:02 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Antimony (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2

Beryllium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Cadmium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-6

Fluoride (mg/L)
GSD-AP-MW-12, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Lead (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1

Lithium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Mercury (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5

Molybdenum (mg/L)
GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-6, GSD-AP-PZ-5, GSD-AP-PZ-6

Selenium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Thallium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Intrawell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	**GSD-AP-MW-7**	**0.109**	**n/a**	**10/26/2022**	**0.128**	**Yes**	**13**	**0.0755**	**0.01236**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-11**	**7.012**	**6.206**	**10/26/2022**	**6.2**	**Yes**	**13**	**6.609**	**0.1486**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**10/26/2022**	**6.44**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	10/26/2022	0.125ND	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-10	0.1381	n/a	10/26/2022	0.0929J	No	13	0.08731	0.01872	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-11	0.1122	n/a	10/26/2022	0.069J	No	13	0.0646	0.01756	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-12	0.125	n/a	10/26/2022	0.125ND	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	10/26/2022	0.125ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.1599	n/a	10/25/2022	0.125ND	No	14	0.1026	0.02163	50	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	10/25/2022	0.15	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	10/25/2022	0.271	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1359	n/a	10/26/2022	0.125ND	No	14	0.07651	0.02239	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	10/26/2022	0.283	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-5	0.08126	n/a	10/26/2022	0.0845J	No	13	0.05878	0.008293	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-6	0.09393	n/a	10/26/2022	0.125ND	No	13	0.3704	0.03104	38.46	Kaplan-Meier	x^(1/3)	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	**GSD-AP-MW-7**	**0.109**	**n/a**	**10/26/2022**	**0.128**	**Yes**	**13**	**0.0755**	**0.01236**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	GSD-AP-MW-8	0.1549	n/a	10/26/2022	0.0911J	No	13	0.09159	0.02334	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1718	n/a	10/26/2022	0.119J	No	13	0.01358	0.00588	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1638	n/a	10/26/2022	0.125ND	No	13	0.109	0.02021	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	n/a	10/26/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	n/a	10/26/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	10/26/2022	5.86	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	10/26/2022	6.84	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-11**	**7.012**	**6.206**	**10/26/2022**	**6.2**	**Yes**	**13**	**6.609**	**0.1486**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-12	5.692	5.209	10/26/2022	5.52	No	13	5.451	0.08911	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-14	4.1	3.25	10/26/2022	4.07	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	10/25/2022	4.64	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	10/25/2022	7.97	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-2	6.801	6.273	10/25/2022	6.64	No	13	6.537	0.09742	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-3	6.88	5.224	10/26/2022	5.97	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	10/26/2022	6.67	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**10/26/2022**	**6.44**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-6	6.703	5.385	10/26/2022	5.98	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-7	6.847	5.694	10/26/2022	6.44	No	13	6.271	0.2126	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-8	7.032	6.084	10/26/2022	6.68	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	10/26/2022	7.07	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	10/26/2022	6.66	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	10/26/2022	5.31	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-6	5.699	5.348	10/26/2022	5.43	No	13	5.523	0.06473	0	None	No	0.0002508	Param Intra 1 of 2

Interwell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	0.1015	n/a	10/26/2022	0.977	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-11	0.1015	n/a	10/26/2022	0.306	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-2	0.1015	n/a	10/25/2022	0.5	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-3	0.1015	n/a	10/26/2022	0.85	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-4	0.1015	n/a	10/26/2022	0.371	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-5	0.1015	n/a	10/26/2022	0.23	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GSD-AP-MW-1	33.58	n/a	10/26/2022	200	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-10	33.58	n/a	10/26/2022	39.5	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-11	33.58	n/a	10/26/2022	129	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-12	33.58	n/a	10/26/2022	60.2	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-2	33.58	n/a	10/25/2022	86.9	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-3	33.58	n/a	10/26/2022	55.3	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-4	33.58	n/a	10/26/2022	33.6	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-5	33.58	n/a	10/26/2022	39.6	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-8	33.58	n/a	10/26/2022	63.7	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-9	33.58	n/a	10/26/2022	47.7	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-1	4.048	n/a	10/26/2022	6.02	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-10	4.048	n/a	10/26/2022	5.87	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-11	4.048	n/a	10/26/2022	4.98	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-12	4.048	n/a	10/26/2022	5.76	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-3	4.048	n/a	10/26/2022	4.38	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-4	4.048	n/a	10/26/2022	7.88	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-5	4.048	n/a	10/26/2022	6.4	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-6	4.048	n/a	10/26/2022	9.4	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-7	4.048	n/a	10/26/2022	7.09	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-8	4.048	n/a	10/26/2022	5.72	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-9	4.048	n/a	10/26/2022	6.99	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	GSD-AP-MW-1	207	n/a	10/26/2022	512	Yes	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-11	207	n/a	10/26/2022	278	Yes	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-12	207	n/a	10/26/2022	230	Yes	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	276.7	n/a	10/26/2022	840	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	276.7	n/a	10/26/2022	545	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	276.7	n/a	10/26/2022	402	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	276.7	n/a	10/25/2022	337	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	276.7	n/a	10/26/2022	328	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**0.1015**	**n/a**	**10/26/2022**	**0.977**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-10	0.1015	n/a	10/26/2022	0.0868J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-11**	**0.1015**	**n/a**	**10/26/2022**	**0.306**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-12	0.1015	n/a	10/26/2022	0.0995J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-2**	**0.1015**	**n/a**	**10/25/2022**	**0.5**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-3**	**0.1015**	**n/a**	**10/26/2022**	**0.85**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-4**	**0.1015**	**n/a**	**10/26/2022**	**0.371**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-5**	**0.1015**	**n/a**	**10/26/2022**	**0.23**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-6	0.1015	n/a	10/26/2022	0.0788J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-7	0.1015	n/a	10/26/2022	0.0839J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-8	0.1015	n/a	10/26/2022	0.0526J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-9	0.1015	n/a	10/26/2022	0.0595J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-1	0.1015	n/a	10/26/2022	0.1015ND	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-5	0.1015	n/a	10/26/2022	0.1015ND	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-6	0.1015	n/a	10/26/2022	0.1015ND	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GSD-AP-MW-1**	**33.58**	**n/a**	**10/26/2022**	**200**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-10**	**33.58**	**n/a**	**10/26/2022**	**39.5**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-11**	**33.58**	**n/a**	**10/26/2022**	**129**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-12**	**33.58**	**n/a**	**10/26/2022**	**60.2**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-2**	**33.58**	**n/a**	**10/25/2022**	**86.9**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-3**	**33.58**	**n/a**	**10/26/2022**	**55.3**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-4**	**33.58**	**n/a**	**10/26/2022**	**33.6**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-5**	**33.58**	**n/a**	**10/26/2022**	**39.6**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-6	33.58	n/a	10/26/2022	12.2	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-7	33.58	n/a	10/26/2022	21.4	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-8**	**33.58**	**n/a**	**10/26/2022**	**63.7**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-9**	**33.58**	**n/a**	**10/26/2022**	**47.7**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-PZ-1	33.58	n/a	10/26/2022	23.1	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-5	33.58	n/a	10/26/2022	3.09	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-6	33.58	n/a	10/26/2022	3.42	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-1**	**4.048**	**n/a**	**10/26/2022**	**6.02**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-10**	**4.048**	**n/a**	**10/26/2022**	**5.87**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-11**	**4.048**	**n/a**	**10/26/2022**	**4.98**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-12**	**4.048**	**n/a**	**10/26/2022**	**5.76**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-2	4.048	n/a	10/25/2022	2.45	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-3**	**4.048**	**n/a**	**10/26/2022**	**4.38**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-4**	**4.048**	**n/a**	**10/26/2022**	**7.88**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-5**	**4.048**	**n/a**	**10/26/2022**	**6.4**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-6**	**4.048**	**n/a**	**10/26/2022**	**9.4**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-7**	**4.048**	**n/a**	**10/26/2022**	**7.09**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-8**	**4.048**	**n/a**	**10/26/2022**	**5.72**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-9**	**4.048**	**n/a**	**10/26/2022**	**6.99**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-1	4.048	n/a	10/26/2022	3.39	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-5	4.048	n/a	10/26/2022	4.03	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-6	4.048	n/a	10/26/2022	3.5	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-1**	**207**	**n/a**	**10/26/2022**	**512**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0007557**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-10	207	n/a	10/26/2022	4.42	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-11**	**207**	**n/a**	**10/26/2022**	**278**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0007557**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GSD-AP-MW-12**	**207**	**n/a**	**10/26/2022**	**230**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0007557**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-2	207	n/a	10/25/2022	111	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	GSD-AP-MW-3	207	n/a	10/26/2022	206	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-4	207	n/a	10/26/2022	61.8	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-5	207	n/a	10/26/2022	16.1	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-6	207	n/a	10/26/2022	12.2	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-7	207	n/a	10/26/2022	11.4	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-8	207	n/a	10/26/2022	10.1	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-9	207	n/a	10/26/2022	13.8	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-1	207	n/a	10/26/2022	3.43	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-5	207	n/a	10/26/2022	0.992J	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-6	207	n/a	10/26/2022	1.7J	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**276.7**	**n/a**	**10/26/2022**	**840**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-10	276.7	n/a	10/26/2022	202	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**276.7**	**n/a**	**10/26/2022**	**545**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-12**	**276.7**	**n/a**	**10/26/2022**	**402**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**276.7**	**n/a**	**10/25/2022**	**337**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**276.7**	**n/a**	**10/26/2022**	**328**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-4	276.7	n/a	10/26/2022	247	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-5	276.7	n/a	10/26/2022	178	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-6	276.7	n/a	10/26/2022	91.3	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-7	276.7	n/a	10/26/2022	121	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-8	276.7	n/a	10/26/2022	226	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-9	276.7	n/a	10/26/2022	194	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-1	276.7	n/a	10/26/2022	96	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-5	276.7	n/a	10/26/2022	45.3	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-6	276.7	n/a	10/26/2022	38	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:58 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	-0.06272	-88	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-11	0.0113	63	58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-2	-0.06977	-85	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-4	-0.043	-87	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-5	-0.05974	-94	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-1	-19.11	-80	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-11	4.053	71	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-2	-11.63	-69	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-3	-9.136	-98	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-17 (bg)	-0.2175	-80	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-3	-0.697	-123	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.2449	-61	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-11	-0.08419	-72	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-16 (bg)	-0.2316	-69	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-11	23.94	77	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-0.792	-63	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	-89.27	-95	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	22.05	70	58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	-55.25	-85	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	-41.2	-104	-63	Yes	17	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:58 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06272**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-11**	**0.0113**	**63**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.001587	56	63	No	17	64.71	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.0009573	-34	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.06977**	**-85**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-3	0.02648	34	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-4**	**-0.043**	**-87**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.05974**	**-94**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.11**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	0.2953	12	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**4.053**	**71**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	1.444	9	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-0.7905	-27	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.8295	-19	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.555	39	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-11.63**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-9.136**	**-98**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-4	-1.089	-20	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-5	-0.7867	-23	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	0.9641	6	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.873	14	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	0.02129	11	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	0.01104	3	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	-0.05352	-7	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	-0.01676	-4	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	-0.008802	-4	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.03896	-16	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.2175**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.697**	**-123**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	-0.08104	-6	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-5**	**-0.2449**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-6	-0.1248	-39	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-7	-0.4945	-53	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.144	31	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.1519	34	58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-14 (bg)	-0.01829	-57	-58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-16 (bg)	0	21	63	No	17	58.82	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-17 (bg)	-0.008461	-50	-58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-7	0.002021	18	58	No	16	18.75	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-11**	**-0.08419**	**-72**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-14 (bg)	-0.01296	-22	-58	No	16	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.2316**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.2293	-29	-58	No	16	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-5	-0.01447	-11	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-1	-17.42	-29	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GSD-AP-MW-11**	**23.94**	**77**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GSD-AP-MW-12	-0.6523	-2	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-5.22	-17	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	17.25	37	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.792**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-89.27**	**-95**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**22.05**	**70**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	-6.344	-9	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-11.74	-22	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	16.45	32	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-3.317	-31	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**-55.25**	**-85**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-41.2**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00101	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.056	0.056
Combined Radium-226/228	pCi/L	2.01	5
Fluoride	mg/L	0.23	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/28/2022, 3:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7783**	**0.4812**	**0.01**	**Yes**	**8**	**0.6298**	**0.1401**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01458**	**0.01132**	**0.01**	**Yes**	**8**	**0.01295**	**0.001538**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/28/2022, 3:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-MW-2	0.00102	0.000538	0.006	No	8	0.0009597	0.0001704	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-5	0.00114	0.001015	0.006	No	8	0.001031	0.00004419	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-6	0.00181	0.001015	0.006	No	8	0.001114	0.0002811	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.004211	0.002396	0.01	No	8	0.003304	0.000856	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004336	0.002397	0.01	No	8	0.003366	0.0009146	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002873	0.002317	0.01	No	8	0.002595	0.0002621	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-12	0.0002	0.000102	0.01	No	8	0.0001877	0.00003465	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7783**	**0.4812**	**0.01**	**Yes**	**8**	**0.6298**	**0.1401**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.005	0.00016	0.01	No	8	0.00261	0.002555	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01458**	**0.01132**	**0.01**	**Yes**	**8**	**0.01295**	**0.001538**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.005	0.00008	0.01	No	8	0.002568	0.002601	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-MW-6	0.0002	0.000151	0.01	No	8	0.0001939	0.00001732	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.0002	0.00007	0.01	No	8	0.0001719	0.00005291	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003252	0.002868	0.01	No	8	0.00306	0.0001814	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.005	0.00055	0.01	No	8	0.002327	0.002222	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-1	0.0002	0.000164	0.01	No	8	0.0001955	0.00001273	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-2	0.005	0.0000826	0.01	No	6	0.001743	0.002523	33.33	None	No	0.0155	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.000203	0.0000808	0.01	No	8	0.0001877	0.0000432	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-6	0.0002	0.00015	0.01	No	8	0.0001937	0.00001768	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.03927	0.02788	2	No	8	0.03358	0.005372	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3596	0.2709	2	No	8	0.3153	0.04183	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.2376	0.1334	2	No	8	0.1855	0.04918	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-12	0.04621	0.03084	2	No	8	0.03853	0.007246	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.09189	0.05478	2	No	8	0.07334	0.0175	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.03861	0.03082	2	No	8	0.03471	0.003674	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-4	0.2233	0.1624	2	No	8	0.1929	0.02872	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2407	0.2186	2	No	8	0.2296	0.01042	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07733	0.06139	2	No	8	0.06936	0.007518	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08784	0.05781	2	No	8	0.07283	0.01417	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.281	0.1973	2	No	8	0.2391	0.0395	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1901	0.1392	2	No	8	0.1646	0.02401	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.08415	0.0508	2	No	8	0.06748	0.01573	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1474	0.04275	2	No	6	0.09508	0.03809	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.085	0.0474	2	No	8	0.05713	0.01203	0	None	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.03114	0.02849	2	No	8	0.02981	0.001251	0	None	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.001	0.0001	0.005	No	8	0.000569	0.0004622	50	None	No	0.004	NP (normality)
Cadmium (mg/L)	GSD-AP-MW-12	0.0006435	0.0003027	0.005	No	8	0.0004731	0.0001608	0	None	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.000203	0.0000688	0.005	No	8	0.0001862	0.00004745	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.0004302	0.0001866	0.005	No	8	0.0005669	0.0003706	37.5	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-7	0.000203	0.000097	0.005	No	8	0.0001898	0.00003748	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.000203	0.00007	0.005	No	8	0.0001714	0.00005862	75	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.000203	0.00008	0.005	No	8	0.0001876	0.00004349	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.01	0.00023	0.1	No	8	0.005147	0.005188	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-10	0.01	0.000207	0.1	No	8	0.005142	0.005193	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-11	0.01	0.00027	0.1	No	8	0.005185	0.005148	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-12	0.01	0.000276	0.1	No	8	0.005182	0.005151	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-2	0.01	0.00022	0.1	No	8	0.005189	0.005144	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-3	0.01	0.00023	0.1	No	8	0.004242	0.004847	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-4	0.001015	0.00023	0.1	No	8	0.0008304	0.0003428	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.001015	0.00028	0.1	No	8	0.0007853	0.0003241	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-6	0.00102	0.000222	0.1	No	8	0.0007387	0.0003895	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-7	0.001015	0.00025	0.1	No	8	0.0007476	0.0003721	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-8	0.001015	0.00022	0.1	No	8	0.0008263	0.0003502	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.001015	0.00021	0.1	No	8	0.0007521	0.0003672	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-1	0.001015	0.00027	0.1	No	8	0.0007671	0.0003452	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-2	0.0008137	0.0003423	0.1	No	6	0.0007965	0.0002738	50	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.01	0.000251	0.1	No	8	0.005187	0.005146	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-PZ-6	0.01	0.000224	0.1	No	8	0.00518	0.005154	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-1	0.02357	0.01438	0.056	No	8	0.01898	0.004337	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.005	0.00037	0.056	No	8	0.002885	0.002268	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-11	0.006803	-0.000708	0.056	No	8	0.004206	0.003442	25	Kaplan-Meier	No	0.01	Param.

Confidence Intervals - All Results

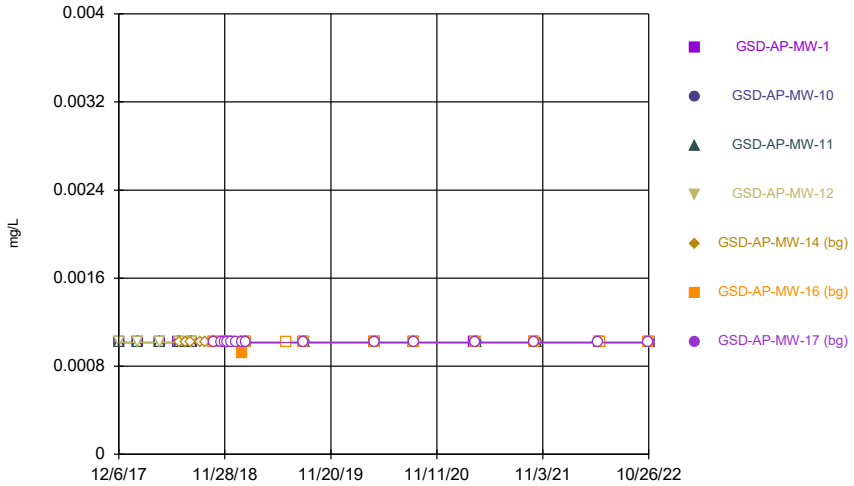
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/28/2022, 3:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-MW-12	0.006068	0.00383	0.056	No	8	0.004949	0.001055	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-2	0.03678	0.02603	0.056	No	8	0.03124	0.00659	0	None	x^3	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02439	0.01416	0.056	No	8	0.01928	0.004823	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.02907	0.024	0.056	No	8	0.02654	0.002391	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.002362	0.001017	0.056	No	8	0.001689	0.0006344	12.5	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-6	0.005	0.00102	0.056	No	8	0.00305	0.002085	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-7	0.005	0.00016	0.056	No	8	0.00272	0.002452	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-8	0.004091	0.002491	0.056	No	8	0.003291	0.000755	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.005	0.000812	0.056	No	8	0.002985	0.002156	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.00014	0.056	No	8	0.0002225	0.00009036	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.007045	0.001389	0.056	No	6	0.004217	0.002059	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00225	0.00008	0.056	No	8	0.000458	0.0007291	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-PZ-6	0.005	0.000078	0.056	No	8	0.002556	0.002613	50	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	0.9381	0.4102	5	No	8	0.6741	0.249	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	2.772	0.00515	5	No	8	1.196	2.167	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.247	0.6148	5	No	8	0.931	0.2983	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.189	0.08541	5	No	8	0.637	0.5204	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.546	0.2948	5	No	8	0.8934	0.6732	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.369	0.1725	5	No	8	0.7925	1.014	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.258	0.1069	5	No	8	0.6822	0.5428	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.244	0.3515	5	No	8	0.7976	0.4209	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	1.36	-0.086	5	No	8	0.3806	0.4479	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	0.9371	0.1026	5	No	8	0.5199	0.3937	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.6291	0.3374	5	No	8	0.4833	0.1376	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.168	0.1459	5	No	8	0.6569	0.4821	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	2.07	-0.129	5	No	8	0.5806	0.6697	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	1.048	-0.01521	5	No	6	0.5163	0.3869	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.9116	0.1809	5	No	8	0.5463	0.3447	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.174	0.004111	5	No	8	0.4634	0.4946	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.125	0.0601	4	No	8	0.1169	0.02295	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.201	0.0813	4	No	8	0.108	0.03884	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-11	0.1109	0.07014	4	No	8	0.1058	0.02451	37.5	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-2	0.2816	0.2207	4	No	8	0.2514	0.03202	0	None	x^3	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.125	0.0592	4	No	8	0.1028	0.03088	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2652	0.1913	4	No	8	0.2283	0.03485	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.122	0.0567	4	No	8	0.07296	0.02167	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-6	0.125	0.0816	4	No	8	0.1196	0.01534	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-7	0.1041	0.06229	4	No	8	0.08899	0.02101	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-8	0.108	0.06561	4	No	8	0.08679	0.01998	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.1452	0.1084	4	No	8	0.1268	0.01737	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1078	0.07653	4	No	8	0.1045	0.02107	37.5	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GSD-AP-MW-2	0.000203	0.00009	0.015	No	8	0.0001889	0.00003995	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.000203	0.00012	0.015	No	6	0.0001833	0.00003238	50	None	No	0.0155	NP (normality)
Lead (mg/L)	GSD-AP-PZ-5	0.000203	0.00013	0.015	No	8	0.0001939	0.00002581	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.000203	0.0000835	0.015	No	8	0.0001673	0.00005053	62.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.05189	0.02466	0.04	No	8	0.03828	0.01284	0	None	No	0.01	Param.
Mercury (mg/L)	GSD-AP-PZ-6	0.00286	0.0005	0.002	No	8	0.000795	0.0008344	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-1	0.0002	0.000198	0.1	No	8	0.0001997	7.1e-7	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.01	0.000204	0.1	No	8	0.005195	0.005137	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-11	0.000203	0.00012	0.1	No	8	0.0001761	0.0000381	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.027	0.0164	0.1	No	8	0.02135	0.003692	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-4	0.01	0.00106	0.1	No	8	0.005571	0.004735	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-5	0.000371	0.00011	0.1	No	8	0.0002058	0.00007523	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.0002	0.0001	0.1	No	8	0.0001836	0.00003549	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.01	0.00032	0.1	No	8	0.005187	0.005145	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-9	0.01	0.00018	0.1	No	8	0.005121	0.005216	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.000203	0.00007	0.1	No	8	0.0001734	0.00005544	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.00028	0.0002	0.1	No	6	0.0002167	0.00003204	66.67	None	No	0.0155	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.000203	0.000112	0.002	No	8	0.0001825	0.00003826	75	None	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.0003855	0.000283	0.002	No	8	0.0003343	0.00004839	0	None	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.001	0.00011	0.002	No	8	0.0005601	0.0004703	50	None	No	0.004	NP (normality)

FIGURE A.

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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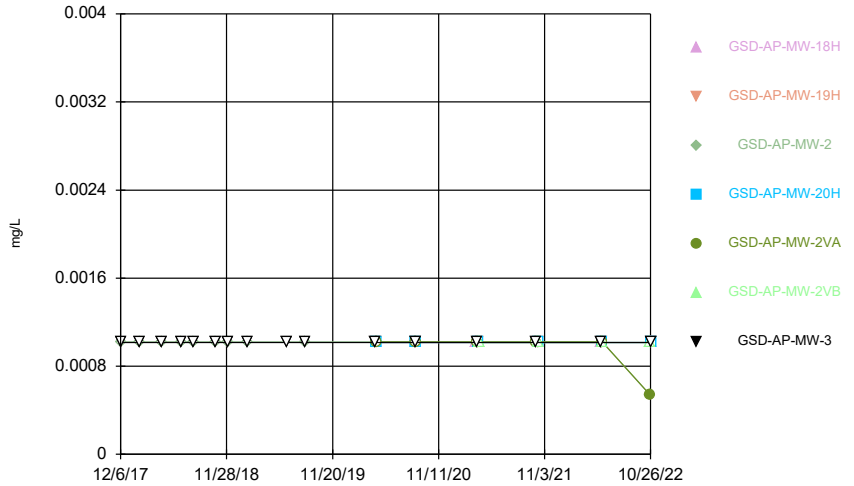

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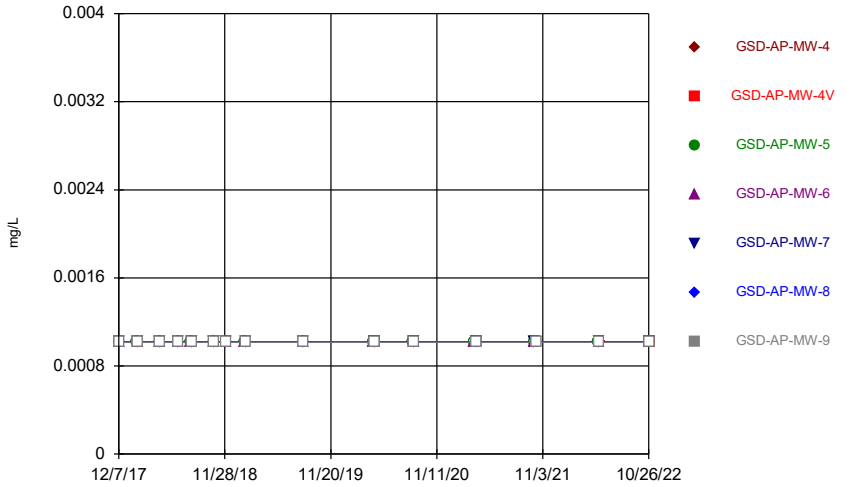

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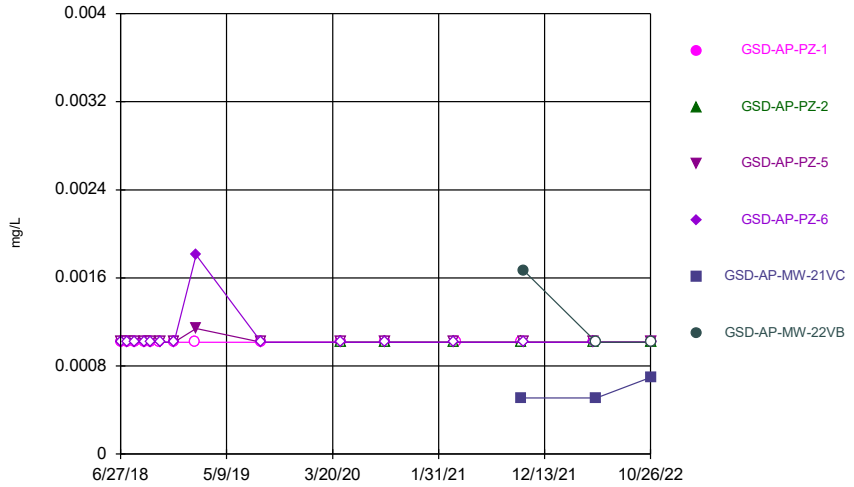

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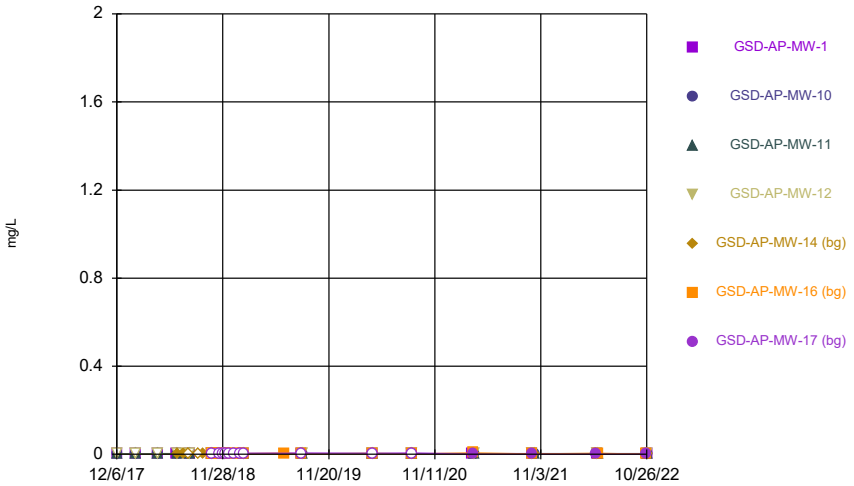

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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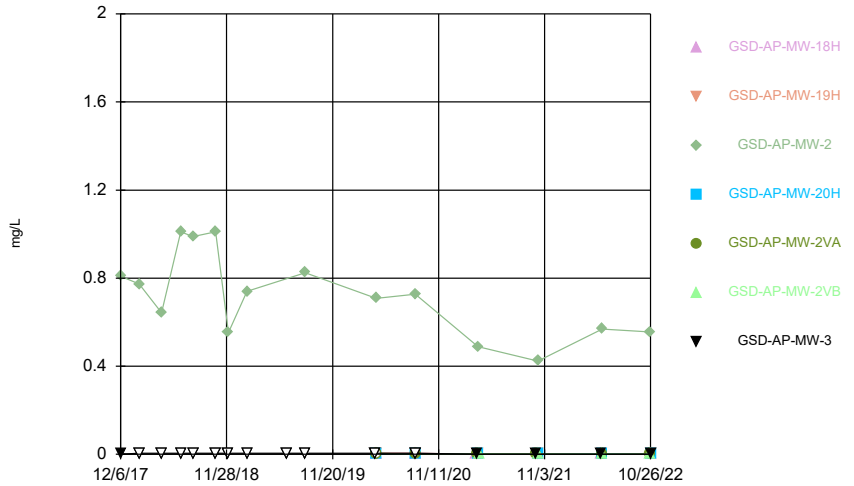

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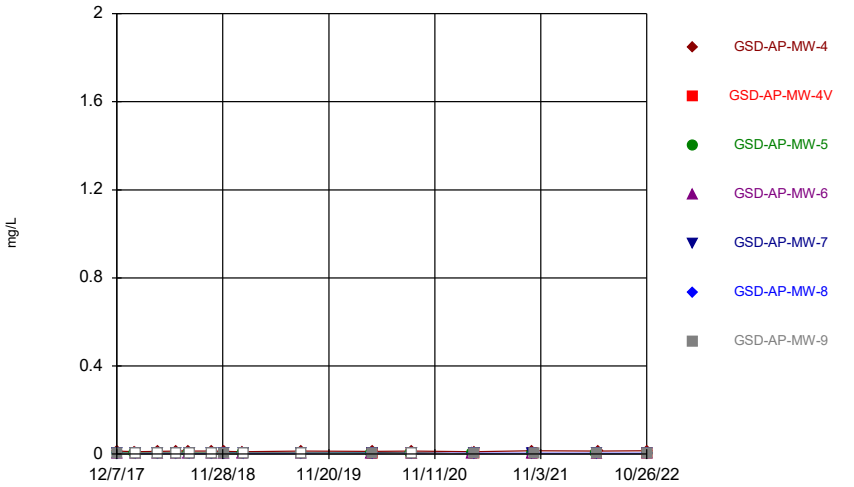

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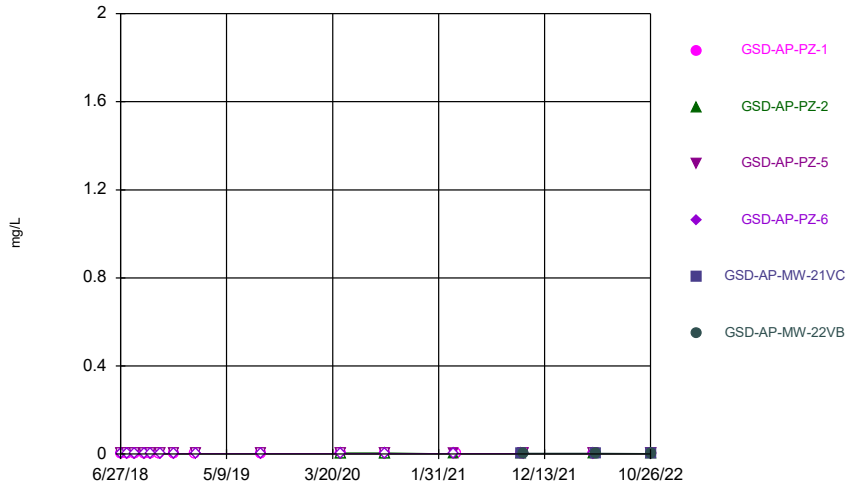

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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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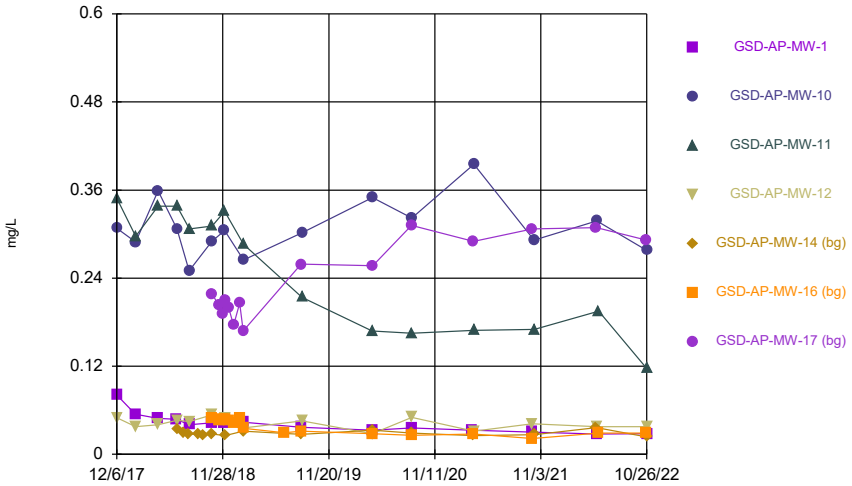

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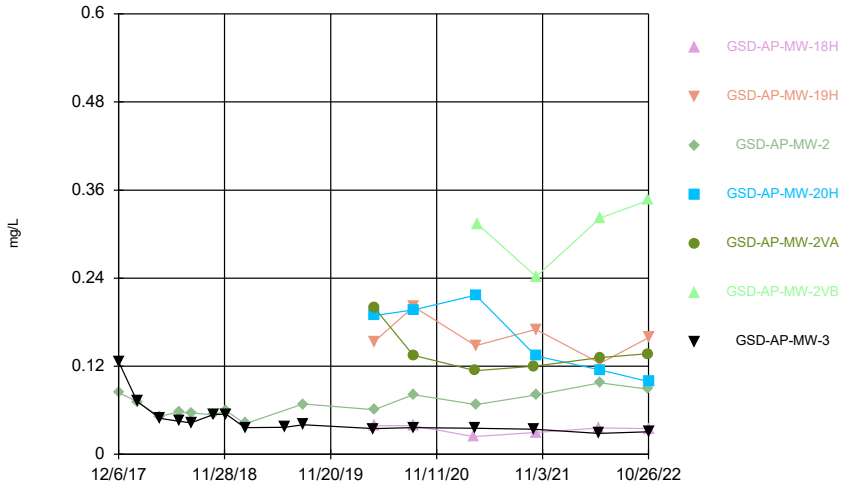
Time Series



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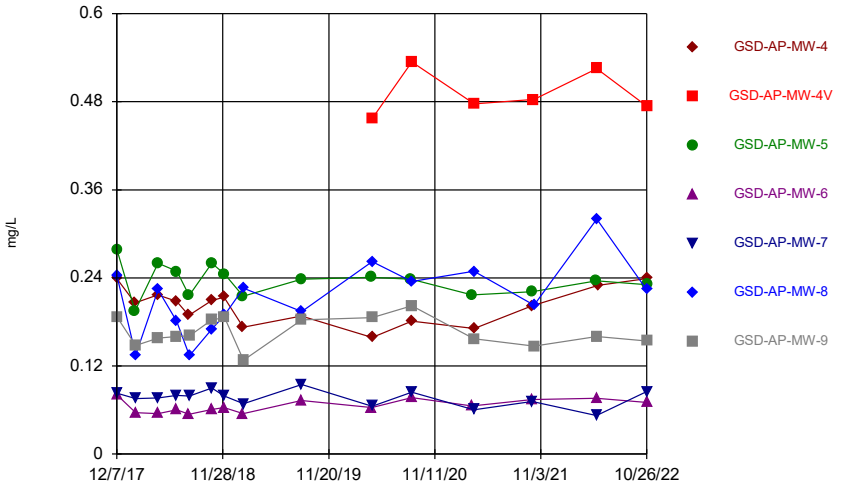
Time Series



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Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

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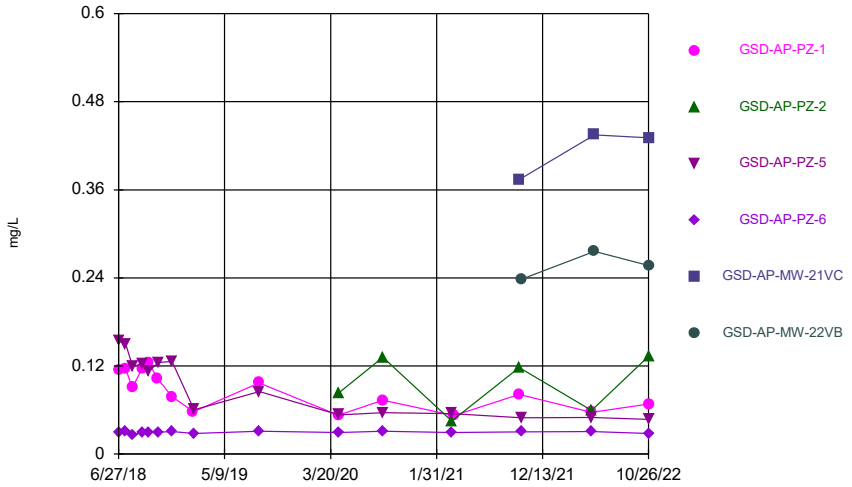

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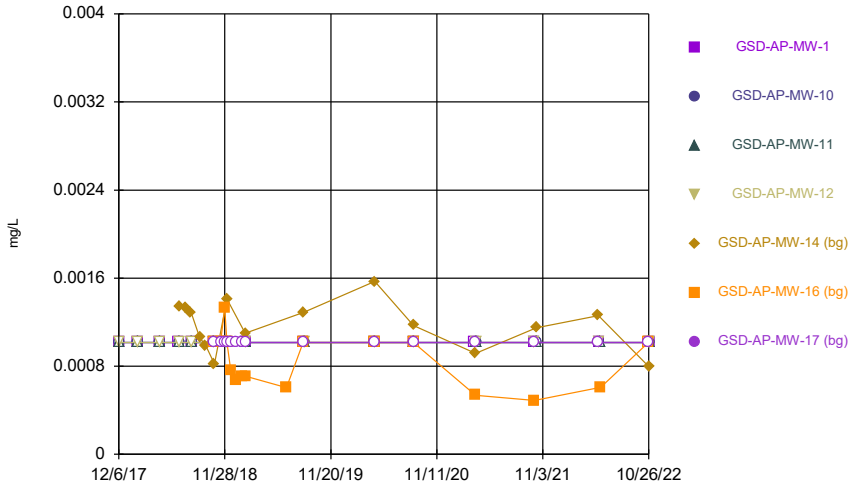

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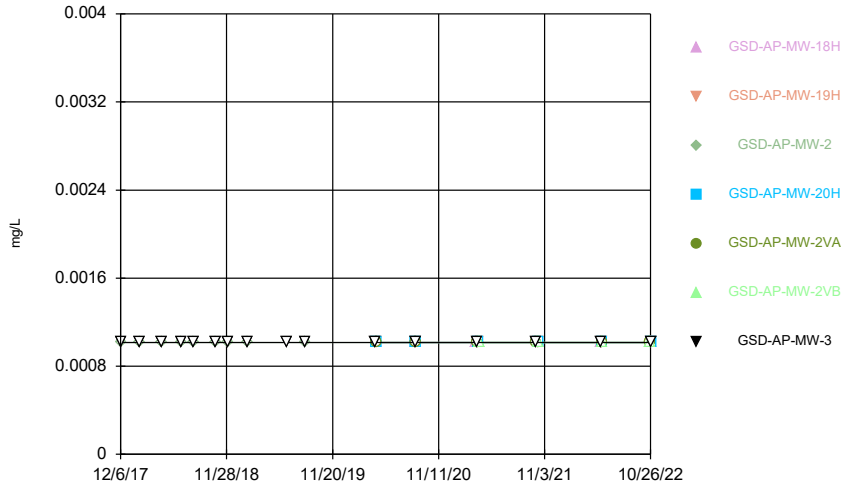

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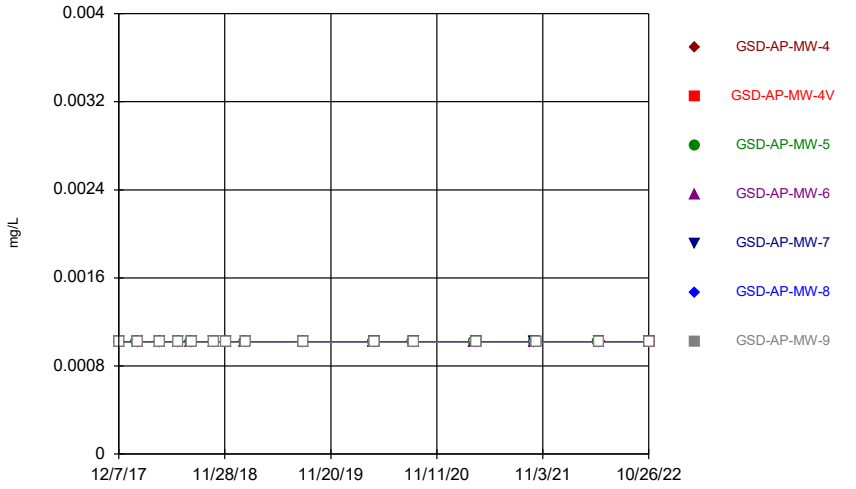
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

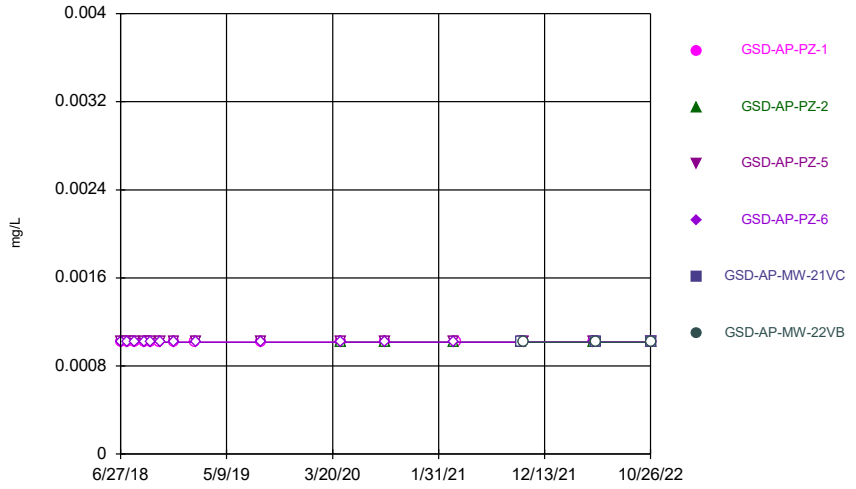
Time Series



Constituent: Beryllium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

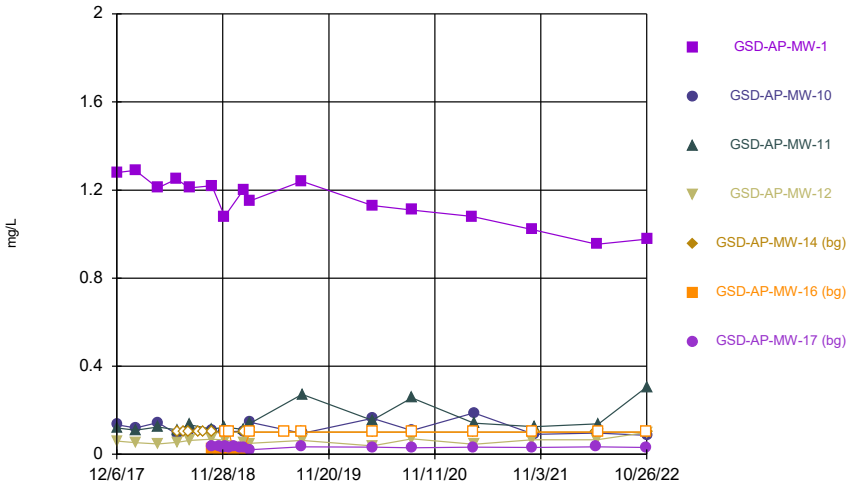
Time Series



Constituent: Beryllium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

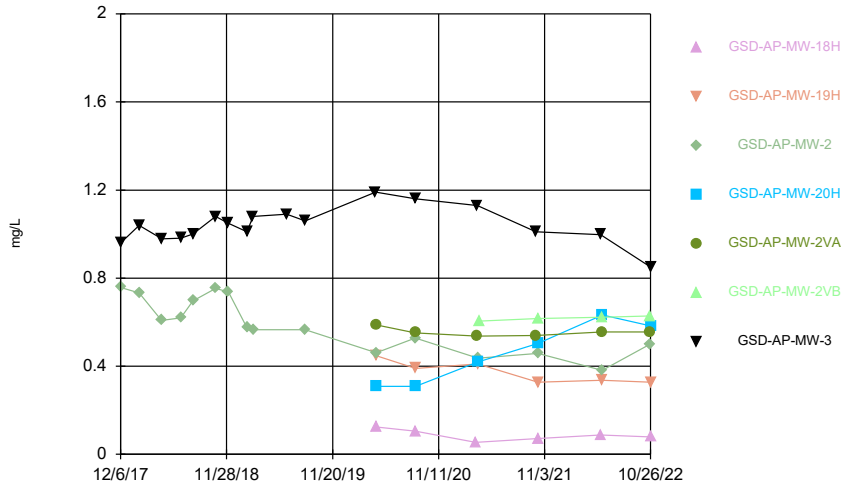
Time Series



Constituent: Boron Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series



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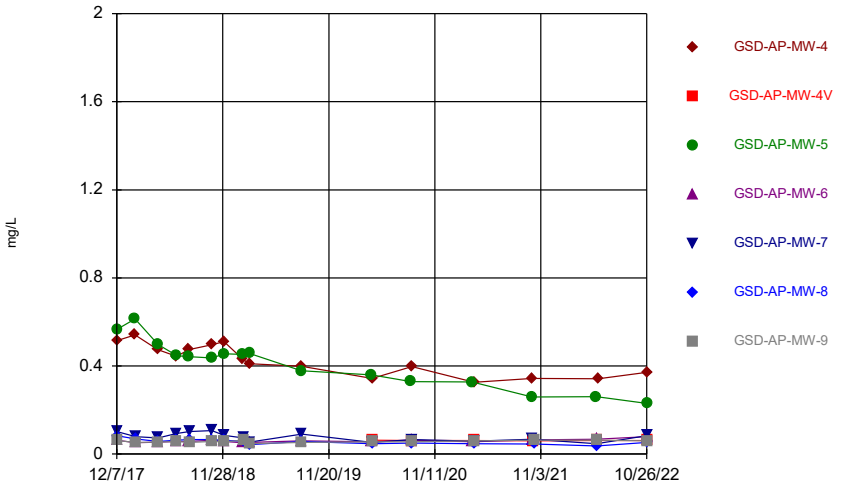
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

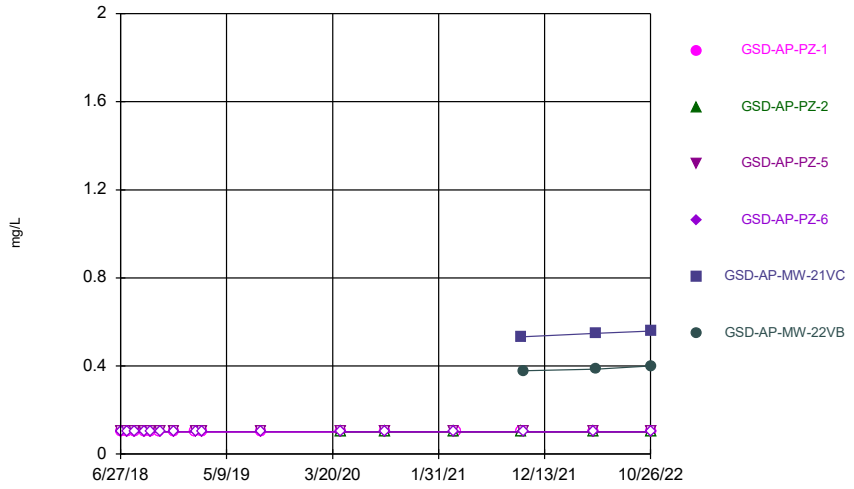
Time Series



Constituent: Boron Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

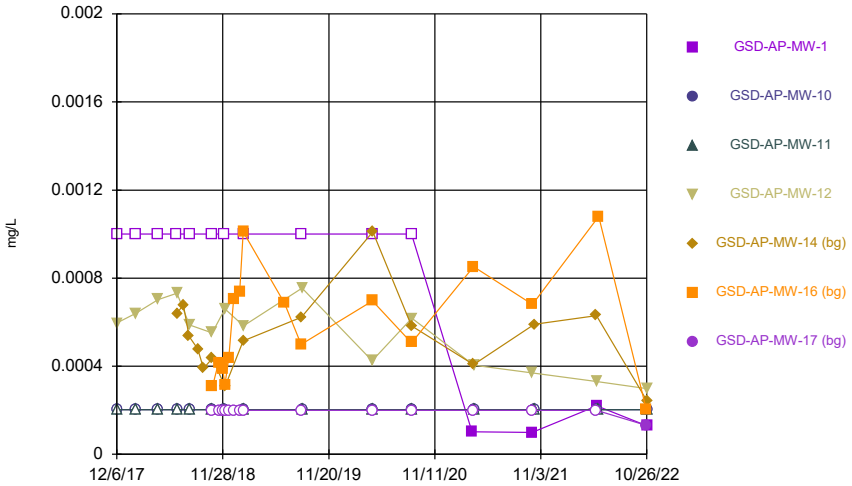
Time Series



Constituent: Boron Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

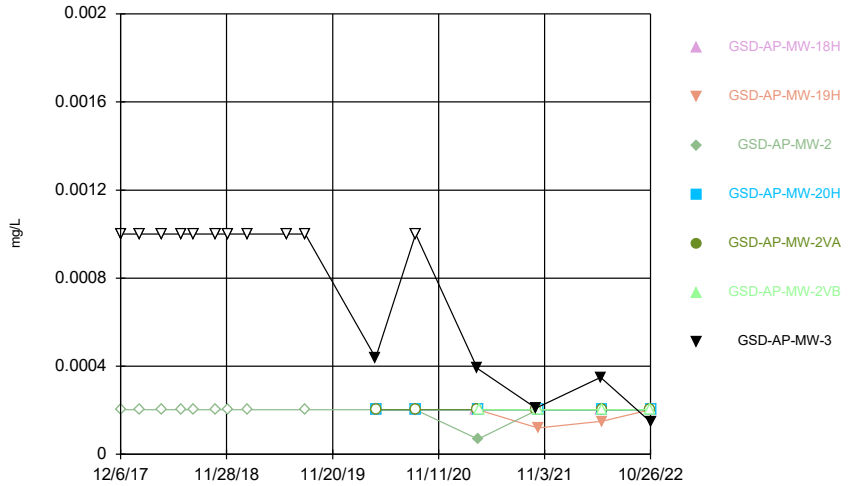
Time Series



Constituent: Cadmium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

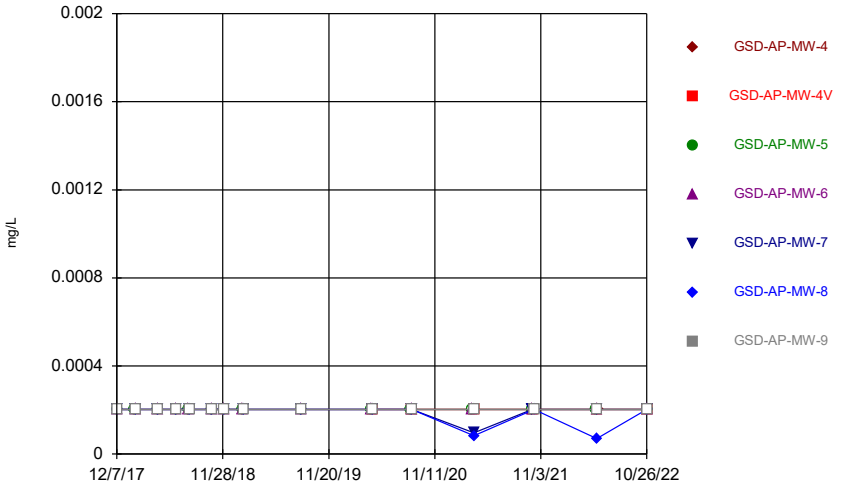
Time Series



Constituent: Cadmium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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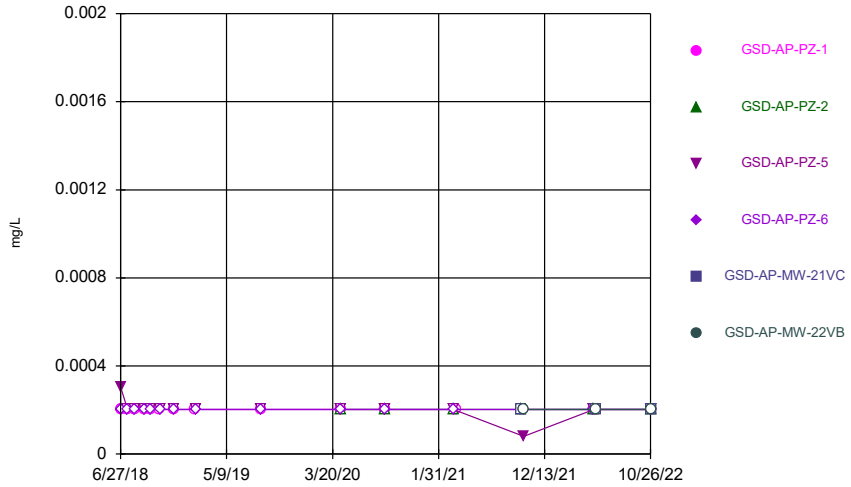
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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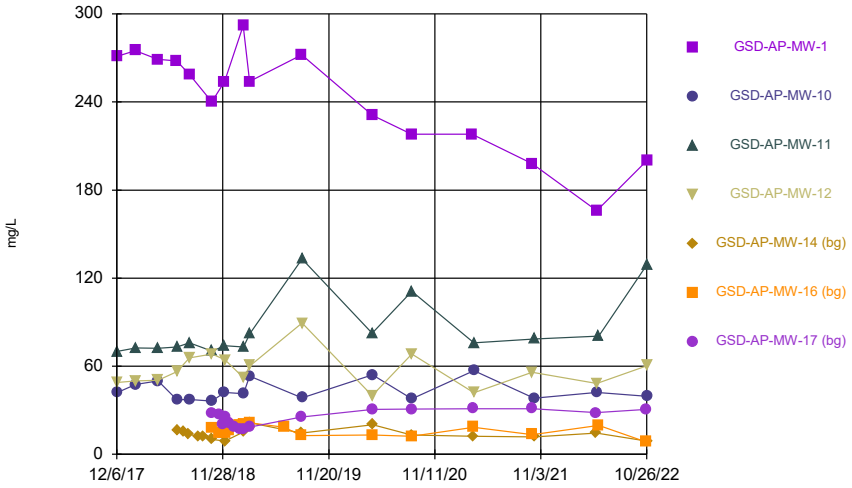
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

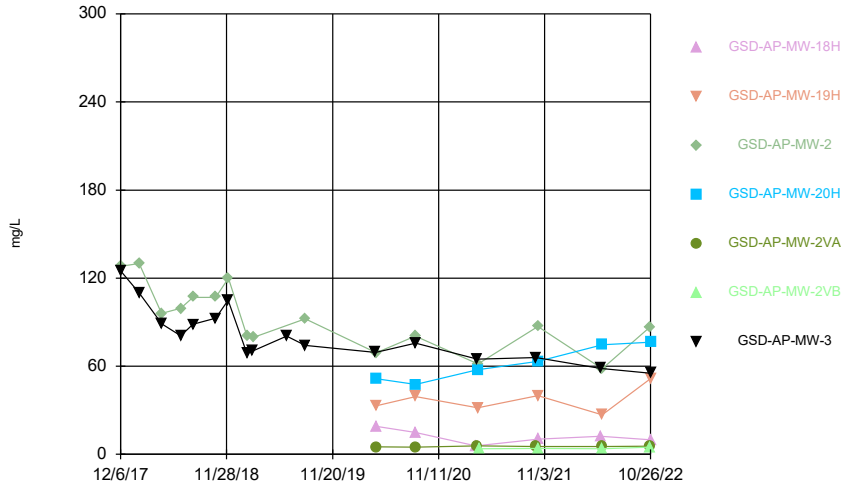


Constituent: Calcium Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

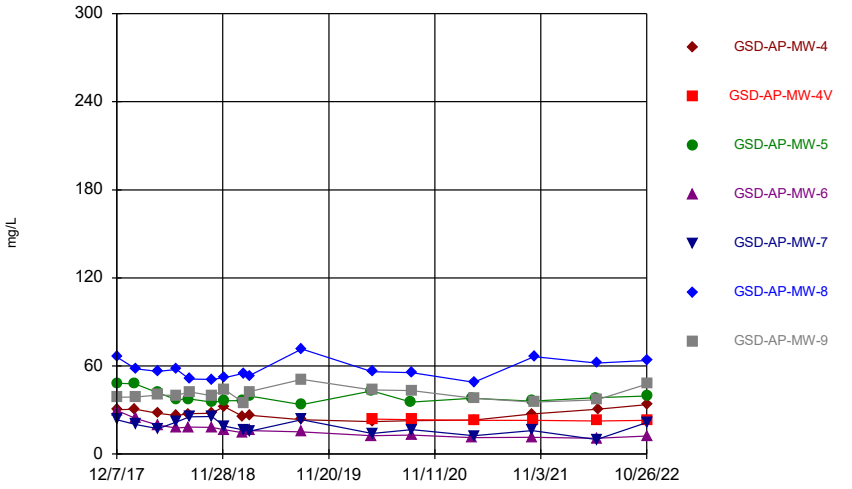


Constituent: Calcium Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series



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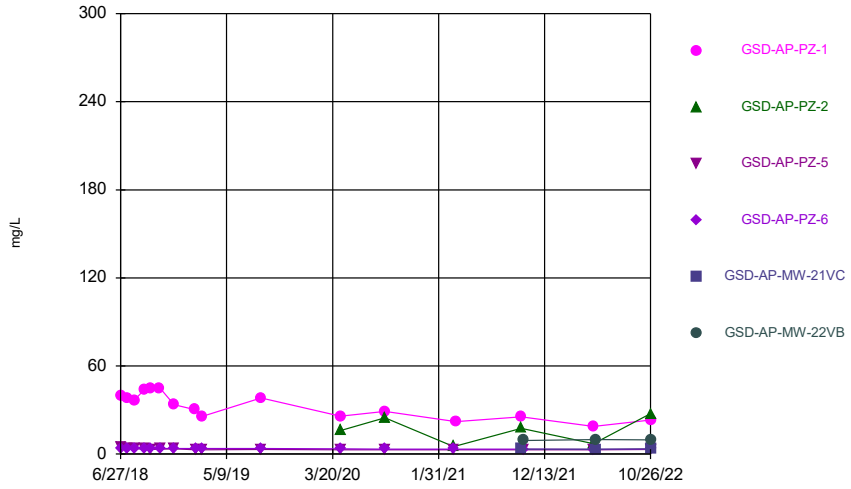
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series



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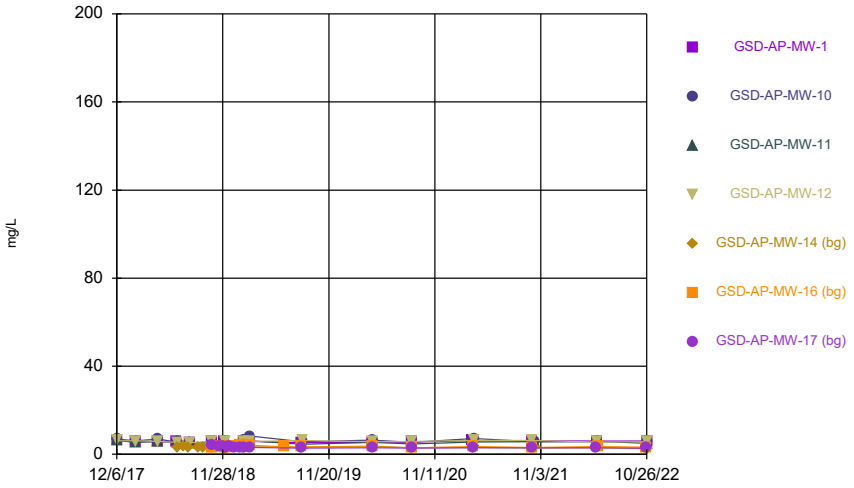
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

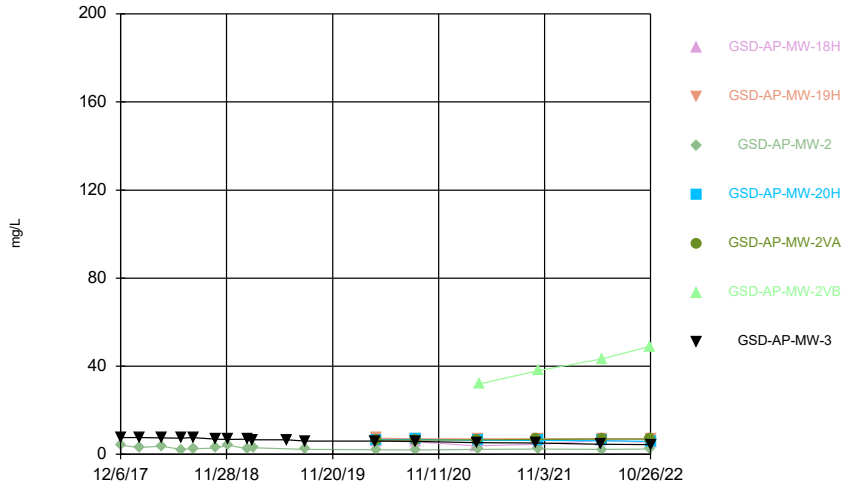


Constituent: Chloride Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

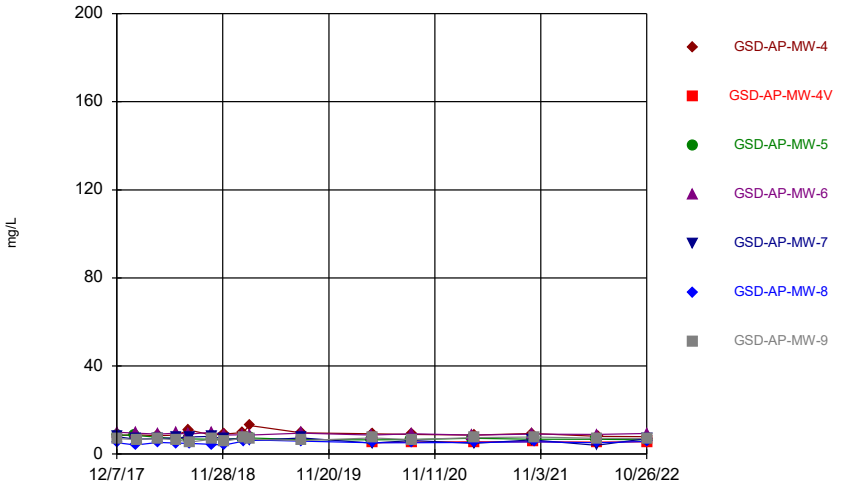


Constituent: Chloride Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

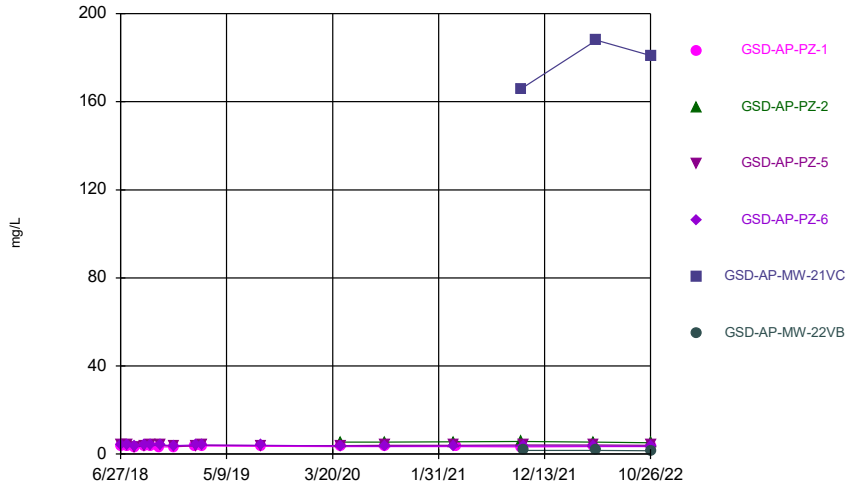


Constituent: Chloride Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series



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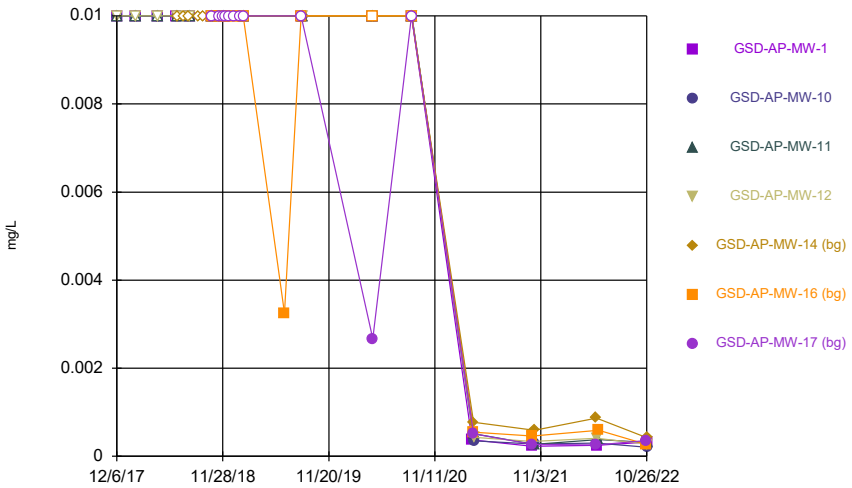
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

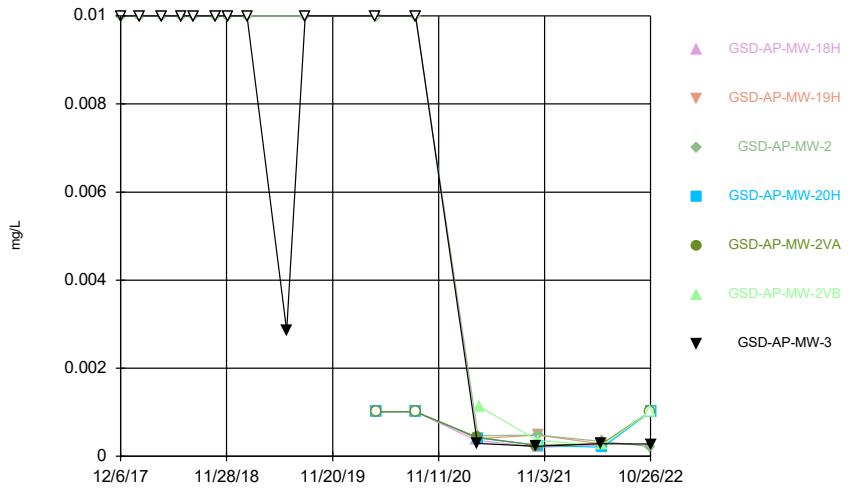
Time Series



Constituent: Chromium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

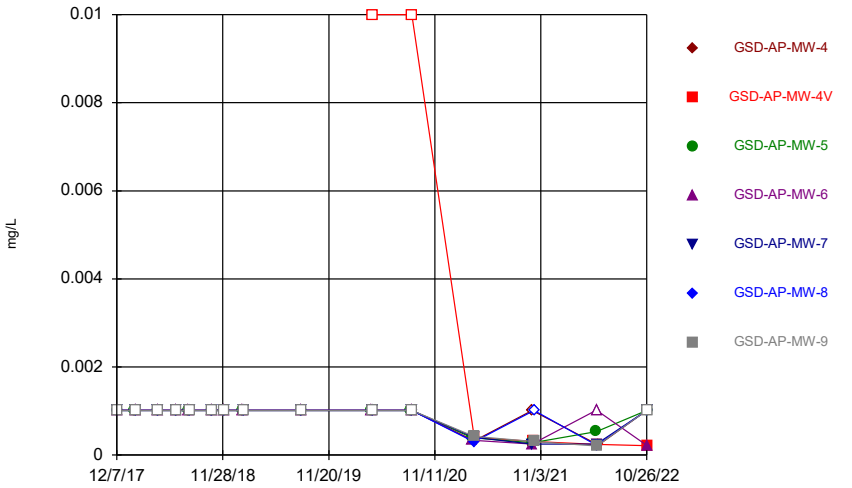
Time Series



Constituent: Chromium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

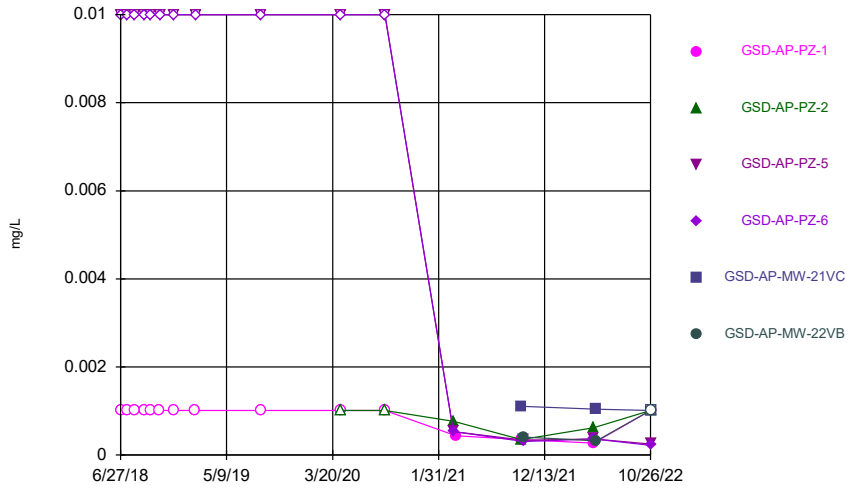
Time Series



Constituent: Chromium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

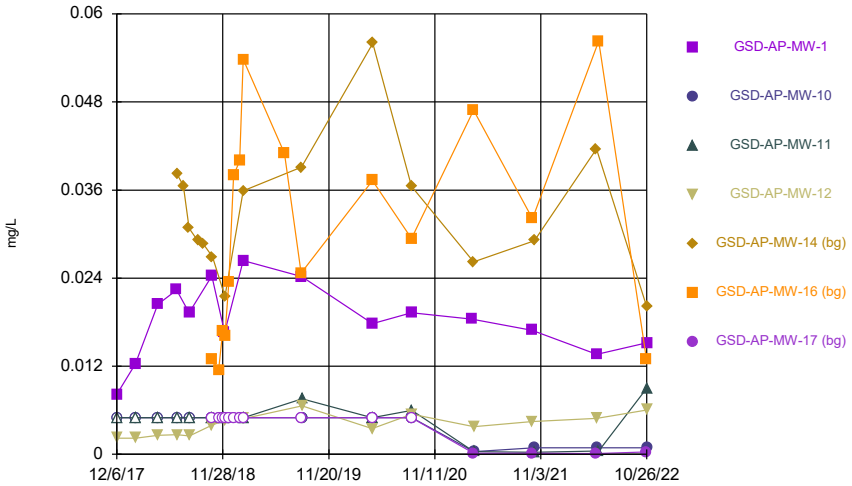
Time Series



Constituent: Chromium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

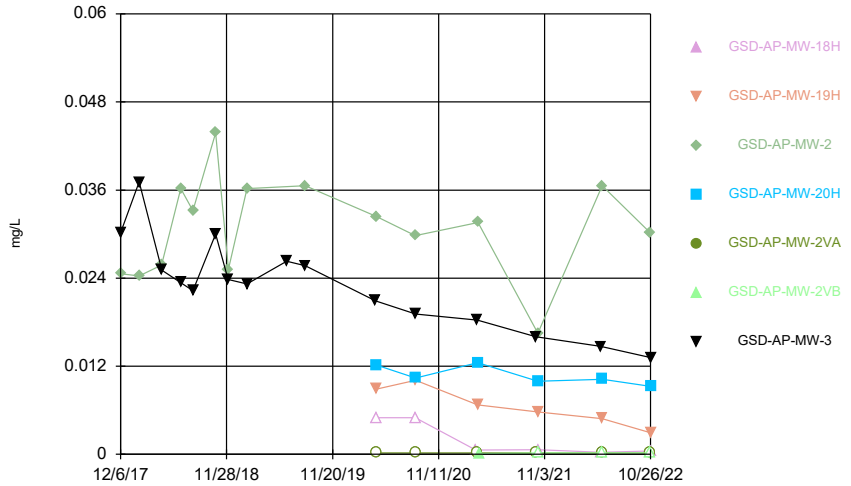
Time Series



Constituent: Cobalt Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

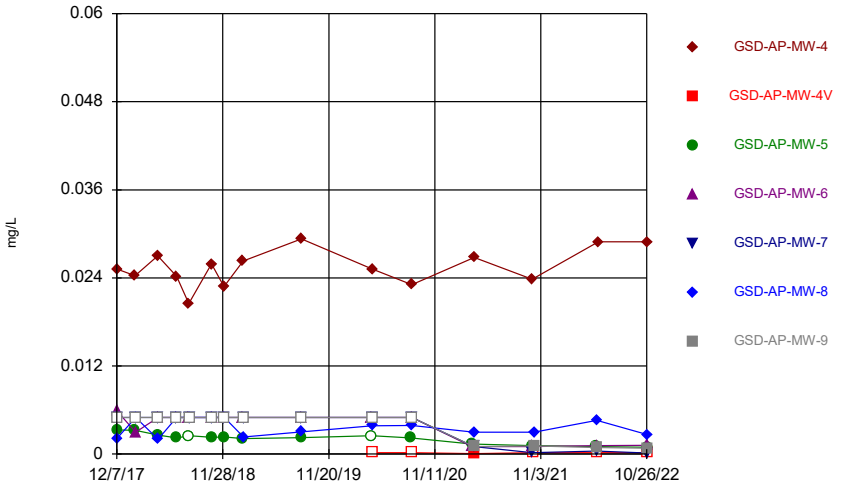
Time Series



Constituent: Cobalt Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

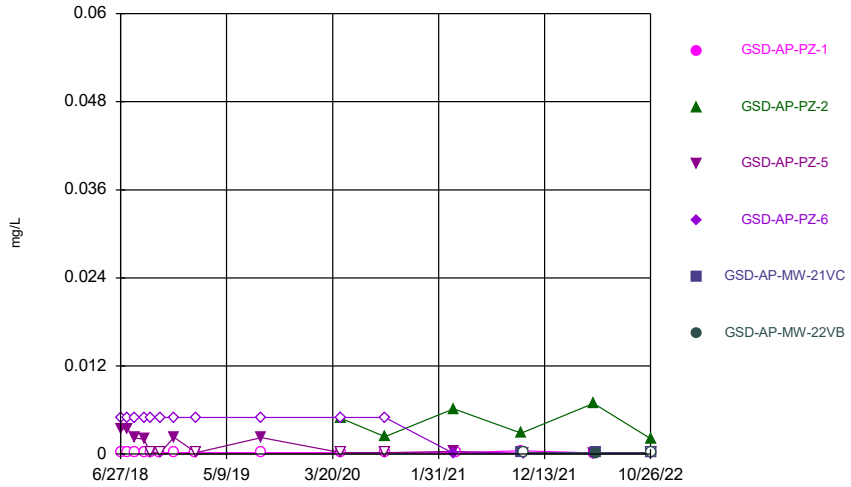
Time Series



Constituent: Cobalt Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

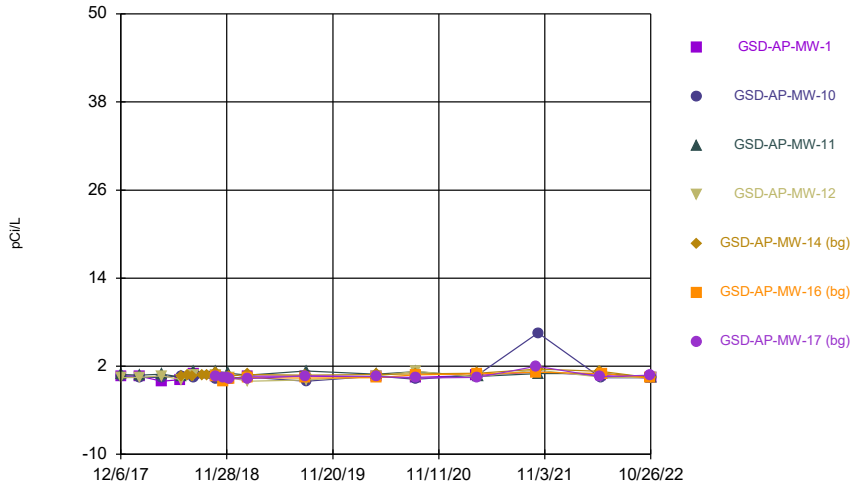
Time Series



Constituent: Cobalt Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

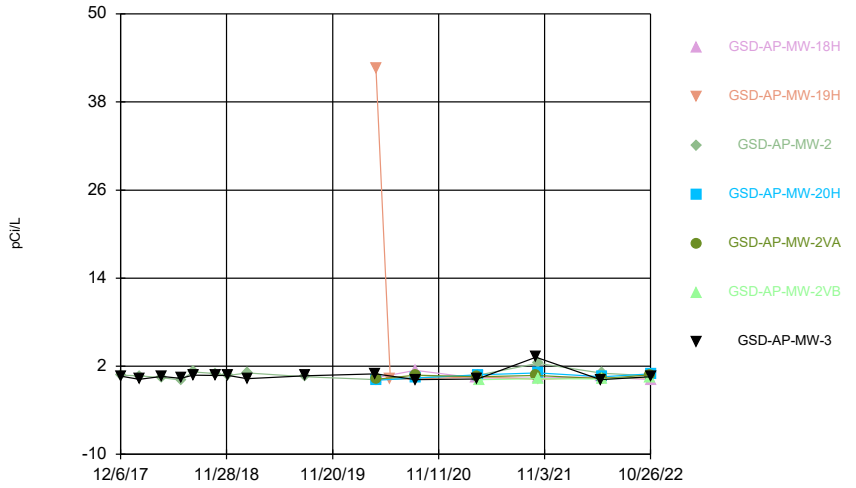


Constituent: Combined Radium 226 + 228 Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

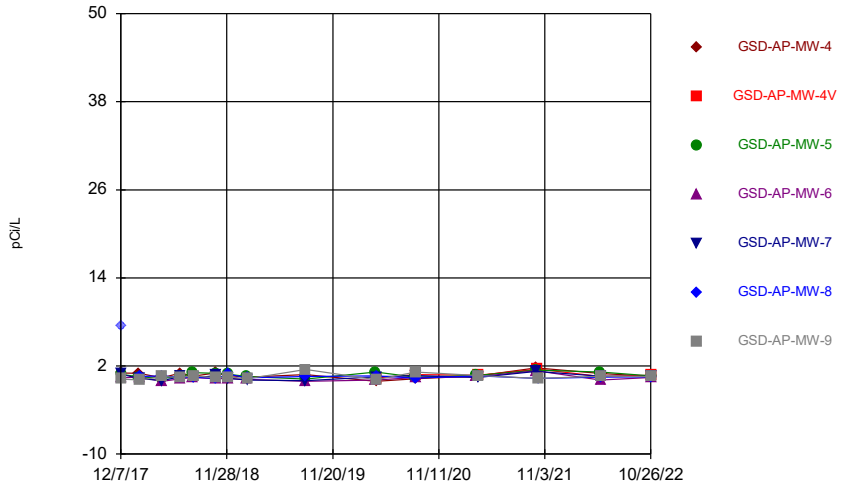


Constituent: Combined Radium 226 + 228 Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

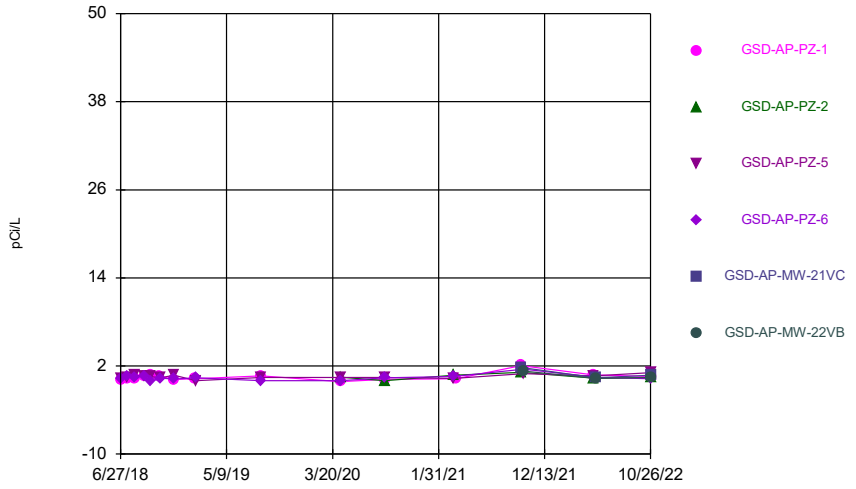


Constituent: Combined Radium 226 + 228 Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

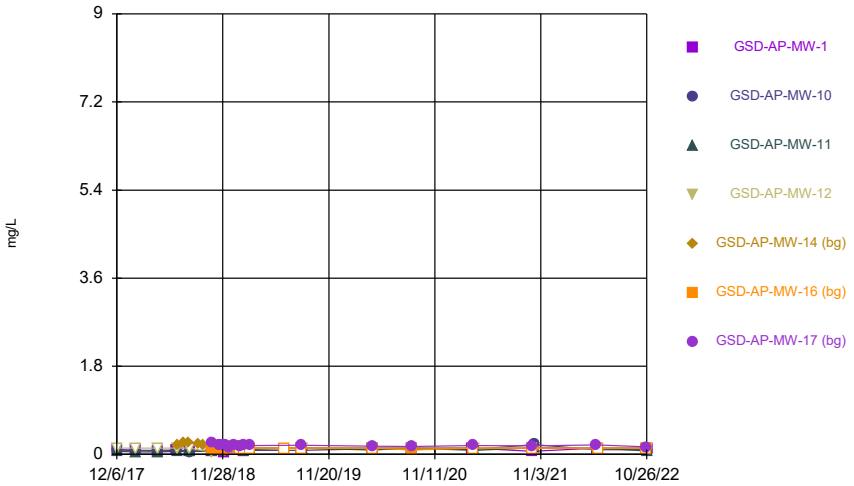


Constituent: Combined Radium 226 + 228 Analysis Run 12/27/2022 6:34 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

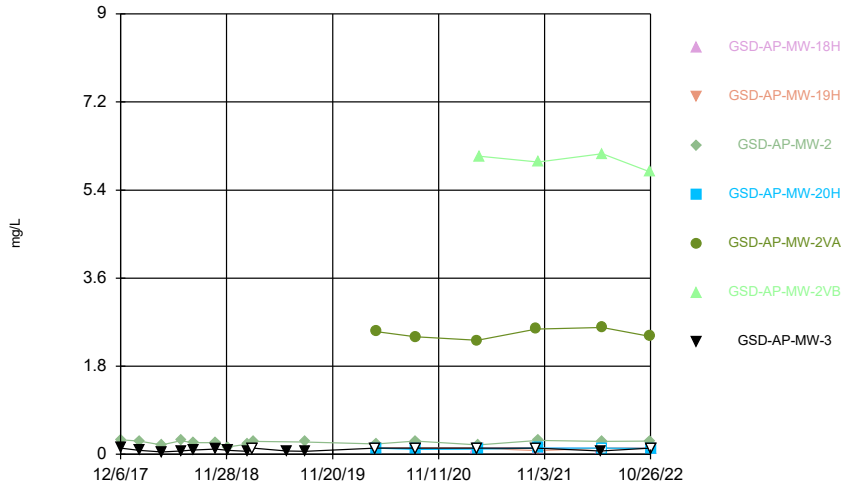
Time Series



Constituent: Fluoride Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

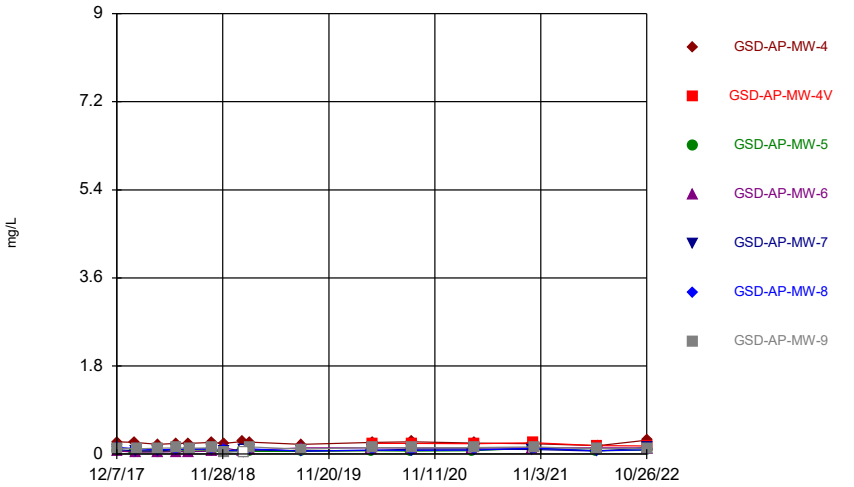
Time Series



Constituent: Fluoride Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

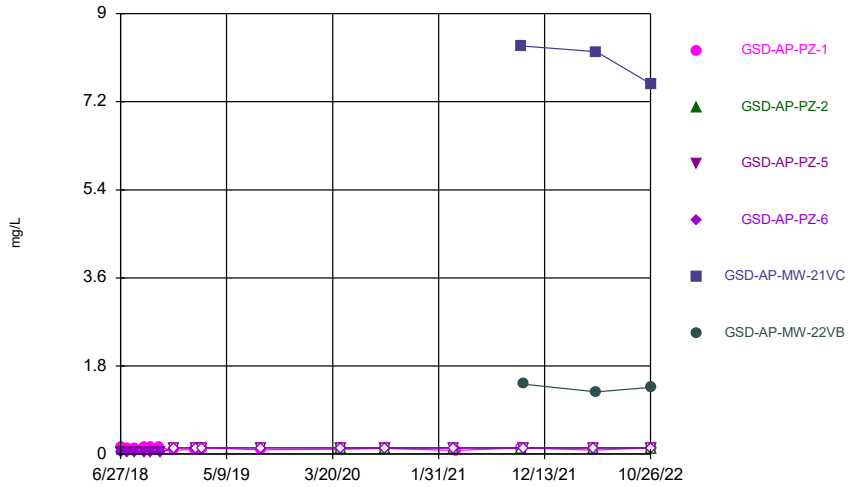
Time Series



Constituent: Fluoride Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

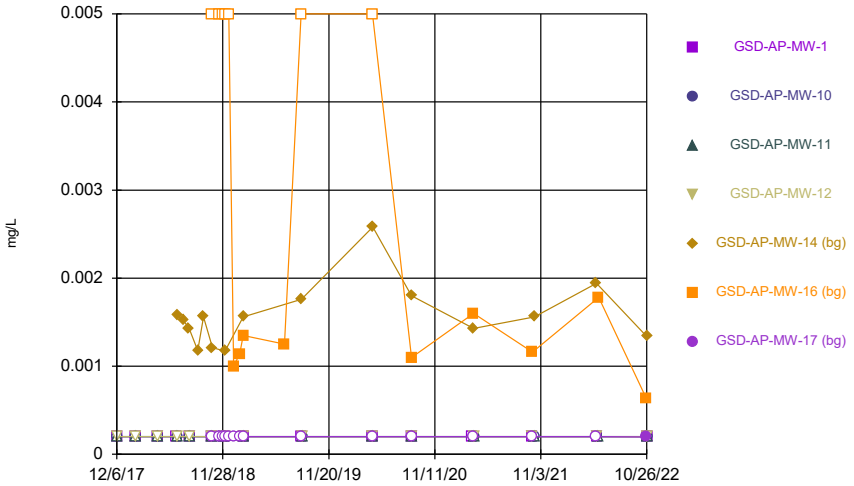
Time Series



Constituent: Fluoride Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

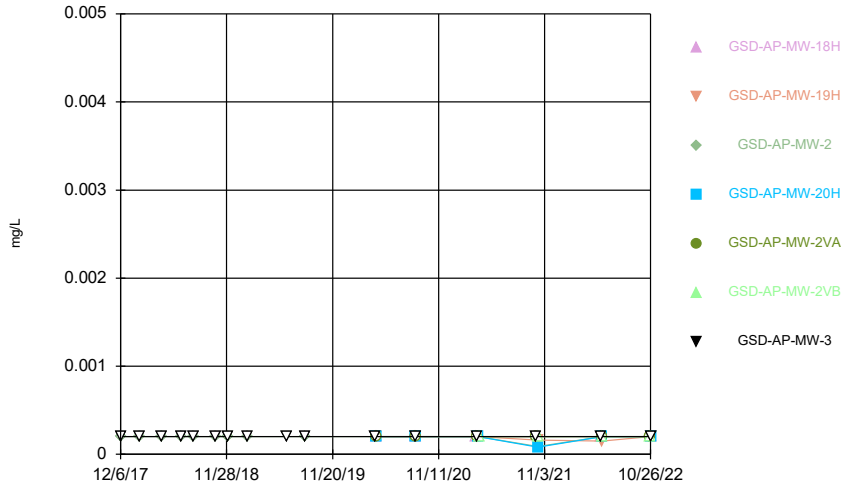
Time Series



Constituent: Lead Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

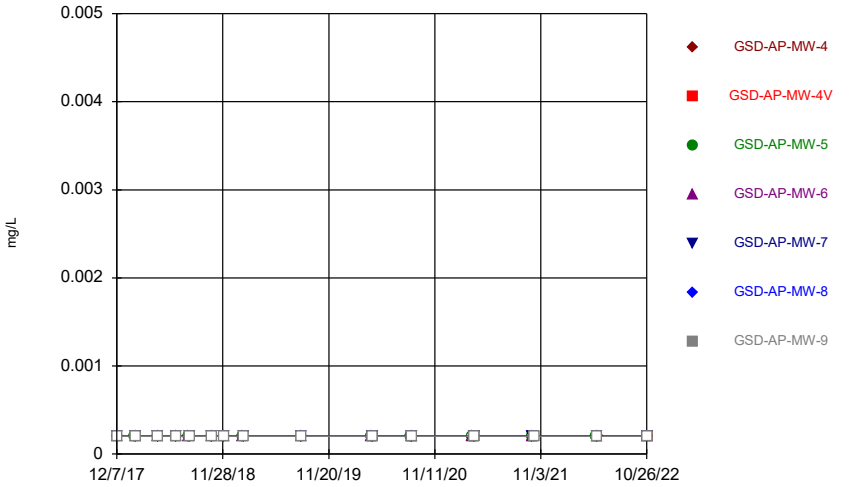
Time Series



Constituent: Lead Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

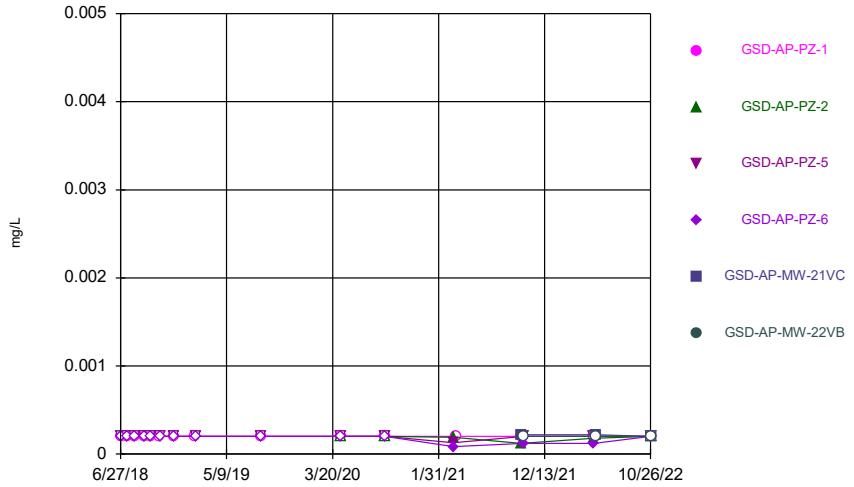
Time Series



Constituent: Lead Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

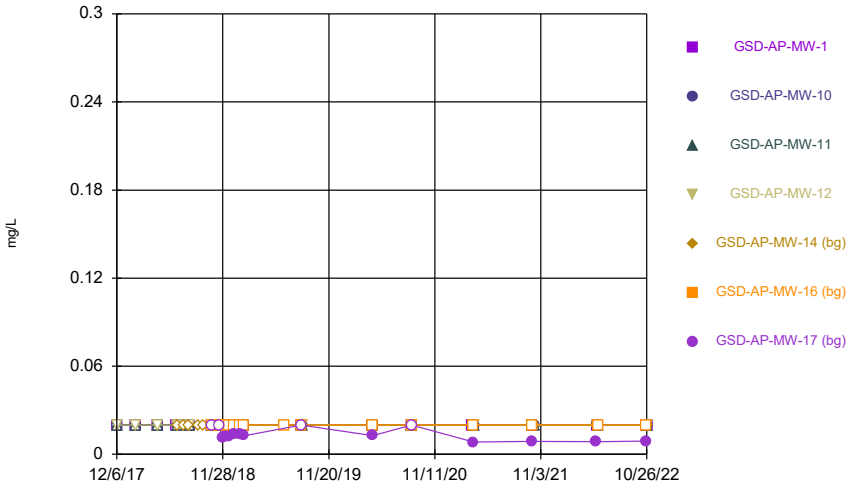
Time Series



Constituent: Lead Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

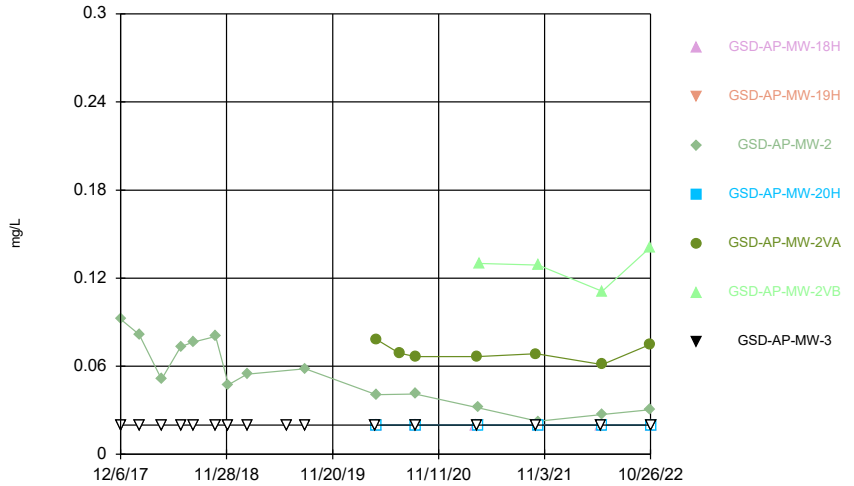
Time Series



Constituent: Lithium Analysis Run 12/27/2022 6:34 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

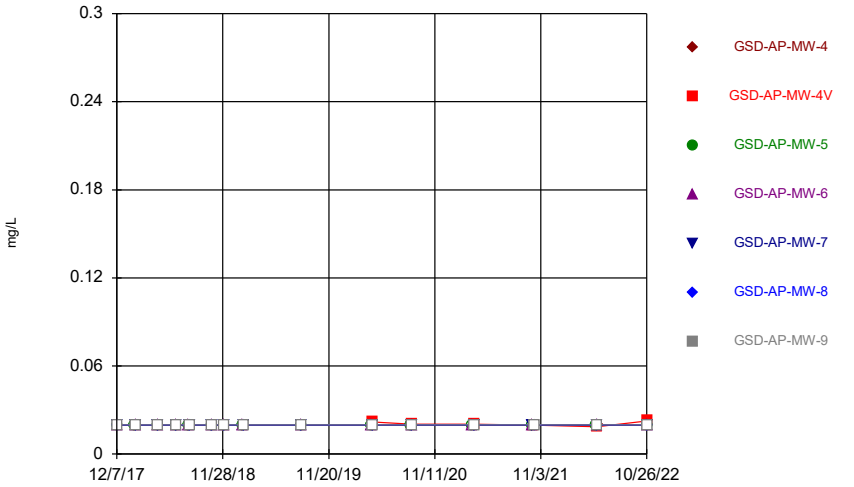
Time Series



Constituent: Lithium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

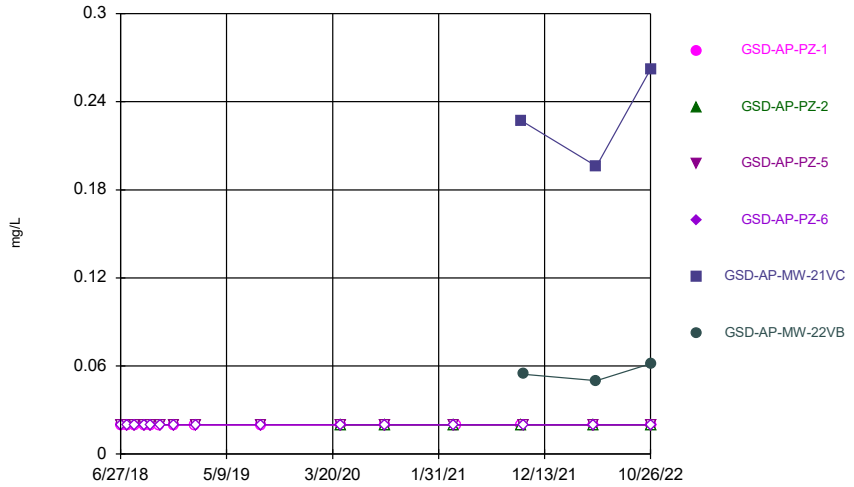
Time Series



Constituent: Lithium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

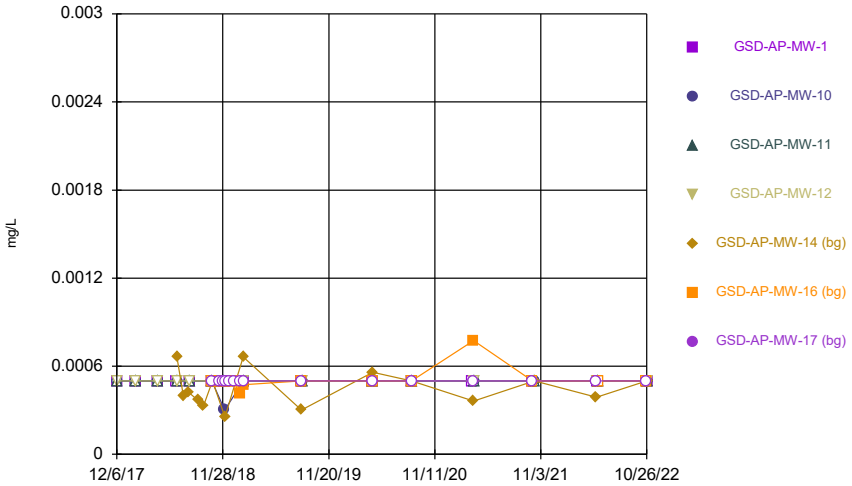
Time Series



Constituent: Lithium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

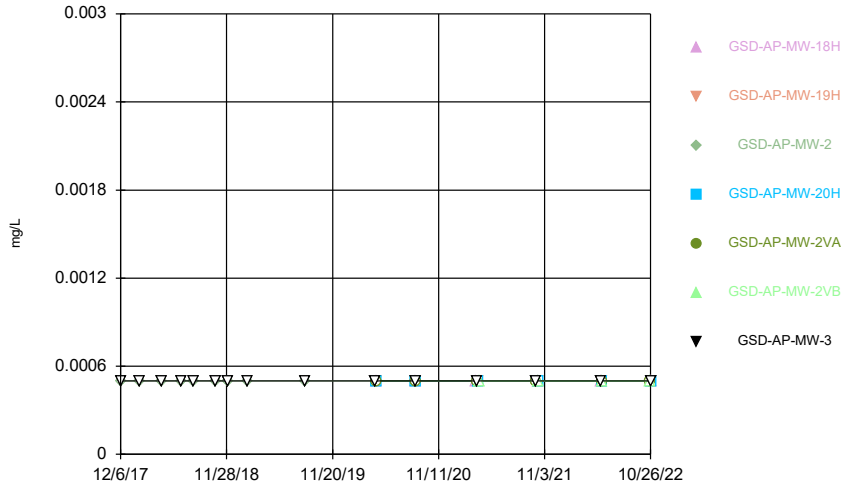
Time Series



Constituent: Mercury Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

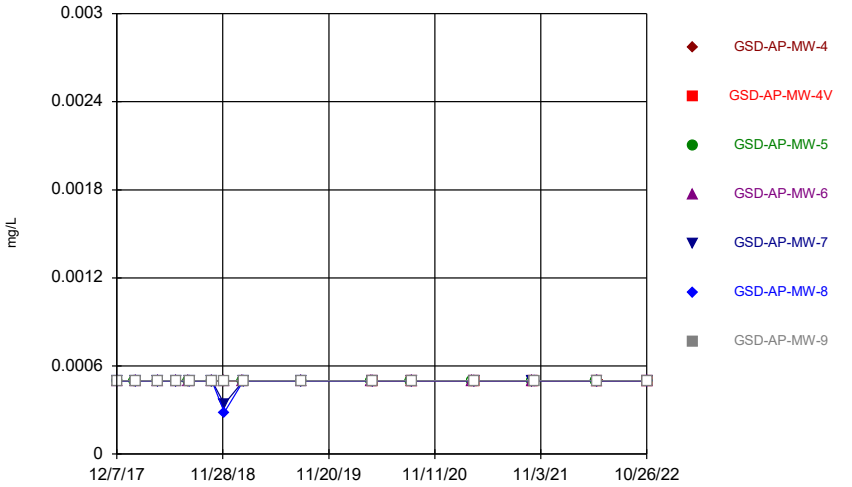
Time Series



Constituent: Mercury Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

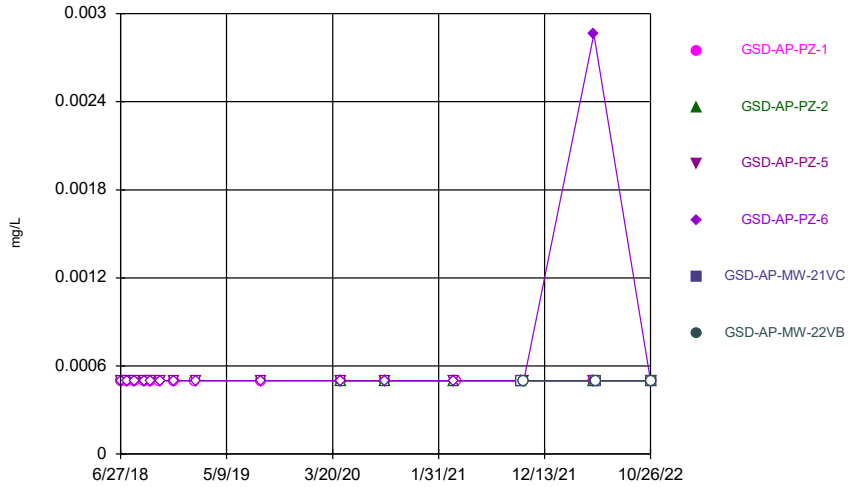
Time Series



Constituent: Mercury Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

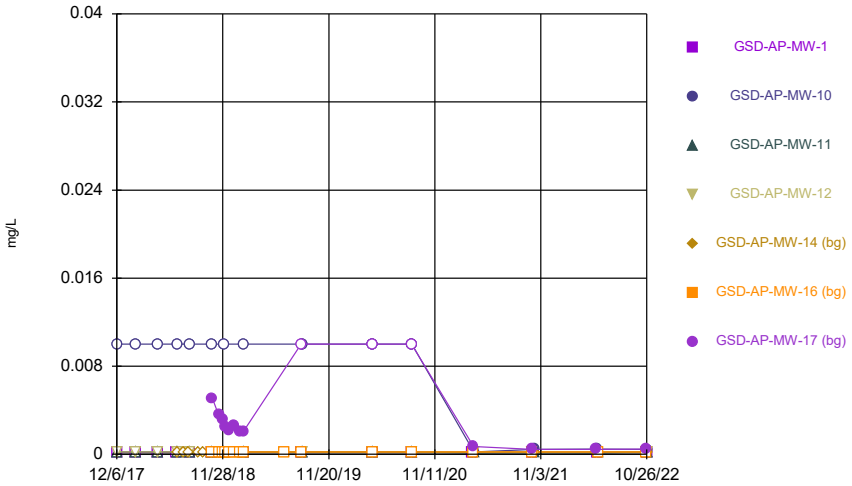
Time Series



Constituent: Mercury Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

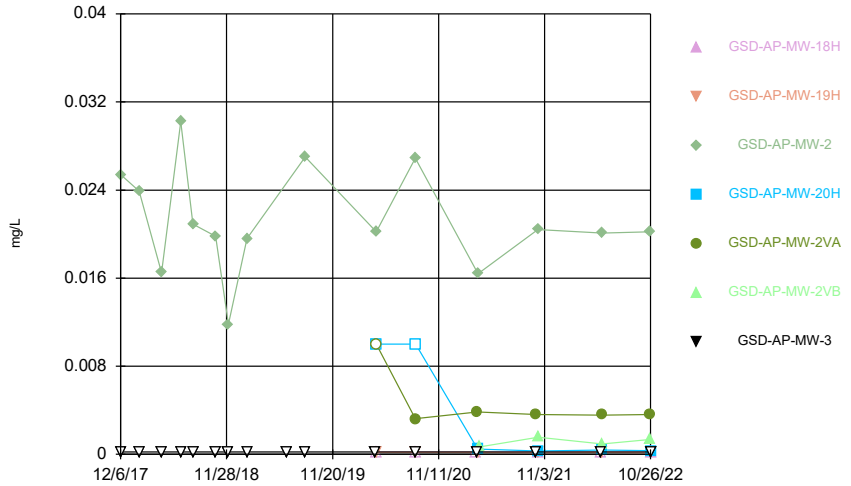
Time Series



Constituent: Molybdenum Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

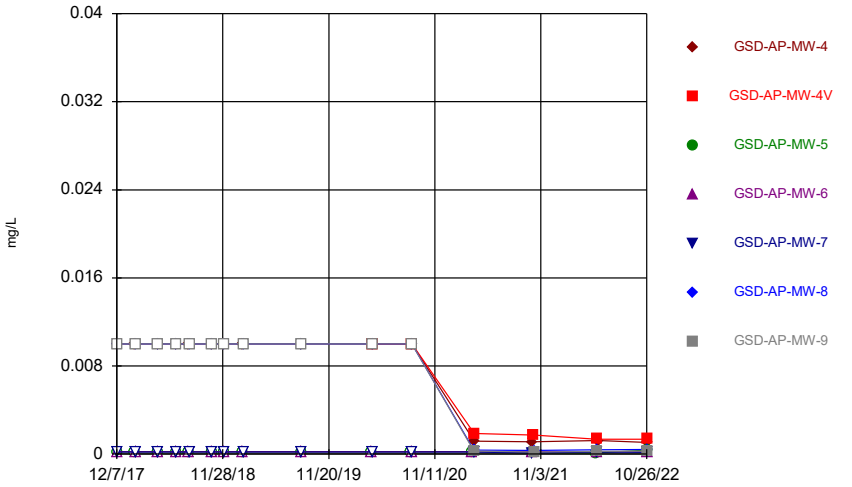
Time Series



Constituent: Molybdenum Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

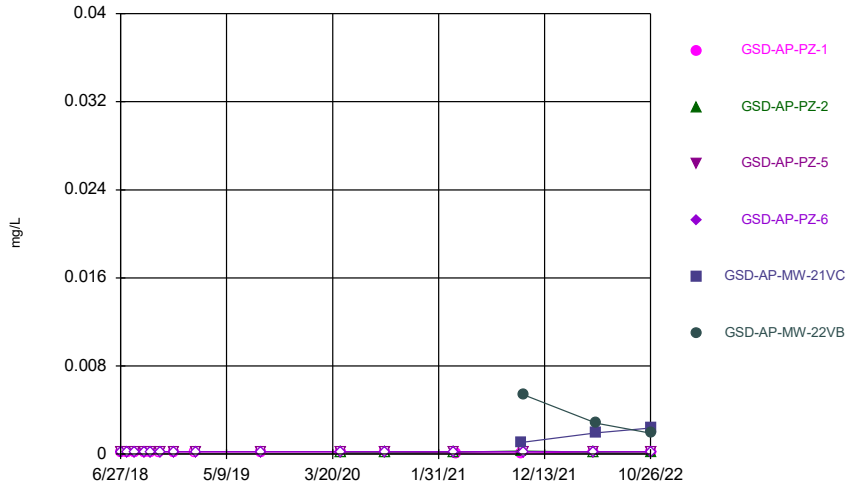
Time Series



Constituent: Molybdenum Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

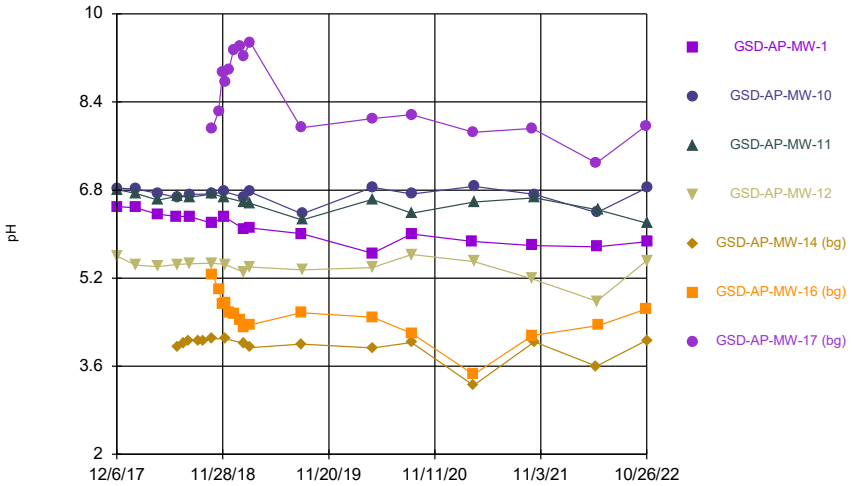
Time Series



Constituent: Molybdenum Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

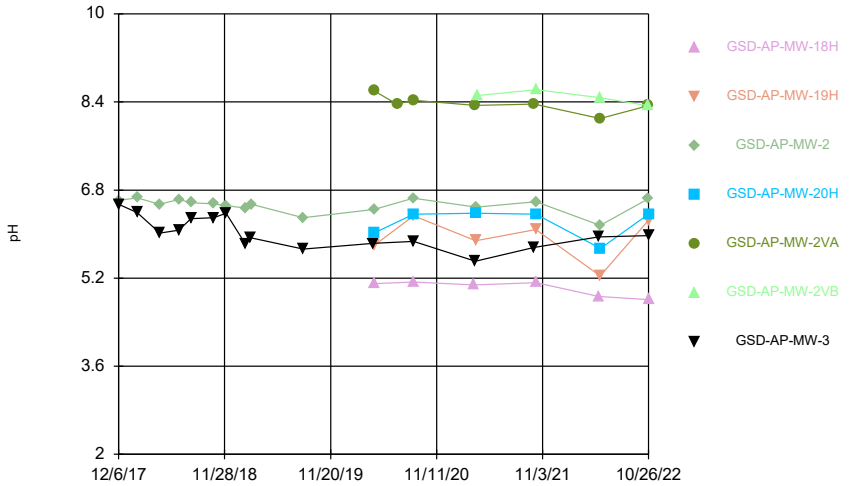


Constituent: pH Analysis Run 12/27/2022 6:35 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

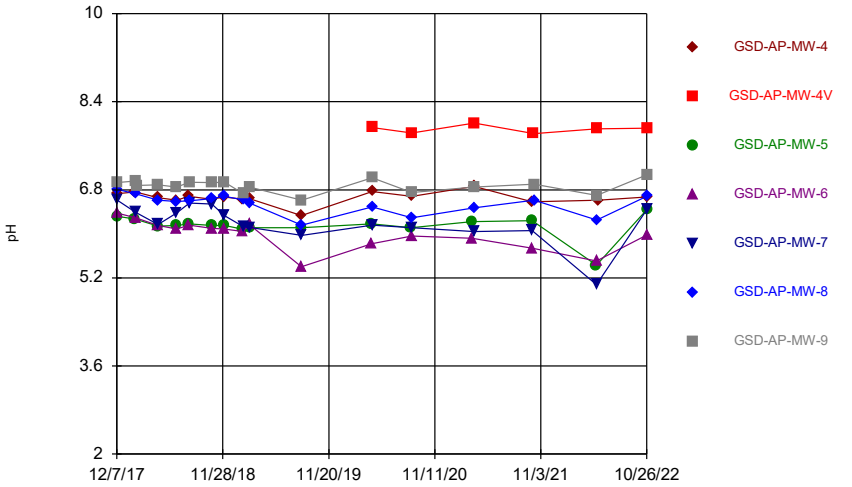


Constituent: pH Analysis Run 12/27/2022 6:35 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

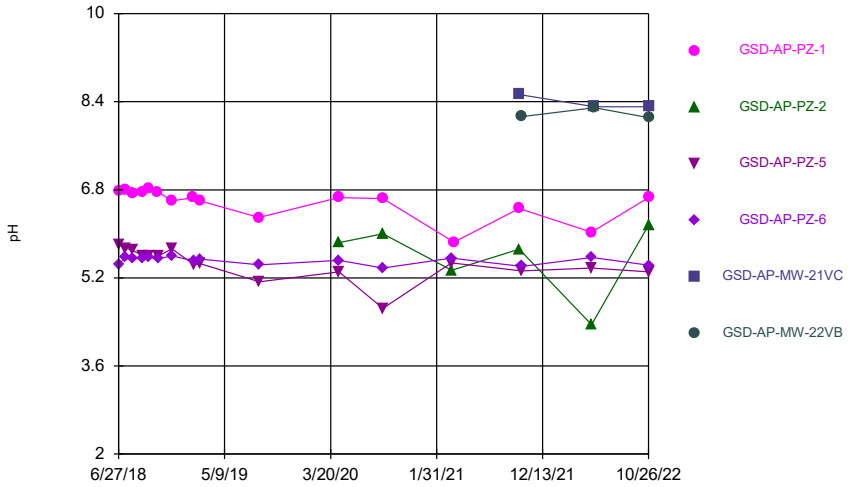


Constituent: pH Analysis Run 12/27/2022 6:35 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series

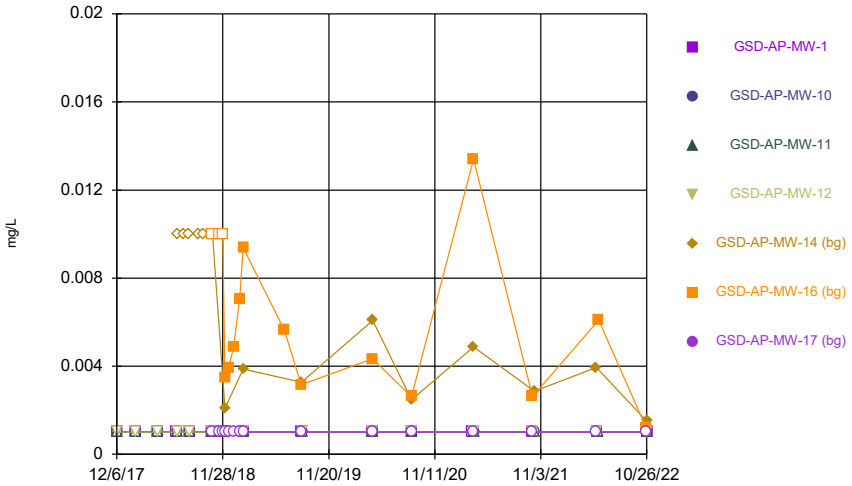


Constituent: pH Analysis Run 12/27/2022 6:35 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

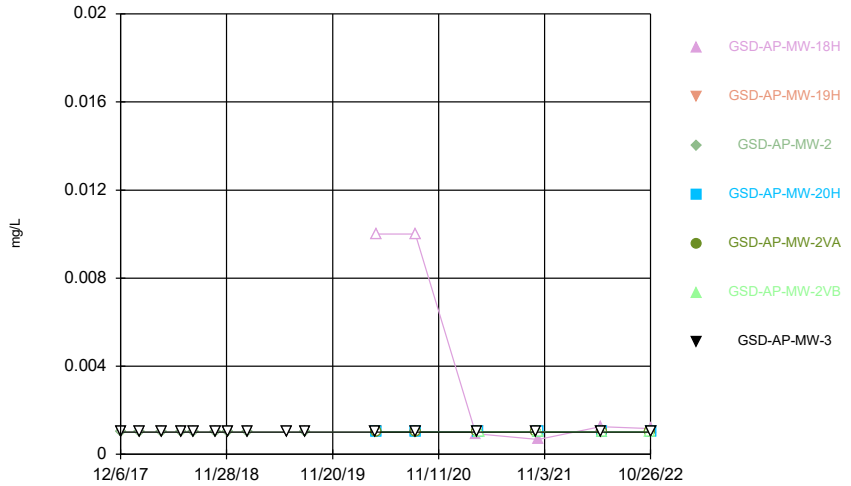
Time Series



Constituent: Selenium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

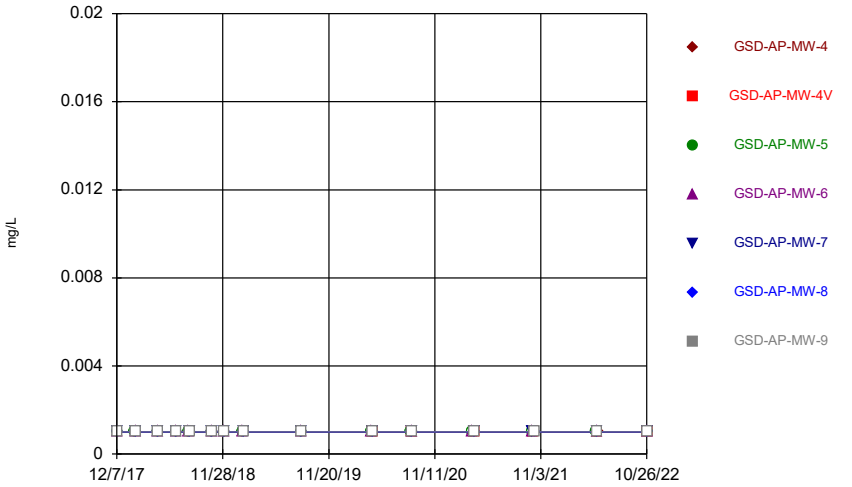
Time Series



Constituent: Selenium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

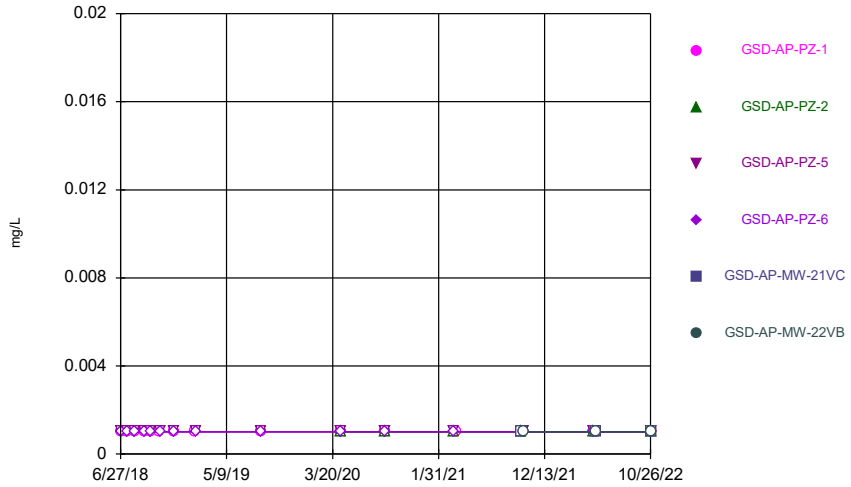
Time Series



Constituent: Selenium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

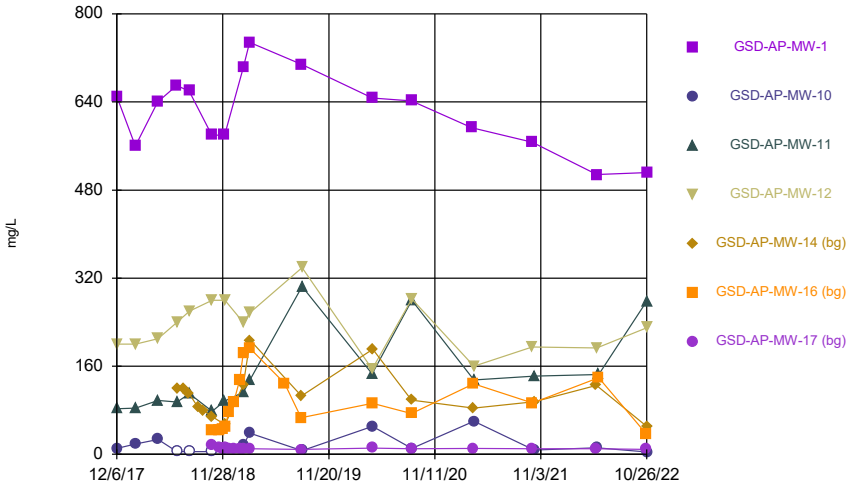
Time Series



Constituent: Selenium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

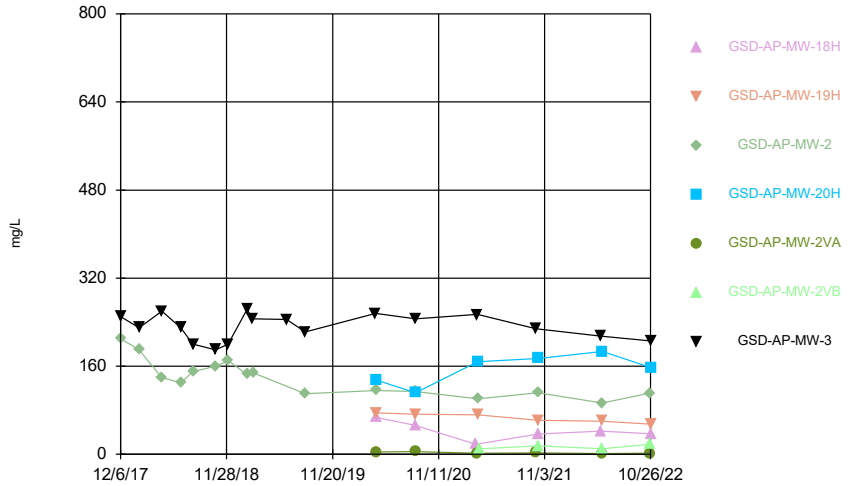
Time Series



Constituent: Sulfate Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

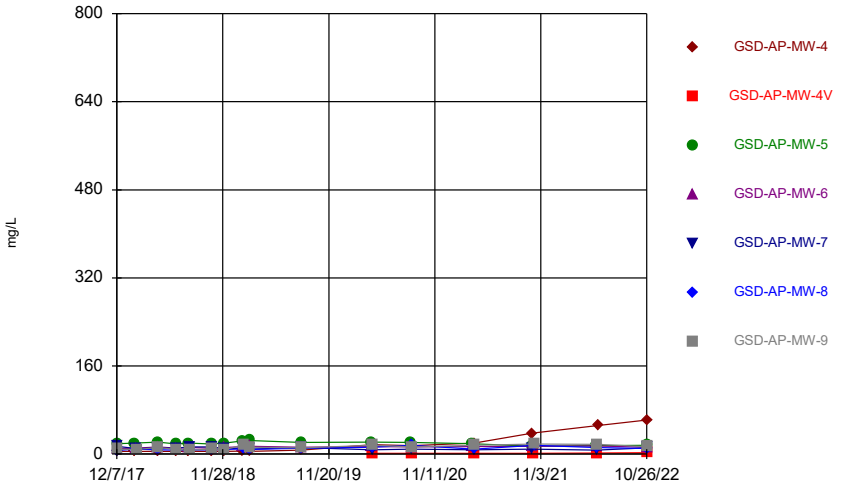
Time Series



Constituent: Sulfate Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

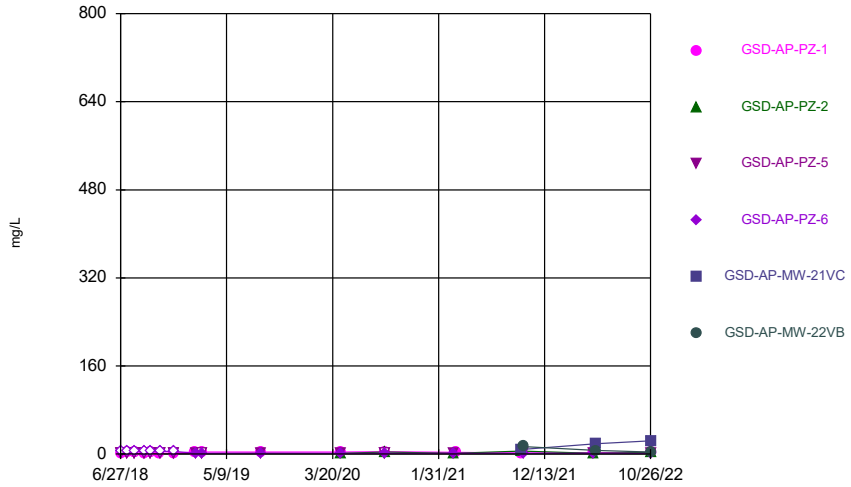
Time Series



Constituent: Sulfate Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

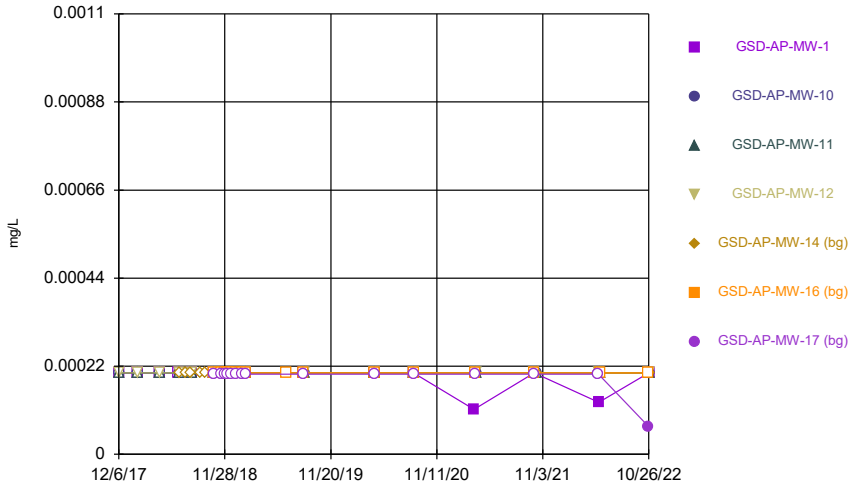
Time Series



Constituent: Sulfate Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

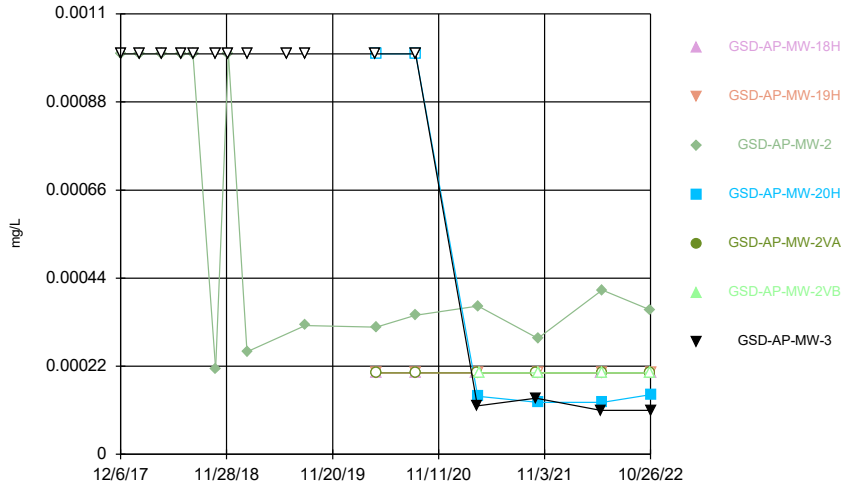
Time Series



Constituent: Thallium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

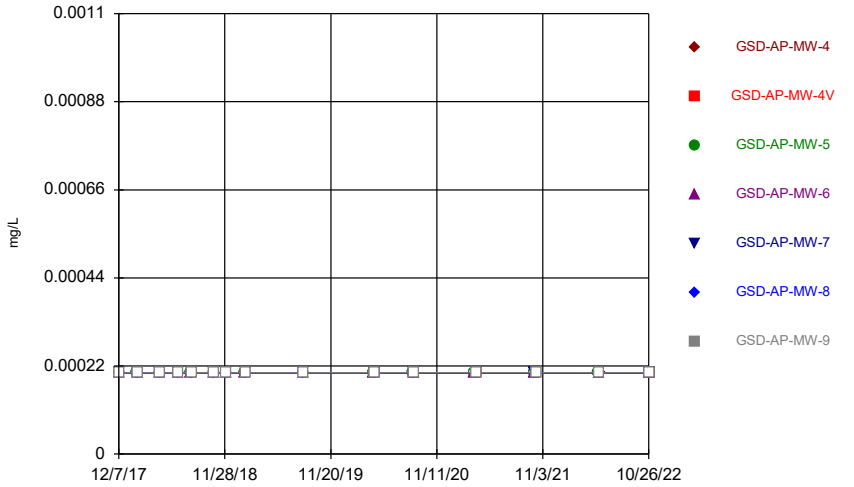
Time Series



Constituent: Thallium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

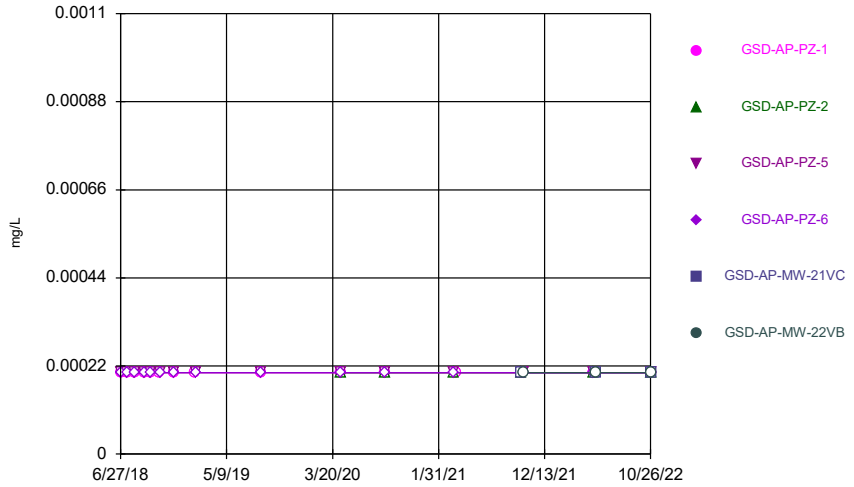
Time Series



Constituent: Thallium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

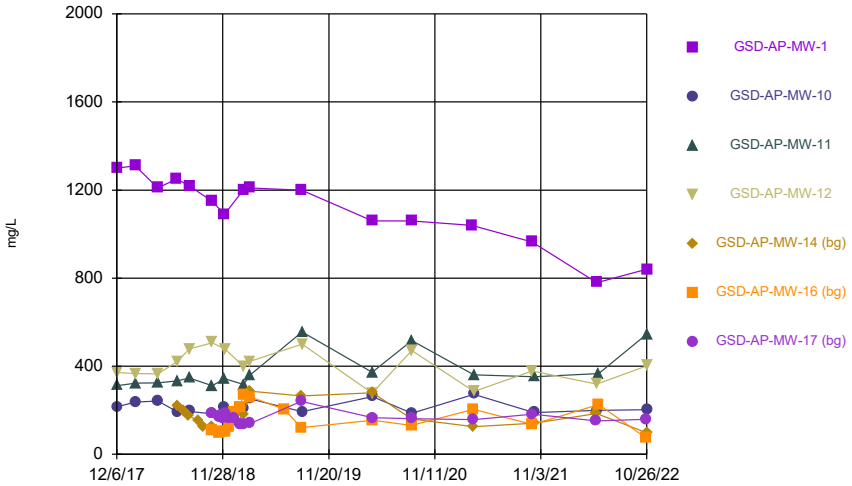
Time Series



Constituent: Thallium Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

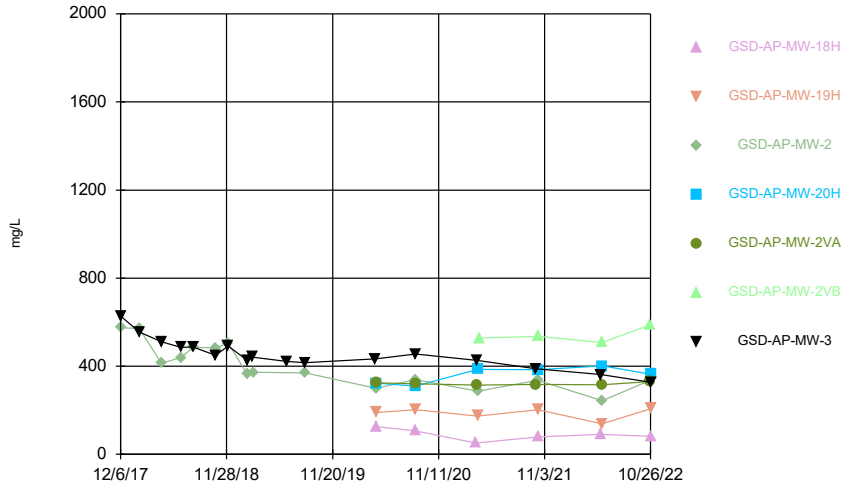
Time Series



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

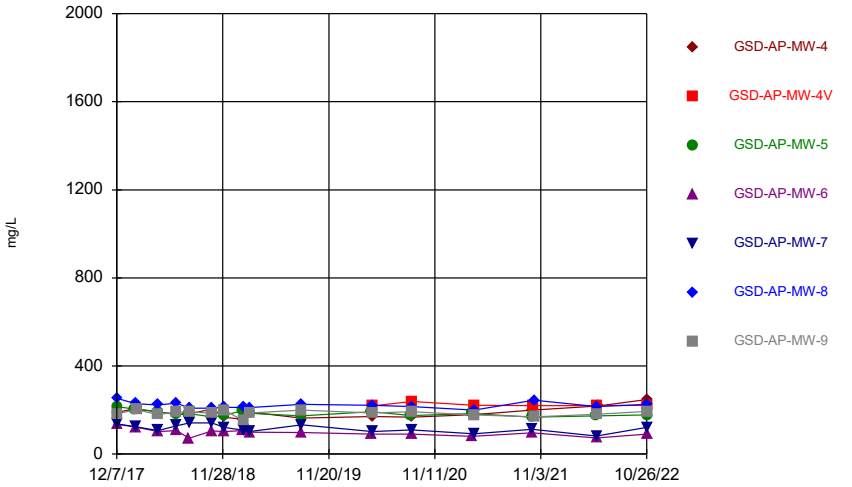
Time Series



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

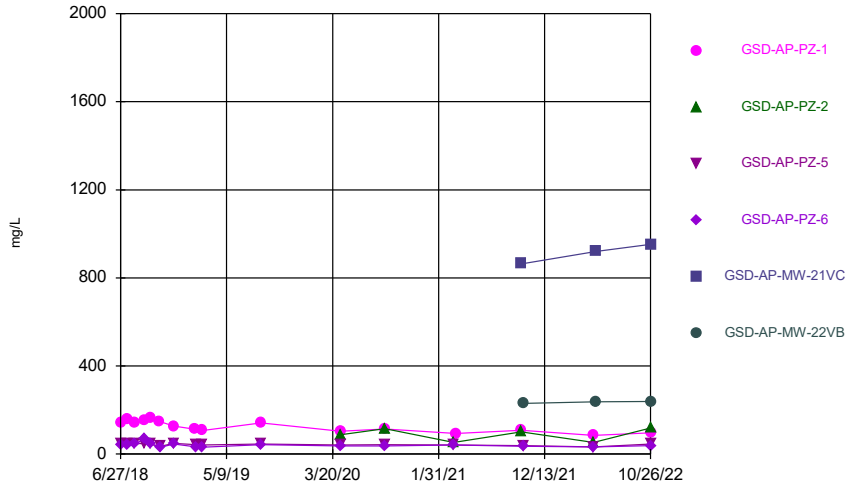
Time Series



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:35 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001015	<0.001015	<0.001015	<0.001015			
2/6/2018	<0.001015						
2/7/2018		<0.001015	<0.001015				
2/8/2018				<0.001015			
4/23/2018	<0.001015						
4/24/2018		<0.001015	<0.001015	<0.001015			
6/26/2018	<0.001015						
6/27/2018		<0.001015	<0.001015	<0.001015	<0.001015		
7/18/2018					<0.001015		
8/6/2018					<0.001015		
8/7/2018	<0.001015	<0.001015					
8/8/2018			<0.001015	<0.001015			
9/5/2018					<0.001015		
9/24/2018					<0.001015		
10/22/2018	<0.001015	<0.001015					
10/23/2018			<0.001015	<0.001015			
10/24/2018					<0.001015	<0.001015	<0.001015
11/14/2018						<0.001015	<0.001015
11/28/2018						<0.001015	<0.001015
12/4/2018	<0.001015	<0.001015	<0.001015				
12/5/2018				<0.001015	<0.001015	<0.001015	<0.001015
12/18/2018						<0.001015	<0.001015
1/3/2019						<0.001015	<0.001015
1/24/2019						0.000922 (J)	<0.001015
2/5/2019	<0.001015				<0.001015	<0.001015	<0.001015
2/6/2019		<0.001015	<0.001015	<0.001015			
6/24/2019						<0.001015	
8/19/2019						<0.001015	<0.001015
8/20/2019					<0.001015		
8/21/2019	<0.001015						
8/22/2019		<0.001015	<0.001015	<0.001015			
4/14/2020			<0.001015	<0.001015			
4/15/2020	<0.001015	<0.001015				<0.001015	
4/16/2020					<0.001015		<0.001015
8/24/2020							<0.001015
8/25/2020	<0.001015				<0.001015	<0.001015	
8/26/2020		<0.001015	<0.001015	<0.001015			
3/16/2021	<0.001015						
3/22/2021					<0.001015	<0.001015	<0.001015
3/23/2021		<0.001015	<0.001015	<0.001015			
10/5/2021	<0.001015			<0.001015			
10/6/2021						<0.001015	<0.001015
10/11/2021		<0.001015					
10/12/2021			<0.001015		<0.001015		
5/9/2022					<0.001015		<0.001015
5/10/2022	<0.001015	<0.001015		<0.001015			
5/17/2022			<0.001015			<0.001015	
10/25/2022						<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.00102				<0.001015
2/6/2018			<0.00102				<0.001015
4/23/2018			<0.00102				
4/24/2018							<0.001015
6/27/2018			<0.00102				<0.001015
8/7/2018			<0.00102				<0.001015
10/22/2018			<0.00102				<0.001015
12/3/2018							<0.001015
12/4/2018			<0.00102				
2/5/2019			<0.00102				<0.001015
6/18/2019							<0.001015
8/20/2019			<0.00102				<0.001015
4/13/2020							<0.001015
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.001015		<0.00102		<0.00102		
8/25/2020	<0.001015		<0.00102		<0.00102		
8/26/2020		<0.001015		<0.001015			<0.001015
3/16/2021	<0.001015						
3/22/2021					<0.00102		<0.001015
3/23/2021		<0.001015		<0.001015			
3/24/2021			<0.00102				
3/30/2021						<0.001015	
10/5/2021							<0.001015
10/6/2021					<0.00102		
10/11/2021		<0.001015	<0.00102	<0.001015			
10/12/2021	<0.001015					<0.001015	
5/10/2022	<0.001015						<0.001015
5/16/2022		<0.001015	<0.00102		<0.00102	<0.001015	
5/17/2022				<0.001015			
10/25/2022			0.000538 (J)		0.000539 (J)	<0.001015	
10/26/2022	<0.001015	<0.001015		<0.001015			<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.001015	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.001015			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.001015			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.001015			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.001015			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.001015			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.001015			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
3/16/2021			<0.001015				
3/17/2021				<0.001015			
3/23/2021					<0.001015	<0.001015	<0.001015
3/24/2021	<0.001015	<0.001015					
10/5/2021	<0.001015		<0.001015	<0.001015	<0.001015		
10/11/2021		<0.001015					
10/12/2021						<0.001015	<0.001015
5/9/2022			<0.001015				
5/10/2022				<0.001015	<0.001015		
5/11/2022		<0.001015				<0.001015	<0.001015
5/16/2022	<0.001015						
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.001015	<0.001015		
7/18/2018	<0.001015		<0.001015	<0.001015		
8/7/2018	<0.001015					
8/8/2018			<0.001015	<0.001015		
9/5/2018	<0.001015		<0.001015	<0.001015		
9/24/2018	<0.001015		<0.001015	<0.001015		
10/22/2018	<0.001015					
10/23/2018			<0.001015	<0.001015		
12/3/2018	<0.001015		<0.001015	<0.001015		
2/5/2019	<0.001015					
2/7/2019			0.00114 (J)	0.00181 (J)		
8/20/2019	<0.001015					
8/21/2019			<0.001015	<0.001015		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.001015	<0.001015		
8/24/2020	<0.001015	<0.001015	<0.001015	<0.001015		
3/16/2021			<0.001015	<0.001015		
3/17/2021		<0.001015				
3/24/2021	<0.001015					
10/5/2021	<0.001015	<0.001015				
10/6/2021					0.00051 (J)	
10/11/2021						0.00167
10/12/2021			<0.001015	<0.001015		
5/9/2022	<0.001015	<0.001015				
5/10/2022			<0.001015	<0.001015		
5/17/2022					0.00051 (J)	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	0.000695 (J)	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00179 (J)	0.00247 (J)	0.00279 (J)	<0.0002			
2/6/2018	0.00191 (J)						
2/7/2018		0.00192 (J)	0.00252 (J)				
2/8/2018				<0.0002			
4/23/2018	0.0023 (J)						
4/24/2018		0.00218 (J)	0.00283 (J)	<0.0002			
6/26/2018	0.00306 (J)						
6/27/2018		0.00419 (J)	0.00289 (J)	<0.0002	0.00165 (J)		
7/18/2018					0.00117 (J)		
8/6/2018					<0.005		
8/7/2018	0.00336 (J)	0.00365 (J)					
8/8/2018			0.00265 (J)	<0.0002			
9/5/2018					<0.005		
9/24/2018					0.00148 (J)		
10/22/2018	0.00451 (J)	0.00404 (J)					
10/23/2018			0.00287 (J)	<0.0002			
10/24/2018					<0.005	<0.005	<0.005
11/14/2018						<0.005	<0.005
11/28/2018						0.00124 (J)	<0.005
12/4/2018	0.00471 (J)	0.00332 (J)	0.00271 (J)				
12/5/2018				<0.0002	<0.005	0.00113 (J)	<0.005
12/18/2018						0.00113 (J)	<0.005
1/3/2019						0.00175 (J)	<0.005
1/24/2019						0.00257 (J)	<0.005
2/5/2019	0.00365 (J)				0.00119 (J)	0.00355 (J)	<0.005
2/6/2019		0.00333 (J)	0.00272 (J)	<0.0002			
6/24/2019						0.00474 (J)	
8/19/2019						0.00228 (J)	<0.005
8/20/2019					0.00216 (J)		
8/21/2019	0.00444 (J)						
8/22/2019		0.00394 (J)	0.00229 (J)	<0.0002			
4/14/2020			0.00286 (J)	<0.0002			
4/15/2020	0.00309 (J)	0.00236 (J)				0.0034 (J)	
4/16/2020					0.00483 (J)		<0.005
8/24/2020							<0.005
8/25/2020	0.00435 (J)				0.002 (J)	0.00237 (J)	
8/26/2020		0.00422 (J)	0.00246 (J)	<0.0002			
3/16/2021	0.0029						
3/22/2021					0.00188	0.00614	0.00031
3/23/2021		0.00163	0.00275	<0.0002			
10/5/2021	0.00356			<0.0002			
10/6/2021						0.00207	0.00026
10/11/2021		0.0037					
10/12/2021			0.00272		0.00131		
5/9/2022					0.00274		0.00023
5/10/2022	0.00221	0.00361		<0.0002			
5/17/2022			0.00281			0.00457	
10/25/2022						0.00117	0.000572
10/26/2022	0.00223	0.00414	0.00215	0.000102 (J)	0.00107		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.809				0.00101 (J)
2/6/2018			0.774				<0.005
4/23/2018			0.643				
4/24/2018							<0.005
6/27/2018			1.01				<0.005
8/7/2018			0.988				<0.005
10/22/2018			1.01				<0.005
12/3/2018							<0.005
12/4/2018			0.553				
2/5/2019			0.74				<0.005
6/18/2019							<0.005
8/20/2019			0.825				<0.005
4/13/2020							<0.005
4/14/2020		<0.005		0.00287 (J)			
4/15/2020	<0.005		0.709		<0.005		
8/25/2020	<0.005		0.727		0.00135 (J)		
8/26/2020		<0.005		0.00186 (J)			<0.005
3/16/2021	0.000136 (J)						
3/22/2021					0.00145		0.0002 (J)
3/23/2021		0.000512		0.00226			
3/24/2021			0.489				
3/30/2021						0.000278	
10/5/2021							0.00021
10/6/2021					0.00139		
10/11/2021		0.00085	0.424	0.00191			
10/12/2021	0.00019 (J)					0.00043	
5/10/2022	0.00015 (J)						0.00016 (J)
5/16/2022		0.00018 (J)	0.569		0.00135	0.00039	
5/17/2022				0.002			
10/25/2022			0.555		0.00165	0.000907	
10/26/2022	0.000338	0.000583		0.00151			0.000311

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.0132		<0.005	<0.0002	<0.0002	0.00313 (J)	0.00112 (J)
2/6/2018	0.0105		<0.005				
2/8/2018				<0.0002	<0.0002	0.00247 (J)	<0.005
4/24/2018	0.0124						
4/25/2018			<0.005	<0.0002	<0.0002	0.00291 (J)	<0.005
6/26/2018	0.0132			<0.0002	<0.0002	0.00265 (J)	<0.005
6/27/2018			<0.005				
8/6/2018	0.013						
8/7/2018			<0.005	<0.0002			
8/8/2018					<0.0002	0.00203 (J)	<0.005
10/22/2018	0.0144						
10/23/2018			<0.005	<0.0002	<0.0002	0.00246 (J)	<0.005
12/3/2018	0.0119			<0.0002			
12/4/2018					<0.0002	0.00328 (J)	
12/5/2018			<0.005				0.00111 (J)
2/5/2019	0.0107		<0.005	<0.0002			
2/6/2019					<0.0002	0.00325 (J)	<0.005
8/20/2019	0.0141		<0.005	<0.0002			
8/21/2019					<0.0002	0.00302 (J)	<0.005
4/13/2020			<0.005	<0.0002			
4/14/2020						0.00295 (J)	0.00118 (J)
4/15/2020	0.0121	<0.005			<0.0002		
8/24/2020			<0.005				
8/26/2020	0.0133	<0.005		<0.0002	<0.0002	0.00304 (J)	<0.005
3/16/2021			8.17E-05 (J)				
3/17/2021				<0.0002			
3/23/2021					<0.0002	0.00282	0.00063
3/24/2021	0.011	0.00034					
10/5/2021	0.0147		0.00013 (J)	<0.0002	7E-05 (J)		
10/11/2021		0.00037					
10/12/2021						0.00287	0.00064
5/9/2022			8E-05 (J)				
5/10/2022				<0.0002	<0.0002		
5/11/2022		0.00031				0.00323	0.00055
5/16/2022	0.0132						
10/26/2022	0.0145	0.000446	0.00025	0.000151 (J)	0.000105 (J)	0.0033	0.000618

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.0002		<0.000203	<0.0002		
7/18/2018	<0.0002		<0.000203	<0.0002		
8/7/2018	<0.0002					
8/8/2018			<0.000203	<0.0002		
9/5/2018	<0.0002		<0.000203	<0.0002		
9/24/2018	<0.0002		<0.000203	<0.0002		
10/22/2018	<0.0002					
10/23/2018			<0.000203	<0.0002		
12/3/2018	<0.0002		<0.000203	<0.0002		
2/5/2019	<0.0002					
2/7/2019			<0.000203	<0.0002		
8/20/2019	<0.0002					
8/21/2019			<0.000203	<0.0002		
4/13/2020	<0.0002	<0.005				
4/15/2020			<0.000203	<0.0002		
8/24/2020	<0.0002	<0.005	<0.000203	<0.0002		
3/16/2021			8.08E-05 (J)	<0.0002		
3/17/2021		8.26E-05 (J)				
3/24/2021	<0.0002					
10/5/2021	<0.0002	9E-05 (J)				
10/6/2021					0.00162	
10/11/2021						0.00408
10/12/2021			<0.000203	<0.0002		
5/9/2022	<0.0002	0.0001 (J)				
5/10/2022			<0.000203	<0.0002		
5/17/2022					0.0014	0.00303
10/26/2022	0.000164 (J)	0.000188 (J)	<0.000203	0.00015 (J)	0.00122	0.00269

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.0807	0.308	0.349	0.0501			
2/6/2018	0.0546						
2/7/2018		0.289	0.297				
2/8/2018				0.0375			
4/23/2018	0.0488						
4/24/2018		0.359	0.338	0.0405			
6/26/2018	0.0479						
6/27/2018		0.307	0.338	0.0466	0.0338		
7/18/2018					0.03		
8/6/2018					0.0274		
8/7/2018	0.0402	0.25					
8/8/2018			0.307	0.0448			
9/5/2018					0.0275		
9/24/2018					0.0264		
10/22/2018	0.0427	0.29					
10/23/2018			0.311	0.054			
10/24/2018					0.0276	0.0499	0.218
11/14/2018						0.0458	0.203
11/28/2018						0.0476	0.191
12/4/2018	0.0434	0.305	0.331				
12/5/2018				0.0493	0.0256	0.0475	0.209
12/18/2018						0.0461	0.199
1/3/2019						0.0426	0.176
1/24/2019						0.0485	0.206
2/5/2019	0.0439				0.0314	0.0354	0.168
2/6/2019		0.265	0.286	0.036			
6/24/2019						0.0294	
8/19/2019						0.0314	0.259
8/20/2019					0.0274		
8/21/2019	0.037						
8/22/2019		0.302	0.214	0.0455			
4/14/2020			0.168	0.0279			
4/15/2020	0.0329	0.35				0.028	
4/16/2020					0.0327		0.257
8/24/2020							0.312
8/25/2020	0.0358				0.0291	0.0261	
8/26/2020		0.322	0.165	0.0503			
3/16/2021	0.0331						
3/22/2021					0.0254	0.0278	0.29
3/23/2021		0.395	0.169	0.0315			
10/5/2021	0.0304			0.0417			
10/6/2021						0.0215	0.307
10/11/2021		0.292					
10/12/2021			0.17		0.0268		
5/9/2022					0.0365		0.309
5/10/2022	0.0275	0.318		0.0377			
5/17/2022			0.195			0.0288	
10/25/2022						0.029	0.292
10/26/2022	0.028	0.278	0.117	0.0376	0.0238		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.0842				0.126
2/6/2018			0.0716				0.0721
4/23/2018			0.0518				
4/24/2018							0.0492
6/27/2018			0.0578				0.0453
8/7/2018			0.0566				0.0431
10/22/2018			0.0536				0.0541
12/3/2018							0.0545
12/4/2018			0.0589				
2/5/2019			0.0418				0.0363
6/18/2019							0.0369
8/20/2019			0.0685				0.0405
4/13/2020							0.0349
4/14/2020		0.153		0.189			
4/15/2020	0.0389		0.0607		0.2		
8/25/2020	0.0388		0.0812		0.135		
8/26/2020		0.201		0.197			0.0363
3/16/2021	0.0243						
3/22/2021					0.114		0.0354
3/23/2021		0.148		0.217			
3/24/2021			0.0676				
3/30/2021						0.313	
10/5/2021							0.0344
10/6/2021					0.12		
10/11/2021		0.17	0.0807	0.134			
10/12/2021	0.0298					0.242	
5/10/2022	0.0361						0.0287
5/16/2022		0.124	0.0974		0.132	0.322	
5/17/2022				0.115			
10/25/2022			0.0888		0.137	0.346	
10/26/2022	0.0349	0.159		0.0993			0.0306

Time Series

Constituent: Barium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.239		0.279	0.0809	0.083	0.244	0.187
2/6/2018	0.206		0.195				
2/8/2018				0.0566	0.0756	0.135	0.148
4/24/2018	0.217						
4/25/2018			0.26	0.0553	0.0764	0.224	0.158
6/26/2018	0.208			0.0604	0.0799	0.181	0.16
6/27/2018			0.249				
8/6/2018	0.189						
8/7/2018			0.216	0.0542			
8/8/2018					0.0791	0.134	0.161
10/22/2018	0.209						
10/23/2018			0.26	0.0608	0.0898	0.17	0.183
12/3/2018	0.214			0.0633			
12/4/2018					0.0789	0.189	
12/5/2018			0.245				0.186
2/5/2019	0.173		0.215	0.0551			
2/6/2019					0.0685	0.226	0.128
8/20/2019	0.188		0.238	0.0731			
8/21/2019					0.0946	0.194	0.183
4/13/2020			0.241	0.0635			
4/14/2020						0.262	0.186
4/15/2020	0.159	0.457			0.0653		
8/24/2020			0.238				
8/26/2020	0.181	0.534		0.0771	0.0845	0.235	0.202
3/16/2021			0.217				
3/17/2021				0.0656			
3/23/2021					0.0602	0.249	0.157
3/24/2021	0.171	0.477					
10/5/2021	0.202		0.221	0.0741	0.0716		
10/11/2021		0.483					
10/12/2021						0.203	0.147
5/9/2022			0.236				
5/10/2022				0.0762	0.0527		
5/11/2022		0.525				0.32	0.16
5/16/2022	0.23						
10/26/2022	0.239	0.474	0.231	0.0702	0.0852	0.224	0.154

Time Series

Constituent: Barium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	0.115		0.154	0.0298		
7/18/2018	0.116		0.15	0.0312		
8/7/2018	0.0906					
8/8/2018			0.119	0.0265		
9/5/2018	0.116		0.123	0.0291		
9/24/2018	0.125		0.112	0.029		
10/22/2018	0.102					
10/23/2018			0.125	0.0298		
12/3/2018	0.0784		0.126	0.0307		
2/5/2019	0.0578					
2/7/2019			0.0602	0.028		
8/20/2019	0.097					
8/21/2019			0.085	0.0312		
4/13/2020	0.0529	0.0832				
4/15/2020			0.0535	0.0296		
8/24/2020	0.0733	0.132	0.0565	0.031		
3/16/2021			0.0553	0.0293		
3/17/2021		0.045				
3/24/2021	0.0525					
10/5/2021	0.0811	0.118				
10/6/2021					0.374	
10/11/2021						0.238
10/12/2021			0.0494	0.0303		
5/9/2022	0.057	0.0593				
5/10/2022			0.0497	0.0309		
5/17/2022					0.435	0.276
10/26/2022	0.0682	0.133	0.0474	0.0282	0.431	0.257

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001015	<0.001015	<0.001015	<0.001015			
2/6/2018	<0.001015						
2/7/2018		<0.001015	<0.001015				
2/8/2018				<0.001015			
4/23/2018	<0.001015						
4/24/2018		<0.001015	<0.001015	<0.001015			
6/26/2018	<0.001015						
6/27/2018		<0.001015	<0.001015	<0.001015	0.00134 (J)		
7/18/2018					0.00133 (J)		
8/6/2018					0.00129 (J)		
8/7/2018	<0.001015	<0.001015					
8/8/2018			<0.001015	<0.001015			
9/5/2018					0.00106 (J)		
9/24/2018					0.000991 (J)		
10/22/2018	<0.001015	<0.001015					
10/23/2018			<0.001015	<0.001015			
10/24/2018					0.00082 (J)	<0.001015	<0.001015
11/14/2018						<0.001015	<0.001015
11/28/2018						0.00133 (J)	<0.001015
12/4/2018	<0.001015	<0.001015	<0.001015				
12/5/2018				<0.001015	0.00141 (J)	<0.001015	<0.001015
12/18/2018						0.000761 (J)	<0.001015
1/3/2019						0.000677 (J)	<0.001015
1/24/2019						0.000703 (J)	<0.001015
2/5/2019	<0.001015				0.0011 (J)	0.000711 (J)	<0.001015
2/6/2019		<0.001015	<0.001015	<0.001015			
6/24/2019						0.000605 (J)	
8/19/2019						<0.001015	<0.001015
8/20/2019					0.00129 (J)		
8/21/2019	<0.001015						
8/22/2019		<0.001015	<0.001015	<0.001015			
4/14/2020			<0.001015	<0.001015			
4/15/2020	<0.001015	<0.001015				<0.001015	
4/16/2020					0.00157 (J)		<0.001015
8/24/2020							<0.001015
8/25/2020	<0.001015				0.00117 (J)	<0.001015	
8/26/2020		<0.001015	<0.001015	<0.001015			
3/16/2021	<0.001015						
3/22/2021					0.000918 (J)	0.000537 (J)	<0.001015
3/23/2021		<0.001015	<0.001015	<0.001015			
10/5/2021	<0.001015			<0.001015			
10/6/2021						0.00049 (J)	<0.001015
10/11/2021		<0.001015					
10/12/2021			<0.001015		0.00115		
5/9/2022					0.00126		<0.001015
5/10/2022	<0.001015	<0.001015		<0.001015			
5/17/2022			<0.001015			0.00061 (J)	
10/25/2022						<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	0.000798 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.001015				<0.001015
2/6/2018			<0.001015				<0.001015
4/23/2018			<0.001015				
4/24/2018							<0.001015
6/27/2018			<0.001015				<0.001015
8/7/2018			<0.001015				<0.001015
10/22/2018			<0.001015				<0.001015
12/3/2018							<0.001015
12/4/2018			<0.001015				
2/5/2019			<0.001015				<0.001015
6/18/2019							<0.001015
8/20/2019			<0.001015				<0.001015
4/13/2020							<0.001015
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.001015		<0.001015		<0.001015		
8/25/2020	<0.001015		<0.001015		<0.001015		
8/26/2020		<0.001015		<0.001015			<0.001015
3/16/2021	<0.001015						
3/22/2021					<0.001015		<0.001015
3/23/2021		<0.001015		<0.001015			
3/24/2021			<0.001015				
3/30/2021						<0.001015	
10/5/2021							<0.001015
10/6/2021					<0.001015		
10/11/2021		<0.001015	<0.001015	<0.001015			
10/12/2021	<0.001015					<0.001015	
5/10/2022	<0.001015						<0.001015
5/16/2022		<0.001015	<0.001015		<0.001015	<0.001015	
5/17/2022				<0.001015			
10/25/2022			<0.001015		<0.001015	<0.001015	
10/26/2022	<0.001015	<0.001015		<0.001015			<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.001015	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.001015			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.001015			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.001015			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.001015			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.001015			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.001015			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
3/16/2021			<0.001015				
3/17/2021				<0.001015			
3/23/2021					<0.001015	<0.001015	<0.001015
3/24/2021	<0.001015	<0.001015					
10/5/2021	<0.001015		<0.001015	<0.001015	<0.001015		
10/11/2021		<0.001015					
10/12/2021						<0.001015	<0.001015
5/9/2022			<0.001015				
5/10/2022				<0.001015	<0.001015		
5/11/2022		<0.001015				<0.001015	<0.001015
5/16/2022	<0.001015						
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.001015	<0.001015		
7/18/2018	<0.001015		<0.001015	<0.001015		
8/7/2018	<0.001015					
8/8/2018			<0.001015	<0.001015		
9/5/2018	<0.001015		<0.001015	<0.001015		
9/24/2018	<0.001015		<0.001015	<0.001015		
10/22/2018	<0.001015					
10/23/2018			<0.001015	<0.001015		
12/3/2018	<0.001015		<0.001015	<0.001015		
2/5/2019	<0.001015					
2/7/2019			<0.001015	<0.001015		
8/20/2019	<0.001015					
8/21/2019			<0.001015	<0.001015		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.001015	<0.001015		
8/24/2020	<0.001015	<0.001015	<0.001015	<0.001015		
3/16/2021			<0.001015	<0.001015		
3/17/2021		<0.001015				
3/24/2021	<0.001015					
10/5/2021	<0.001015	<0.001015				
10/6/2021					<0.001015	
10/11/2021						<0.001015
10/12/2021			<0.001015	<0.001015		
5/9/2022	<0.001015	<0.001015				
5/10/2022			<0.001015	<0.001015		
5/17/2022					<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1.28	0.135	0.12	0.0605 (J)			
2/6/2018	1.29						
2/7/2018		0.12	0.109				
2/8/2018				0.0527 (J)			
4/23/2018	1.21						
4/24/2018		0.144	0.124	0.0476 (J)			
6/26/2018	1.25						
6/27/2018		0.0903 (J)	0.111	0.0539 (J)	<0.1015		
7/18/2018					<0.1015		
8/6/2018					<0.1015		
8/7/2018	1.21	0.106					
8/8/2018			0.135	0.0637 (J)			
9/5/2018					<0.1015		
9/24/2018					<0.1015		
10/22/2018	1.22	0.107					
10/23/2018			0.114	0.0696 (J)			
10/24/2018					<0.1015	0.0261 (J)	0.0357 (J)
11/14/2018						0.0209 (J)	0.0348 (J)
11/28/2018						0.0239 (J)	0.0313 (J)
12/4/2018	1.08	0.103	0.124				
12/5/2018				0.0652 (J)	<0.1015	<0.1015	0.0363 (J)
12/18/2018						<0.1015	0.033 (J)
1/3/2019						0.0209 (J)	0.036 (J)
1/24/2019						0.0271 (J)	0.0307 (J)
2/5/2019	1.2				<0.1015	0.0245 (J)	0.0306 (J)
2/6/2019		0.105	0.112	0.0511 (J)			
2/26/2019	1.15	0.146					
2/27/2019			0.14	0.0494 (J)			
2/28/2019					<0.1015	<0.1015	0.0206 (J)
6/24/2019						<0.1015	
8/19/2019						<0.1015	0.0341 (J)
8/20/2019					<0.1015		
8/21/2019	1.24						
8/22/2019		0.0951 (J)	0.272	0.0625 (J)			
4/14/2020			0.154	0.0377 (J)			
4/15/2020	1.13	0.164				<0.1015	
4/16/2020					<0.1015		0.0331 (J)
8/24/2020							0.0303 (J)
8/25/2020	1.11				<0.1015	<0.1015	
8/26/2020		0.108	0.257	0.0698 (J)			
3/16/2021	1.08						
3/22/2021					<0.1015	<0.1015	0.0333 (J)
3/23/2021		0.188	0.142	0.0452 (J)			
10/5/2021	1.02			0.0661 (J)			
10/6/2021						<0.1015	0.0305 (J)
10/11/2021		0.09 (J)					
10/12/2021			0.125		<0.1015		
5/9/2022					<0.1015		0.0347 (J)
5/10/2022	0.954	0.097 (J)		0.066 (J)			
5/17/2022			0.139			<0.1015	
10/25/2022						<0.1015	0.0308 (J)
10/26/2022	0.977	0.0868 (J)	0.306	0.0995 (J)	<0.1015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.758				0.959
2/6/2018			0.733				1.04
4/23/2018			0.608				
4/24/2018							0.979
6/27/2018			0.619				0.982
8/7/2018			0.697				1
10/22/2018			0.754				1.08
12/3/2018							1.05
12/4/2018			0.737				
2/5/2019			0.575				1.01
2/25/2019							1.08
2/26/2019			0.566				
6/18/2019							1.09
8/20/2019			0.566				1.06
4/13/2020							1.19
4/14/2020		0.448		0.308			
4/15/2020	0.124		0.461		0.587		
8/25/2020	0.105		0.528		0.552		
8/26/2020		0.39		0.308			1.16
3/16/2021	0.0545 (J)						
3/22/2021					0.537		1.13
3/23/2021		0.41		0.419			
3/24/2021			0.437				
3/30/2021						0.605	
10/5/2021							1.01
10/6/2021					0.54		
10/11/2021		0.328	0.459	0.504			
10/12/2021	0.0717 (J)					0.617	
5/10/2022	0.0883 (J)						0.998
5/16/2022		0.336	0.381		0.556	0.622	
5/17/2022				0.632			
10/25/2022			0.5		0.555	0.628	
10/26/2022	0.0784 (J)	0.327		0.584			0.85

Time Series

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.515		0.566	0.063 (J)	0.102	0.0828 (J)	0.0614 (J)
2/6/2018	0.541		0.614				
2/8/2018				0.0508 (J)	0.0787 (J)	0.0691 (J)	0.0531 (J)
4/24/2018	0.475						
4/25/2018			0.498	0.0548 (J)	0.0734 (J)	0.0571 (J)	0.0551 (J)
6/26/2018	0.444			0.0571 (J)	0.094 (J)	0.0634 (J)	0.0568 (J)
6/27/2018			0.446				
8/6/2018	0.474						
8/7/2018			0.442	0.0571 (J)			
8/8/2018					0.103	0.0659 (J)	0.0524 (J)
10/22/2018	0.496						
10/23/2018			0.436	0.0636 (J)	0.106	0.0666 (J)	0.0576 (J)
12/3/2018	0.51			0.0568 (J)			
12/4/2018					0.085 (J)	0.0617 (J)	
12/5/2018			0.456				0.0561 (J)
2/5/2019	0.43		0.453	0.0509 (J)			
2/6/2019					0.0733 (J)	0.0586 (J)	0.0627 (J)
2/26/2019	0.411			0.0527 (J)			
2/27/2019			0.457		0.0548 (J)	0.0428 (J)	0.0474 (J)
8/20/2019	0.399		0.378	0.0608 (J)			
8/21/2019					0.091 (J)	0.0569 (J)	0.0524 (J)
4/13/2020			0.359	0.0561 (J)			
4/14/2020						0.0474 (J)	0.0562 (J)
4/15/2020	0.344	0.0634 (J)			0.0534 (J)		
8/24/2020			0.329				
8/26/2020	0.398	0.0611 (J)		0.0633 (J)	0.0665 (J)	0.0501 (J)	0.0565 (J)
3/16/2021			0.328				
3/17/2021				0.0563 (J)			
3/23/2021					0.0587 (J)	0.0476 (J)	0.0609 (J)
3/24/2021	0.326	0.0618 (J)					
10/5/2021	0.344		0.26	0.0649 (J)	0.0673 (J)		
10/11/2021		0.0596 (J)					
10/12/2021						0.0462 (J)	0.0632 (J)
5/9/2022			0.261				
5/10/2022				0.0681 (J)	0.0465 (J)		
5/11/2022		0.062 (J)				0.037 (J)	0.0636 (J)
5/16/2022	0.342						
10/26/2022	0.371	0.0618 (J)	0.23	0.0788 (J)	0.0839 (J)	0.0526 (J)	0.0595 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.1015		<0.1015	<0.1015		
7/18/2018	<0.1015		<0.1015	<0.1015		
8/7/2018	<0.1015					
8/8/2018			<0.1015	<0.1015		
9/5/2018	<0.1015		<0.1015	<0.1015		
9/24/2018	<0.1015		<0.1015	<0.1015		
10/22/2018	<0.1015					
10/23/2018			<0.1015	<0.1015		
12/3/2018	<0.1015		<0.1015	<0.1015		
2/5/2019	<0.1015					
2/7/2019			<0.1015	<0.1015		
2/25/2019	<0.1015		<0.1015	<0.1015		
8/20/2019	<0.1015					
8/21/2019			<0.1015	<0.1015		
4/13/2020	<0.1015	<0.1015				
4/15/2020			<0.1015	<0.1015		
8/24/2020	<0.1015	<0.1015	<0.1015	<0.1015		
3/16/2021			<0.1015	<0.1015		
3/17/2021		<0.1015				
3/24/2021	<0.1015					
10/5/2021	<0.1015	<0.1015				
10/6/2021					0.532	
10/11/2021						0.378
10/12/2021			<0.1015	<0.1015		
5/9/2022	<0.1015	<0.1015				
5/10/2022			<0.1015	<0.1015		
5/17/2022					0.548	0.385
10/26/2022	<0.1015	<0.1015	<0.1015	<0.1015	0.559	0.4

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001	<0.000203	<0.000203	0.000596 (J)			
2/6/2018	<0.001						
2/7/2018		<0.000203	<0.000203				
2/8/2018				0.00064 (J)			
4/23/2018	<0.001						
4/24/2018		<0.000203	<0.000203	0.000702 (J)			
6/26/2018	<0.001						
6/27/2018		<0.000203	<0.000203	0.000732 (J)	0.00064 (J)		
7/18/2018					0.000679 (J)		
8/6/2018					0.000536 (J)		
8/7/2018	<0.001	<0.000203					
8/8/2018			<0.000203	0.000587 (J)			
9/5/2018					0.000479 (J)		
9/24/2018					0.00039 (J)		
10/22/2018	<0.001	<0.000203					
10/23/2018			<0.000203	0.000552 (J)			
10/24/2018					0.000436 (J)	0.000307 (J)	<0.0002
11/14/2018						0.000417 (J)	<0.0002
11/28/2018						0.000387 (J)	<0.0002
12/4/2018	<0.001	<0.000203	<0.000203				
12/5/2018				0.000661 (J)	0.000307 (J)	0.000317 (J)	<0.0002
12/18/2018						0.000438 (J)	<0.0002
1/3/2019						0.000703 (J)	<0.0002
1/24/2019						0.000736 (J)	<0.0002
2/5/2019	<0.001				0.000515 (J)	0.00101	<0.0002
2/6/2019		<0.000203	<0.000203	0.000583 (J)			
6/24/2019						0.000686 (J)	
8/19/2019						0.000499 (J)	<0.0002
8/20/2019					0.000622 (J)		
8/21/2019	<0.001						
8/22/2019		<0.000203	<0.000203	0.000755 (J)			
4/14/2020			<0.000203	0.000425 (J)			
4/15/2020	<0.001	<0.000203				0.000697 (J)	
4/16/2020					0.00101		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.001				0.000584 (J)	0.000507 (J)	
8/26/2020		<0.000203	<0.000203	0.000618 (J)			
3/16/2021	0.000102 (J)						
3/22/2021					0.000407	0.000852	<0.0002
3/23/2021		<0.000203	<0.000203	0.000405			
10/5/2021	0.0001 (J)			0.00037			
10/6/2021						0.00068	<0.0002
10/11/2021		<0.000203					
10/12/2021			<0.000203		0.00059		
5/9/2022					0.00063		<0.0002
5/10/2022	0.00022	<0.000203		0.00033			
5/17/2022			<0.000203			0.00108	
10/25/2022						0.000203 (J)	0.000132 (J)
10/26/2022	0.00013 (J)	<0.000203	<0.000203	0.000299	0.000245		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.000203				<0.001
2/6/2018			<0.000203				<0.001
4/23/2018			<0.000203				
4/24/2018							<0.001
6/27/2018			<0.000203				<0.001
8/7/2018			<0.000203				<0.001
10/22/2018			<0.000203				<0.001
12/3/2018							<0.001
12/4/2018			<0.000203				
2/5/2019			<0.000203				<0.001
6/18/2019							<0.001
8/20/2019			<0.000203				<0.001
4/13/2020							0.000438 (J)
4/14/2020		<0.000203		<0.000203			
4/15/2020	<0.000203		<0.000203		<0.000203		
8/25/2020	<0.000203		<0.000203		<0.000203		
8/26/2020		<0.000203		<0.000203			<0.001
3/16/2021	<0.000203						
3/22/2021					<0.000203		0.00039
3/23/2021		<0.000203		<0.000203			
3/24/2021			6.88E-05 (J)				
3/30/2021						<0.000203	
10/5/2021							0.00021
10/6/2021					<0.000203		
10/11/2021		0.00012 (J)	<0.000203	<0.000203			
10/12/2021	<0.000203					<0.000203	
5/10/2022	<0.000203						0.00035
5/16/2022		0.00015 (J)	<0.000203		<0.000203	<0.000203	
5/17/2022				<0.000203			
10/25/2022			<0.000203		<0.000203	<0.000203	
10/26/2022	<0.000203	<0.000203		<0.000203			0.000147 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/6/2018	<0.000203		<0.000203				
2/8/2018				<0.000203	<0.000203	<0.000203	<0.000203
4/24/2018	<0.000203						
4/25/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/26/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
6/27/2018			<0.000203				
8/6/2018	<0.000203						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	<0.000203	<0.000203
10/22/2018	<0.000203						
10/23/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018	<0.000203			<0.000203			
12/4/2018					<0.000203	<0.000203	
12/5/2018			<0.000203				<0.000203
2/5/2019	<0.000203		<0.000203	<0.000203			
2/6/2019					<0.000203	<0.000203	<0.000203
8/20/2019	<0.000203		<0.000203	<0.000203			
8/21/2019					<0.000203	<0.000203	<0.000203
4/13/2020			<0.000203	<0.000203			
4/14/2020						<0.000203	<0.000203
4/15/2020	<0.000203	<0.000203			<0.000203		
8/24/2020			<0.000203				
8/26/2020	<0.000203	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203
3/16/2021			<0.000203				
3/17/2021				<0.000203			
3/23/2021					9.7E-05 (J)	8.32E-05 (J)	<0.000203
3/24/2021	<0.000203	<0.000203					
10/5/2021	<0.000203		<0.000203	<0.000203	<0.000203		
10/11/2021		<0.000203					
10/12/2021						<0.000203	<0.000203
5/9/2022			<0.000203				
5/10/2022				<0.000203	<0.000203		
5/11/2022		<0.000203				7E-05 (J)	<0.000203
5/16/2022	<0.000203						
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		0.000304 (J)	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.000203				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.000203	<0.000203	<0.000203		
3/16/2021			<0.000203	<0.000203		
3/17/2021		<0.000203				
3/24/2021	<0.000203					
10/5/2021	<0.000203	<0.000203				
10/6/2021					<0.000203	
10/11/2021						<0.000203
10/12/2021			8E-05 (J)	<0.000203		
5/9/2022	<0.000203	<0.000203				
5/10/2022			<0.000203	<0.000203		
5/17/2022					<0.000203	<0.000203
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	271	42	70	49			
2/6/2018	275						
2/7/2018		47.6	72.4				
2/8/2018				50			
4/23/2018	269						
4/24/2018		50.1	72.3	50.5			
6/26/2018	268						
6/27/2018		37.1	73.1	56.3	16.6		
7/18/2018					15.3		
8/6/2018					13.8		
8/7/2018	259	37.4					
8/8/2018			76	65.7			
9/5/2018					12.1		
9/24/2018					11.8		
10/22/2018	240	36.3					
10/23/2018			70.2	68.3			
10/24/2018					10.2	18	28.3
11/14/2018						14.9	27.5
11/28/2018						14.8	20.7
12/4/2018	254	42.1	74				
12/5/2018				64.3	9.14	14.8	25.3
12/18/2018						16.4	20.9
1/3/2019						19.7	18.5
1/24/2019						19.6	17
2/5/2019	292				15.1	20.8	17.1
2/6/2019		41.3	73.1	52.2			
2/26/2019	254	53.3					
2/27/2019			82.2	60.2			
2/28/2019					21.4	21.5	18.6
6/24/2019						18.4	
8/19/2019						12.8	25.3
8/20/2019					14.4		
8/21/2019	272						
8/22/2019		38.5	133	89.4			
4/14/2020			82.4	40			
4/15/2020	231	54.1				13.1	
4/16/2020					20.1		30.7
8/24/2020							30.8
8/25/2020	218				13.1	12.2	
8/26/2020		37.8	111	68.4			
3/16/2021	218						
3/22/2021					12.2	18.4	31
3/23/2021		57	75.9	42			
10/5/2021	198			55.8			
10/6/2021						13.4	31
10/11/2021		38.2					
10/12/2021			78.6		11.8		
5/9/2022					14.5		28.4
5/10/2022	166	42.2		48.2			
5/17/2022			80.6			19.7	
10/25/2022						8.46	30.700001
10/26/2022	200	39.5	129	60.200001	8.97		

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			128				125
2/6/2018			130				110
4/23/2018			95.9				
4/24/2018							88.8
6/27/2018			99.4				80.8
8/7/2018			107				88.5
10/22/2018			107				92.7
12/3/2018							105
12/4/2018			120				
2/5/2019			80.6				68.6
2/25/2019							70.6
2/26/2019			79.6				
6/18/2019							80.5
8/20/2019			92.3				74.1
4/13/2020							69.5
4/14/2020		32.9		51.5			
4/15/2020	19.1		69.2		5		
8/25/2020	14.9		80.5		4.97		
8/26/2020		39.3		47.6			75.7
3/16/2021	5.77						
3/22/2021					5.71		64.9
3/23/2021		31.7		57.6			
3/24/2021			61.5				
3/30/2021						3.71	
10/5/2021							65.9
10/6/2021					5.38		
10/11/2021		40	87.1	63.4			
10/12/2021	10.3					3.96	
5/10/2022	12.4						58.5
5/16/2022		26.9	58.2		5.22	3.81	
5/17/2022				74.7			
10/25/2022			86.900002		5.52	4.99	
10/26/2022	10	51.599998		76.300003			55.299999

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	30.1		48.2	29.8	23.4	66.1	38.7
2/6/2018	30.6		47.8				
2/8/2018				24.3	20.1	58	38.8
4/24/2018	27.8						
4/25/2018			41.8	19.8	17.4	56.3	40.3
6/26/2018	26.2			17.8	21.8	57.7	39.9
6/27/2018			36.9				
8/6/2018	27.5						
8/7/2018			37.6	18.3			
8/8/2018					25.4	51.2	42.3
10/22/2018	27.7						
10/23/2018			35.3	18.1	25.6	50.9	39.8
12/3/2018	32.3			16.6			
12/4/2018					19	51.9	
12/5/2018			36.3				43.8
2/5/2019	25.5		36.6	14.5			
2/6/2019					16.4	55	34.9
2/26/2019	26.4			16			
2/27/2019			39.6		15.6	53.4	42.5
8/20/2019	23.5		33.7	15.1			
8/21/2019					23.5	71.5	50.9
4/13/2020			43	12.5			
4/14/2020						56.2	43.6
4/15/2020	22	23.9			14		
8/24/2020			35.5				
8/26/2020	22.8	23.5		12.9	16.7	55.5	43.2
3/16/2021			38.1				
3/17/2021				11.3			
3/23/2021					12.5	48.9	38.1
3/24/2021	23.1	22.9					
10/5/2021	27.4		36	11.4	15.9		
10/11/2021		23					
10/12/2021						66.3	35.4
5/9/2022			38.4				
5/10/2022				10.8	9.95		
5/11/2022		22.6				61.9	36.9
5/16/2022	30.7						
10/26/2022	33.599998	23	39.599998	12.2	21.4	63.700001	47.700001

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:36 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	39.4		4.56	3.89		
7/18/2018	38.4		3.92	3.8		
8/7/2018	36.7					
8/8/2018			3.74	3.89		
9/5/2018	43.6		3.38	3.78		
9/24/2018	44.5		3.25	3.73		
10/22/2018	45					
10/23/2018			3.37	3.79		
12/3/2018	33.7		3.67	3.79		
2/5/2019	30.1					
2/7/2019			2.89	3.75		
2/25/2019	25.6		2.95	3.81		
8/20/2019	38.3					
8/21/2019			3.04	3.71		
4/13/2020	25.9	16.1				
4/15/2020			2.93	3.56		
8/24/2020	29	24.8	2.94	3.45		
3/16/2021			2.9	3.44		
3/17/2021		5.21				
3/24/2021	22.2					
10/5/2021	25.4	17.6				
10/6/2021					3.46	
10/11/2021						9.35
10/12/2021			2.94	3.29		
5/9/2022	18.9	7.02				
5/10/2022			2.87	3.24		
5/17/2022					3.3	9.99
10/26/2022	23.1	27.5	3.09	3.42	3.6	9.75

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.2	6.9	6.3	6.2			
2/6/2018	5.9						
2/7/2018		6.1	5.4				
2/8/2018				6.1			
4/23/2018	5.9						
4/24/2018		6.9	5.7	5.9			
6/26/2018	5.7						
6/27/2018		5.6	5.4	5.5	3.1		
7/18/2018					3.4		
8/6/2018					2.8		
8/7/2018	5.3	5.1					
8/8/2018			5.2	5.3			
9/5/2018					2.8		
9/24/2018					3.1		
10/22/2018	5.6	5.5					
10/23/2018			5.4	5.8			
10/24/2018					2.8	3.3	4
11/14/2018						3.6	3.6
11/28/2018						3.5	3.5
12/4/2018	5.8	5.6	5.3				
12/5/2018				6	2.2	3.3	3.2
12/18/2018						3.6	3.4
1/3/2019						3.4	3.2
1/24/2019						3.91	3.15
2/5/2019	5.8				3.12	3.94	2.98
2/6/2019		6.24	5.89	5.95			
2/26/2019	5.92	8.28					
2/27/2019			6.2	5.88			
2/28/2019					3.45	4.15	3.05
6/24/2019						3.36 (D)	
8/19/2019						3.42	2.8
8/20/2019					3.27		
8/21/2019	5.26						
8/22/2019		5.66	4.64	6.31			
4/14/2020			5.46	5.74			
4/15/2020	5.5	6.49				3.39	
4/16/2020					3.74		2.93
8/24/2020							2.82
8/25/2020	5.59				3.03	2.94	
8/26/2020		5.39	4.74	5.91			
3/16/2021	6.2						
3/22/2021					3.15	3.61	2.94
3/23/2021		7.14	5.54	6.3			
10/5/2021	6.1			6.26			
10/6/2021						3.17	2.98
10/11/2021		5.72					
10/12/2021			5.8		2.87		
5/9/2022					3		3.01
5/10/2022	5.97	5.72		5.64			
5/17/2022			5.92			3.58	
10/25/2022						3.24	2.88
10/26/2022	6.02	5.87	4.98	5.76	2.56		

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			4.1				7.6
2/6/2018			3.1				7.6
4/23/2018			3.7				
4/24/2018							7.5
6/27/2018			2.2				7.3
8/7/2018			2.6				7.6
10/22/2018			2.8				6.9
12/3/2018							6.8
12/4/2018			4.1				
2/5/2019			2.56				6.95
2/25/2019							6.55
2/26/2019			3.03				
6/18/2019							6.62
8/20/2019			2.24				6.07
4/13/2020							5.95
4/14/2020		7.35		6.64			
4/15/2020	6		2.16		6.47		
8/25/2020	5.79		2		6.4		
8/26/2020		7.03		6.73			5.89
3/16/2021	3.85						
3/22/2021					6.65		5.26
3/23/2021		7.11		6.33			
3/24/2021			2.29				
3/30/2021						32	
10/5/2021							5.09
10/6/2021					6.82		
10/11/2021		7.04	2.43	6.37			
10/12/2021	4.59					38	
5/10/2022	6.38						4.59
5/16/2022		7.23	2.18		6.86	43.4	
5/17/2022				6.22			
10/25/2022			2.45		6.86	49	
10/26/2022	5.44	7.04		5.91			4.38

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	8.5		8.7	10	7.9	5.2	7
2/6/2018	8.8		8.5				
2/8/2018				9.5	6.7	4.1	
2/12/2018							6.6
4/24/2018	8.4						
4/25/2018			7.6	9.1	7	5.3	7.1
6/26/2018	8.7			9.5	7.4	5	6.4
6/27/2018			7.1				
8/6/2018	11						
8/7/2018			6.9	9			
8/8/2018					7.7	4.8	5.5
10/22/2018	8.6						
10/23/2018			6.7	9.9	8	4.4	6.7
12/3/2018	9.1			8.7			
12/4/2018					6.7	4.2	
12/5/2018			6.7				5.9
2/5/2019	9.81		7.24	8.73			
2/6/2019					6.84	5.84	7.26
2/26/2019	13			8.66			
2/27/2019			7.38		6.21	6.52	6.77
8/20/2019	9.62		6.53	9.55			
8/21/2019					7.35	5.89	6.16
4/13/2020			6.48	8.6			
4/14/2020						5.21	7.27
4/15/2020	9.27	5.16			4.99		
8/24/2020			6.64				
8/26/2020	8.96	5.37		9.21	6.19	5.16	6.57
3/16/2021			7.14				
3/17/2021				8.59			
3/23/2021					4.87	5.3	7.42
3/24/2021	8.61	5.55					
10/5/2021	9.3		6.78	9.09	6.43		
10/11/2021		5.65					
10/12/2021						5.6	7.78
5/9/2022			6.81				
5/10/2022				8.87	3.96		
5/11/2022		5.48				5.13	7.2
5/16/2022	8.07						
10/26/2022	7.88	5.53	6.4	9.4	7.09	5.72	6.99

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	3.6		4.2	4.1		
7/18/2018	3.8		4.1	4.3		
8/7/2018	3.3					
8/8/2018			3.3	3.8		
9/5/2018	3.4		3.7	3.9		
9/24/2018	3.8		3.9	4.2		
10/22/2018	3.3					
10/23/2018			4	4.1		
12/3/2018	3.2		3.6	3.8		
2/5/2019	3.78					
2/7/2019			3.72	4.15		
2/25/2019	3.66		3.95	4.2		
8/20/2019	3.52					
8/21/2019			3.85	4		
4/13/2020	3.36	5.42				
4/15/2020			3.83	3.71		
8/24/2020	3.35	5.46	3.96	3.59		
3/16/2021			3.98	3.66		
3/17/2021		5.53				
3/24/2021	3.45					
10/5/2021	3.23	5.79				
10/6/2021					166	
10/11/2021						1.72
10/12/2021			4.07	3.68		
5/9/2022	3.46	5.51				
5/10/2022			4.12	3.68		
5/17/2022					188	1.69
10/26/2022	3.39	5.09	4.03	3.5	181	1.56

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.01	<0.01	<0.01	<0.01			
2/6/2018	<0.01						
2/7/2018		<0.01	<0.01				
2/8/2018				<0.01			
4/23/2018	<0.01						
4/24/2018		<0.01	<0.01	<0.01			
6/26/2018	<0.01						
6/27/2018		<0.01	<0.01	<0.01	<0.01		
7/18/2018					<0.01		
8/6/2018					<0.01		
8/7/2018	<0.01	<0.01					
8/8/2018			<0.01	<0.01			
9/5/2018					<0.01		
9/24/2018					<0.01		
10/22/2018	<0.01	<0.01					
10/23/2018			<0.01	<0.01			
10/24/2018					<0.01	<0.01	<0.01
11/14/2018						<0.01	<0.01
11/28/2018						<0.01	<0.01
12/4/2018	<0.01	<0.01	<0.01				
12/5/2018				<0.01	<0.01	<0.01	<0.01
12/18/2018						<0.01	<0.01
1/3/2019						<0.01	<0.01
1/24/2019						<0.01	<0.01
2/5/2019	<0.01				<0.01	<0.01	<0.01
2/6/2019		<0.01	<0.01	<0.01			
6/24/2019						0.00325 (J)	
8/19/2019						<0.01	<0.01
8/20/2019					<0.01		
8/21/2019	<0.01						
8/22/2019		<0.01	<0.01	<0.01			
4/14/2020			<0.01	<0.01			
4/15/2020	<0.01	<0.01				<0.01	
4/16/2020					<0.01		0.00267 (J)
8/24/2020							<0.01
8/25/2020	<0.01				<0.01	<0.01	
8/26/2020		<0.01	<0.01	<0.01			
3/16/2021	0.000376 (J)						
3/22/2021					0.000771 (J)	0.000546 (J)	0.000509 (J)
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)			
10/5/2021	0.00023 (J)			0.00034 (J)			
10/6/2021						0.00046 (J)	0.00027 (J)
10/11/2021		0.00028 (J)					
10/12/2021			0.00027 (J)		0.00059 (J)		
5/9/2022					0.00087 (J)		0.00026 (J)
5/10/2022	0.00025 (J)	0.0003 (J)		0.00041 (J)			
5/17/2022			0.00038 (J)			0.00059 (J)	
10/25/2022						0.000275 (J)	0.000357 (J)
10/26/2022	0.000321 (J)	0.000207 (J)	0.000318 (J)	0.000276 (J)	0.000428 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.01				<0.01
2/6/2018			<0.01				<0.01
4/23/2018			<0.01				
4/24/2018							<0.01
6/27/2018			<0.01				<0.01
8/7/2018			<0.01				<0.01
10/22/2018			<0.01				<0.01
12/3/2018							<0.01
12/4/2018			<0.01				
2/5/2019			<0.01				<0.01
6/18/2019							0.00285 (J)
8/20/2019			<0.01				<0.01
4/13/2020							<0.01
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.001015		<0.01		<0.001015		
8/25/2020	<0.001015		<0.01		<0.001015		
8/26/2020		<0.001015		<0.001015			<0.01
3/16/2021	0.000363 (J)						
3/22/2021					0.000433 (J)		0.000293 (J)
3/23/2021		0.000404 (J)		0.000417 (J)			
3/24/2021			0.00047 (J)				
3/30/2021						0.00112	
10/5/2021							0.00023 (J)
10/6/2021					0.00025 (J)		
10/11/2021		0.00048 (J)	0.00048 (J)	0.00025 (J)			
10/12/2021	0.00021 (J)					0.00035 (J)	
5/10/2022	0.00025 (J)						0.00029 (J)
5/16/2022		0.00028 (J)	0.00034 (J)		0.00029 (J)	0.00026 (J)	
5/17/2022				0.00021 (J)			
10/25/2022			0.00022 (J)		<0.001015	<0.001015	
10/26/2022	<0.001015	<0.001015		<0.001015			0.000276 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.00102	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.00102	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.00102	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.00102	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.00102			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.00102	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.00102			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.00102			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.00102			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.00102			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.01			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.01		<0.00102	<0.001015	<0.001015	<0.001015
3/16/2021			0.000397 (J)				
3/17/2021				0.000338 (J)			
3/23/2021					0.000406 (J)	0.0003 (J)	0.000422 (J)
3/24/2021	0.000323 (J)	0.000402 (J)					
10/5/2021	<0.001015		0.00028 (J)	0.00025 (J)	0.00025 (J)		
10/11/2021		0.00031 (J)					
10/12/2021						<0.001015	0.00031 (J)
5/9/2022			0.00053 (J)				
5/10/2022				<0.00102	0.00025 (J)		
5/11/2022		0.00024 (J)				0.00022 (J)	0.00021 (J)
5/16/2022	0.00023 (J)						
10/26/2022	<0.001015	0.000214 (J)	<0.001015	0.000222 (J)	<0.001015	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.01	<0.01		
7/18/2018	<0.001015		<0.01	<0.01		
8/7/2018	<0.001015					
8/8/2018			<0.01	<0.01		
9/5/2018	<0.001015		<0.01	<0.01		
9/24/2018	<0.001015		<0.01	<0.01		
10/22/2018	<0.001015					
10/23/2018			<0.01	<0.01		
12/3/2018	<0.001015		<0.01	<0.01		
2/5/2019	<0.001015					
2/7/2019			<0.01	<0.01		
8/20/2019	<0.001015					
8/21/2019			<0.01	<0.01		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.01	<0.01		
8/24/2020	<0.001015	<0.001015	<0.01	<0.01		
3/16/2021			0.000534 (J)	0.000534 (J)		
3/17/2021		0.000764 (J)				
3/24/2021	0.000442 (J)					
10/5/2021	0.00035 (J)	0.00035 (J)				
10/6/2021					0.00111	
10/11/2021						0.00041 (J)
10/12/2021			0.00034 (J)	0.00031 (J)		
5/9/2022	0.00027 (J)	0.00062 (J)				
5/10/2022			0.00037 (J)	0.00037 (J)		
5/17/2022					0.00104	0.00032 (J)
10/26/2022	<0.001015	<0.001015	0.000251 (J)	0.000224 (J)	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00818 (J)	<0.005	<0.005	0.00221 (J)			
2/6/2018	0.0123						
2/7/2018		<0.005	<0.005				
2/8/2018				0.00221 (J)			
4/23/2018	0.0204						
4/24/2018		<0.005	<0.005	0.00257 (J)			
6/26/2018	0.0224						
6/27/2018		<0.005	<0.005	0.00266 (J)	0.0382		
7/18/2018					0.0366		
8/6/2018					0.0308		
8/7/2018	0.0193	<0.005					
8/8/2018			<0.005	0.00251 (J)			
9/5/2018					0.0291		
9/24/2018					0.0286		
10/22/2018	0.0243	<0.005					
10/23/2018			<0.005	0.00399 (J)			
10/24/2018					0.0269	0.0129	<0.005
11/14/2018						0.0114	<0.005
11/28/2018						0.0168	<0.005
12/4/2018	0.0166	<0.005	<0.005				
12/5/2018				0.00466 (J)	0.0215	0.0161	<0.005
12/18/2018						0.0234	<0.005
1/3/2019						0.038	<0.005
1/24/2019						0.04	<0.005
2/5/2019	0.0264				0.0359	0.0538	<0.005
2/6/2019		<0.005	<0.005	0.00485 (J)			
6/24/2019						0.041	
8/19/2019						0.0247	<0.005
8/20/2019					0.0391		
8/21/2019	0.0242						
8/22/2019		<0.005	0.00756	0.00658			
4/14/2020			<0.005	0.0035 (J)			
4/15/2020	0.0178	<0.005				0.0373	
4/16/2020					0.056		<0.005
8/24/2020							<0.005
8/25/2020	0.0193				0.0365	0.0294	
8/26/2020		<0.005	0.00599	0.00547			
3/16/2021	0.0184						
3/22/2021					0.0262	0.0469	0.000133 (J)
3/23/2021		0.00037	0.000388	0.00378			
10/5/2021	0.0169			0.00448			
10/6/2021						0.0321	0.00013 (J)
10/11/2021		0.00089					
10/12/2021			0.00027		0.0291		
5/9/2022					0.0416		0.00011 (J)
5/10/2022	0.0136	0.00091		0.0049			
5/17/2022			0.00044			0.0563	
10/25/2022						0.013	0.000311
10/26/2022	0.0152	0.000907	0.009	0.00603	0.0201		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.0246				0.0302
2/6/2018			0.0243				0.0371
4/23/2018			0.0258				
4/24/2018							0.0251
6/27/2018			0.0362				0.0234
8/7/2018			0.0332				0.0223
10/22/2018			0.0438				0.03
12/3/2018							0.0238
12/4/2018			0.0252				
2/5/2019			0.0362				0.0232
6/18/2019							0.0263
8/20/2019			0.0366				0.0257
4/13/2020							0.0209
4/14/2020		0.00886		0.0122			
4/15/2020	<0.005		0.0324		<0.0002		
8/25/2020	<0.005		0.0298		<0.0002		
8/26/2020		0.0101		0.0104			0.0191
3/16/2021	0.000577						
3/22/2021					<0.0002		0.0183
3/23/2021		0.00674		0.0125			
3/24/2021			0.0316				
3/30/2021						0.000116 (J)	
10/5/2021							0.016
10/6/2021					<0.0002		
10/11/2021		0.00579	0.0165	0.00995			
10/12/2021	0.00062					<0.0002	
5/10/2022	0.0003						0.0147
5/16/2022		0.00485	0.0366		<0.0002	<0.0002	
5/17/2022				0.0102			
10/25/2022			0.0302		<0.0002	<0.0002	
10/26/2022	0.000452	0.00294		0.00924			0.0132

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.0252		0.00331 (J)	0.00592 (J)	<0.005	0.00212 (J)	<0.005
2/6/2018	0.0243		0.00323 (J)				
2/8/2018				0.00297 (J)	<0.005	<0.005	<0.005
4/24/2018	0.027						
4/25/2018			0.00258 (J)	<0.005	<0.005	0.00204 (J)	<0.005
6/26/2018	0.0242			<0.005	<0.005	<0.005	<0.005
6/27/2018			0.00218 (J)				
8/6/2018	0.0205						
8/7/2018			<0.005	<0.005			
8/8/2018					<0.005	<0.005	<0.005
10/22/2018	0.0259						
10/23/2018			0.0023 (J)	<0.005	<0.005	<0.005	<0.005
12/3/2018	0.0228			<0.005			
12/4/2018					<0.005	<0.005	
12/5/2018			0.00233 (J)				<0.005
2/5/2019	0.0263		0.0021 (J)	<0.005			
2/6/2019					<0.005	0.00232 (J)	<0.005
8/20/2019	0.0293		0.00223 (J)	<0.005			
8/21/2019					<0.005	0.00303 (J)	<0.005
4/13/2020			<0.005	<0.005			
4/14/2020						0.00385 (J)	<0.005
4/15/2020	0.0252	<0.0002			<0.005		
8/24/2020			0.00222 (J)				
8/26/2020	0.0231	<0.0002		<0.005	<0.005	0.00388 (J)	<0.005
3/16/2021			0.00136				
3/17/2021				0.00102			
3/23/2021					0.00102	0.003	0.00103
3/24/2021	0.0268	8.16E-05 (J)					
10/5/2021	0.0238		0.00116	0.00104	0.00018 (J)		
10/11/2021		<0.0002					
10/12/2021						0.00298	0.00113
5/9/2022			0.00101				
5/10/2022				0.00114	0.0004		
5/11/2022		<0.0002				0.00461	0.00091
5/16/2022	0.0289						
10/26/2022	0.0289	<0.0002	0.000936	0.0012	0.00016 (J)	0.00266	0.000812

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.0002		0.00341 (J)	<0.005		
7/18/2018	<0.0002		0.00341 (J)	<0.005		
8/7/2018	<0.0002					
8/8/2018			0.00221 (J)	<0.005		
9/5/2018	<0.0002		0.00202 (J)	<0.005		
9/24/2018	<0.0002		<0.0002	<0.005		
10/22/2018	<0.0002					
10/23/2018			<0.0002	<0.005		
12/3/2018	<0.0002		0.00227 (J)	<0.005		
2/5/2019	<0.0002					
2/7/2019			<0.0002	<0.005		
8/20/2019	<0.0002					
8/21/2019			0.00225 (J)	<0.005		
4/13/2020	<0.0002	0.00489 (J)				
4/15/2020			<0.0002	<0.005		
8/24/2020	<0.0002	0.00237 (J)	<0.0002	<0.005		
3/16/2021			0.000384	0.000108 (J)		
3/17/2021		0.00616				
3/24/2021	<0.0002					
10/5/2021	0.00044	0.00287				
10/6/2021					0.00021	
10/11/2021						<0.0002
10/12/2021			8E-05 (J)	0.00014 (J)		
5/9/2022	0.00014 (J)	0.00691				
5/10/2022			0.00015 (J)	0.00012 (J)		
5/17/2022					0.00019 (J)	8E-05 (J)
10/26/2022	<0.0002	0.0021	<0.0002	7.8E-05 (J)	<0.0002	<0.0002

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.694	0.585	0.891	0.435 (U)			
2/6/2018	0.641						
2/7/2018		0.474	0.786				
2/8/2018				0.477			
4/23/2018	-0.0527 (U)						
4/24/2018		0.463 (U)	0.935	0.695			
6/26/2018	0.162 (U)						
6/27/2018		0.678	0.537	0.183 (U)	0.616		
7/18/2018					0.859		
8/6/2018					0.654		
8/7/2018	0.87	0.495 (U)					
8/8/2018			1.28	0.817			
9/5/2018					0.855		
9/24/2018					0.787		
10/22/2018	0.691	0.36 (U)					
10/23/2018			1.3	0.796			
10/24/2018					1.14	0.564	0.694
11/14/2018						-0.0027 (U)	0.398 (U)
11/28/2018						0.222 (U)	0.428 (U)
12/4/2018	0.213 (U)	0.407 (U)	1.05				
12/5/2018				0.498 (U)	0.64	0.288 (U)	0.302 (U)
2/5/2019	0.637				0.873	0.431 (U)	0.307 (U)
2/6/2019		0.537	0.779	-0.0241 (U)			
8/19/2019						0.377 (U)	0.683
8/20/2019					0.774		
8/21/2019	0.643 (U)						
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)			
4/14/2020			0.922 (U)	0.643 (U)			
4/15/2020	0.538 (U)	0.64 (U)				0.449 (U)	
4/16/2020					0.865		0.603
8/24/2020							0.404 (U)
8/25/2020	0.502 (U)				0.976	0.851	
8/26/2020		0.221 (U)	1.28	1.31			
3/16/2021	0.722 (U)						
3/22/2021					1.04	0.942 (U)	0.497 (U)
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)			
10/5/2021	1.21			1.48			
10/6/2021						1.16 (U)	2.01
10/11/2021		6.52					
10/12/2021			1.02 (U)		1.61		
5/9/2022					1.31		0.56 (U)
5/10/2022	0.761 (U)	0.421 (U)		0.531 (U)			
5/17/2022			1.01 (U)			1.01	
10/25/2022						0.406 (U)	0.776 (U)
10/26/2022	0.38 (U)	0.42 (U)	0.505 (U)	0.446 (U)	0.457 (U)		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.772				0.643
2/6/2018			0.679				0.209 (U)
4/23/2018			0.447 (U)				
4/24/2018							0.596
6/27/2018			0.117 (U)				0.363 (U)
8/7/2018			1.22				0.788
10/22/2018			0.996				0.749
12/3/2018							0.749
12/4/2018			0.739				
2/5/2019			1.09				0.299 (U)
8/20/2019			0.553 (U)				0.709 (U)
4/13/2020							0.942 (U)
4/14/2020		42.6		0.0962 (U)			
4/15/2020	0.419 (U)		0.182 (U)		0.231 (U)		
6/1/2020		0.215 (U)					
8/25/2020	1.45		0.43 (U)		0.807		
8/26/2020		0.265 (U)		0.413 (U)			0.177 (U)
3/16/2021	0.405 (U)						
3/22/2021					0.58 (U)		0.263 (U)
3/23/2021		0.562 (U)		0.847 (U)			
3/24/2021			0.769 (U)				
3/30/2021						0.185 (U)	
10/5/2021							3.21
10/6/2021					0.746 (U)		
10/11/2021		0.202 (U)	2.38	1.09 (U)			
10/12/2021	0.383 (U)					0.323 (U)	
5/10/2022	0.576 (U)						0.189 (U)
5/16/2022		0.471 (U)	1.06		0.285 (U)	0.253 (U)	
5/17/2022				0.551 (U)			
10/25/2022			0.683 (U)		0.849	0.529 (U)	
10/26/2022	0.165 (U)	0.401 (U)		0.958 (U)			0.551 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	1.04		0.885	0.394 (U)	0.895	7.45 (o)	0.226 (U)
2/6/2018	0.989		0.524				
2/8/2018				0.489	0.322 (U)	0.549	0.071 (U)
4/24/2018	0.405 (U)						
4/25/2018			0.341 (U)	-0.0902 (U)	0.0097 (U)	0.65	0.569
6/26/2018	1.03			0.245 (U)	0.587	0.436 (U)	0.43 (U)
6/27/2018			0.546				
8/6/2018	0.622						
8/7/2018			1.09	0.439 (U)			
8/8/2018					0.364 (U)	0.486 (U)	0.656
10/22/2018	1.06						
10/23/2018			1.01	0.243 (U)	0.703	0.319 (U)	0.395 (U)
12/3/2018	0.697			0.304 (U)			
12/4/2018					0.325 (U)	0.875	
12/5/2018			0.876				0.52 (U)
2/5/2019	0.467 (U)		0.551 (U)	0.196 (U)			
2/6/2019					0.0774 (U)	0.378 (U)	0.244 (U)
8/20/2019	0.814		0.206 (U)	-0.086 (U)			
8/21/2019					-0.0134 (U)	0.552 (U)	1.53 (U)
4/13/2020			1.19	0.0901 (U)			
4/14/2020						0.641 (U)	0.119 (U)
4/15/2020	-0.0841 (U)	0.329 (U)			0.526 (U)		
8/24/2020			0.482 (U)				
8/26/2020	0.26 (U)	0.839		0.416 (U)	0.691 (U)	0.339 (U)	1.18
3/16/2021			0.709 (U)				
3/17/2021				0.539 (U)			
3/23/2021					0.45 (U)	0.662 (U)	0.694 (U)
3/24/2021	0.664 (U)	0.725 (U)					
10/5/2021	1.75		1.44	1.36	1.27		
10/11/2021		1.58					
10/12/2021						0.291 (U)	0.311 (U)
5/9/2022			1.16				
5/10/2022				0.0979 (U)	0.599 (U)		
5/11/2022		0.576 (U)				0.475 (U)	0.605 (U)
5/16/2022	0.978						
10/26/2022	0.609 (U)	0.725 (U)	0.643 (U)	0.432 (U)	0.559 (U)	0.528 (U)	0.572 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	0.188 (U)		0.259 (U)	0.231 (U)		
7/18/2018	0.314 (U)		0.434	0.676		
8/7/2018	0.279 (U)					
8/8/2018			0.763	0.496		
9/5/2018	0.589		0.631	0.62		
9/24/2018	0.772		0.588	-0.12 (U)		
10/22/2018	0.621					
10/23/2018			0.383 (U)	0.352 (U)		
12/3/2018	0.188 (U)		0.736	0.238 (U)		
2/5/2019	0.274 (U)					
2/7/2019			0.0202 (U)	0.395 (U)		
8/20/2019	0.663					
8/21/2019			0.442 (U)	-0.00256 (U)		
4/13/2020	-0.129 (U)	0.472 (U)				
4/15/2020			0.432 (U)	0.000738 (U)		
8/24/2020	0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)		
3/16/2021			0.32 (U)	0.589 (U)		
3/17/2021		0.756 (U)				
3/24/2021	0.245 (U)					
10/5/2021	2.07	1.13				
10/6/2021					1.78	
10/11/2021						1.29
10/12/2021			0.963 (U)	1.57		
5/9/2022	0.784 (U)	0.352 (U)				
5/10/2022			0.659 (U)	0.468 (U)		
5/17/2022					0.4 (U)	0.306 (U)
10/26/2022	0.561 (U)	0.391 (U)	1.08	0.283 (U)	0.755 (U)	0.426 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.1	0.09 (J)	0.06 (J)	<0.125			
2/6/2018	0.08 (J)						
2/7/2018		0.08 (J)	0.05 (J)				
2/8/2018				<0.125			
4/23/2018	0.07 (J)						
4/24/2018		0.08 (J)	0.05 (J)	<0.125			
6/26/2018	0.08 (J)						
6/27/2018		0.09 (J)	0.06 (J)	<0.125	0.18		
7/18/2018					0.23		
8/6/2018					0.23		
8/7/2018	0.07 (J)	0.04 (J)					
8/8/2018			0.06 (J)	<0.125			
9/5/2018					0.22		
9/24/2018					0.2		
10/22/2018	0.07 (J)	0.1					
10/23/2018			0.06 (J)	0.04 (J)			
10/24/2018					0.14	0.11	0.23
11/14/2018						0.1	0.2
11/28/2018						0.1	0.19
12/4/2018	0.04 (J)	0.07 (J)	<0.125				
12/5/2018				<0.125	0.07 (J)	0.11	0.19
12/18/2018						0.14	0.15
1/3/2019						0.16	0.19
1/24/2019						<0.125	0.168
2/5/2019	0.0525 (J)				<0.125	<0.125	0.192
2/6/2019		0.107	0.0678 (J)	<0.125			
2/26/2019	<0.125	0.0813 (J)					
2/27/2019			0.0985 (J)	<0.125			
2/28/2019					<0.125	<0.125	0.182
6/24/2019						<0.125 (D)	
8/19/2019						<0.125	0.187
8/20/2019					<0.125		
8/21/2019	<0.125						
8/22/2019		0.084 (J)	<0.125	<0.125			
4/14/2020			0.0878 (J)	<0.125			
4/15/2020	<0.125	0.112				<0.125	
4/16/2020					<0.125		0.166
8/24/2020							0.163
8/25/2020	<0.125				<0.125	0.0863 (J)	
8/26/2020		0.0997 (J)	<0.125	<0.125			
3/16/2021	<0.125						
3/22/2021					<0.125	<0.125	0.18
3/23/2021		0.101	0.0819 (J)	<0.125			
10/5/2021	0.0601 (J)			<0.125			
10/6/2021						<0.125	0.175
10/11/2021		0.201					
10/12/2021			0.134		<0.125		
5/9/2022					<0.125		0.191
5/10/2022	<0.125	0.0918 (J)		<0.125			
5/17/2022			<0.125			<0.125	
10/25/2022						<0.125	0.15
10/26/2022	<0.125	0.0929 (J)	0.069 (J)	<0.125	<0.125		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.3				0.13
2/6/2018			0.27				0.08 (J)
4/23/2018			0.19				
4/24/2018							0.05 (J)
6/27/2018			0.28				0.07 (J)
8/7/2018			0.24				0.09 (J)
10/22/2018			0.24				0.11
12/3/2018							0.08 (J)
12/4/2018			0.15				
2/5/2019			0.207				0.064 (J)
2/25/2019							<0.125
2/26/2019			0.264				
6/18/2019							0.0664 (J)
8/20/2019			0.252				0.0592 (J)
4/13/2020							<0.125
4/14/2020		<0.125		0.125			
4/15/2020	<0.125		0.21		2.51		
8/25/2020	<0.125		0.273		2.4		
8/26/2020		<0.125		0.103			<0.125
3/16/2021	<0.125						
3/22/2021					2.33		<0.125
3/23/2021		<0.125		0.108			
3/24/2021			0.194				
3/30/2021						6.09	
10/5/2021							<0.125
10/6/2021					2.56		
10/11/2021		0.0779 (J)	0.283	0.127			
10/12/2021	<0.125					5.97	
5/10/2022	<0.125						0.0714 (J)
5/16/2022		<0.125	0.264		2.59	6.14	
5/17/2022				<0.125			
10/25/2022			0.271		2.41	5.77	
10/26/2022	<0.125	<0.125		0.121 (J)			<0.125

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	0.25		0.06 (J)	0.06 (J)	0.09 (J)	0.14	0.12
2/6/2018	0.24		0.05 (J)				
2/8/2018				0.04 (J)	0.07 (J)	0.11	
2/12/2018							0.11
4/24/2018	0.2						
4/25/2018			0.05 (J)	0.04 (J)	0.07 (J)	0.09 (J)	0.12
6/26/2018	0.22			0.05 (J)	0.09 (J)	0.1	0.13
6/27/2018			0.06 (J)				
8/6/2018	0.22						
8/7/2018			0.06 (J)	0.05 (J)			
8/8/2018					0.1	0.1	0.12
10/22/2018	0.24						
10/23/2018			0.07 (J)	0.06 (J)	0.1	0.11	0.13
12/3/2018	0.22			<0.125			
12/4/2018					0.06 (J)	0.08 (J)	
12/5/2018			0.04 (J)				0.04 (J)
2/5/2019	0.259		0.0651 (J)	0.0581 (J)			
2/6/2019					<0.1	<0.1	<0.1
2/26/2019	0.246			0.0816 (J)			
2/27/2019			0.0578 (J)		0.0824 (J)	0.108	0.147
8/20/2019	0.197		0.0567 (J)	<0.125			
8/21/2019					0.068 (J)	0.0648 (J)	0.0984 (J)
4/13/2020			0.0688 (J)	<0.125			
4/14/2020						0.0845 (J)	0.133
4/15/2020	0.238	0.218			0.0775 (J)		
8/24/2020			0.0607 (J)				
8/26/2020	0.251	0.217		<0.125	<0.1	0.0732 (J)	0.13
3/16/2021			0.065 (J)				
3/17/2021				<0.125			
3/23/2021					<0.1	0.0802 (J)	0.132
3/24/2021	0.227	0.212					
10/5/2021	0.214		0.122	<0.125	0.0933 (J)		
10/11/2021		0.23					
10/12/2021						0.123	0.147
5/9/2022			0.0682 (J)				
5/10/2022				<0.125	0.0627 (J)		
5/11/2022		0.175				0.0695 (J)	0.108 (J)
5/16/2022	0.17						
10/26/2022	0.283	0.164	0.0845 (J)	<0.125	0.128	0.0911 (J)	0.119 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	0.13		0.05 (J)	0.04 (J)		
7/18/2018	0.11		0.04 (J)	0.04 (J)		
8/7/2018	0.11					
8/8/2018			0.04 (J)	0.04 (J)		
9/5/2018	0.13		0.04 (J)	0.04 (J)		
9/24/2018	0.13		0.04 (J)	0.04 (J)		
10/22/2018	0.13					
10/23/2018			0.04 (J)	0.04 (J)		
12/3/2018	0.08 (J)		<0.125	<0.125		
2/5/2019	0.0934 (J)					
2/7/2019			<0.125	<0.125		
2/25/2019	<0.125		<0.125	<0.125		
8/20/2019	0.0889 (J)					
8/21/2019			<0.125	<0.125		
4/13/2020	0.103	<0.125				
4/15/2020			<0.125	<0.125		
8/24/2020	0.114	<0.125	<0.125	<0.125		
3/16/2021			<0.125	<0.125		
3/17/2021		<0.125				
3/24/2021	0.0725 (J)					
10/5/2021	<0.125	<0.125				
10/6/2021					8.34	
10/11/2021						1.43
10/12/2021			<0.125	<0.125		
5/9/2022	0.0824 (J)	<0.125				
5/10/2022			<0.125	<0.125		
5/17/2022					8.22	1.27
10/26/2022	<0.125	<0.125	<0.125	<0.125	7.57	1.36

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.000203	<0.000203	<0.000203	<0.000203			
2/6/2018	<0.000203						
2/7/2018		<0.000203	<0.000203				
2/8/2018				<0.000203			
4/23/2018	<0.000203						
4/24/2018		<0.000203	<0.000203	<0.000203			
6/26/2018	<0.000203						
6/27/2018		<0.000203	<0.000203	<0.000203	0.00158 (J)		
7/18/2018					0.00152 (J)		
8/6/2018					0.00143 (J)		
8/7/2018	<0.000203	<0.000203					
8/8/2018			<0.000203	<0.000203			
9/5/2018					0.00118 (J)		
9/24/2018					0.00156 (J)		
10/22/2018	<0.000203	<0.000203					
10/23/2018			<0.000203	<0.000203			
10/24/2018					0.00121 (J)	<0.005	<0.0002
11/14/2018						<0.005	<0.0002
11/28/2018						<0.005	<0.0002
12/4/2018	<0.000203	<0.000203	<0.000203				
12/5/2018				<0.000203	0.00117 (J)	<0.005	<0.0002
12/18/2018						<0.005	<0.0002
1/3/2019						0.001 (J)	<0.0002
1/24/2019						0.00114 (J)	<0.0002
2/5/2019	<0.000203				0.00156 (J)	0.00135 (J)	<0.0002
2/6/2019		<0.000203	<0.000203	<0.000203			
6/24/2019						0.00125 (J)	
8/19/2019						<0.005	<0.0002
8/20/2019					0.00176 (J)		
8/21/2019	<0.000203						
8/22/2019		<0.000203	<0.000203	<0.000203			
4/14/2020			<0.000203	<0.000203			
4/15/2020	<0.000203	<0.000203				<0.005	
4/16/2020					0.00258 (J)		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.000203				0.0018 (J)	0.0011 (J)	
8/26/2020		<0.000203	<0.000203	<0.000203			
3/16/2021	<0.000203						
3/22/2021					0.00143	0.0016	<0.0002
3/23/2021		<0.000203	<0.000203	<0.000203			
10/5/2021	<0.000203			<0.000203			
10/6/2021						0.00116	<0.0002
10/11/2021		<0.000203					
10/12/2021			<0.000203		0.00156		
5/9/2022					0.00194		<0.0002
5/10/2022	<0.000203	<0.000203		<0.000203			
5/17/2022			<0.000203			0.00178	
10/25/2022						0.000634	0.000196 (J)
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	0.00134		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.000203				<0.000203
2/6/2018			<0.000203				<0.000203
4/23/2018			<0.000203				
4/24/2018							<0.000203
6/27/2018			<0.000203				<0.000203
8/7/2018			<0.000203				<0.000203
10/22/2018			<0.000203				<0.000203
12/3/2018							<0.000203
12/4/2018			<0.000203				
2/5/2019			<0.000203				<0.000203
6/18/2019							<0.000203
8/20/2019			<0.000203				<0.000203
4/13/2020							<0.000203
4/14/2020		<0.000203		<0.000203			
4/15/2020	<0.000203		<0.000203		<0.000203		
8/25/2020	<0.000203		<0.000203		<0.000203		
8/26/2020		<0.000203		<0.000203			<0.000203
3/16/2021	<0.000203						
3/22/2021					<0.000203		<0.000203
3/23/2021		0.000201 (J)		<0.000203			
3/24/2021			<0.000203				
3/30/2021						<0.000203	
10/5/2021							<0.000203
10/6/2021					<0.000203		
10/11/2021		0.00016 (J)	9E-05 (J)	8E-05 (J)			
10/12/2021	<0.000203					<0.000203	
5/10/2022	<0.000203						<0.000203
5/16/2022		0.00015 (J)	<0.000203		<0.000203	<0.000203	
5/17/2022				<0.000203			
10/25/2022			<0.000203		<0.000203	<0.000203	
10/26/2022	<0.000203	<0.000203		<0.000203			<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/6/2018	<0.000203		<0.000203				
2/8/2018				<0.000203	<0.000203	<0.000203	<0.000203
4/24/2018	<0.000203						
4/25/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/26/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
6/27/2018			<0.000203				
8/6/2018	<0.000203						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	<0.000203	<0.000203
10/22/2018	<0.000203						
10/23/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018	<0.000203			<0.000203			
12/4/2018					<0.000203	<0.000203	
12/5/2018			<0.000203				<0.000203
2/5/2019	<0.000203		<0.000203	<0.000203			
2/6/2019					<0.000203	<0.000203	<0.000203
8/20/2019	<0.000203		<0.000203	<0.000203			
8/21/2019					<0.000203	<0.000203	<0.000203
4/13/2020			<0.000203	<0.000203			
4/14/2020						<0.000203	<0.000203
4/15/2020	<0.000203	<0.000203			<0.000203		
8/24/2020			<0.000203				
8/26/2020	<0.000203	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203
3/16/2021			<0.000203				
3/17/2021				<0.000203			
3/23/2021					<0.000203	<0.000203	<0.000203
3/24/2021	<0.000203	<0.000203					
10/5/2021	<0.000203		<0.000203	<0.000203	<0.000203		
10/11/2021		<0.000203					
10/12/2021						<0.000203	<0.000203
5/9/2022			<0.000203				
5/10/2022				<0.000203	<0.000203		
5/11/2022		<0.000203				<0.000203	<0.000203
5/16/2022	<0.000203						
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		<0.000203	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.000203				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.000203	<0.000203	<0.000203		
3/16/2021			0.00013 (J)	8.35E-05 (J)		
3/17/2021		0.000191 (J)				
3/24/2021	<0.000203					
10/5/2021	<0.000203	0.00012 (J)				
10/6/2021					0.00022	
10/11/2021						<0.000203
10/12/2021			<0.000203	0.00012 (J)		
5/9/2022	<0.000203	0.00018 (J)				
5/10/2022			<0.000203	0.00012 (J)		
5/17/2022					0.00022	<0.000203
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.02	<0.02	<0.02	<0.02			
2/6/2018	<0.02						
2/7/2018		<0.02	<0.02				
2/8/2018				<0.02			
4/23/2018	<0.02						
4/24/2018		<0.02	<0.02	<0.02			
6/26/2018	<0.02						
6/27/2018		<0.02	<0.02	<0.02	<0.02		
7/18/2018					<0.02		
8/6/2018					<0.02		
8/7/2018	<0.02	<0.02					
8/8/2018			<0.02	<0.02			
9/5/2018					<0.02		
9/24/2018					<0.02		
10/22/2018	<0.02	<0.02					
10/23/2018			<0.02	<0.02			
10/24/2018					<0.02	<0.02	<0.02
11/14/2018						<0.02	<0.02
11/28/2018						<0.02	0.0111 (J)
12/4/2018	<0.02	<0.02	<0.02				
12/5/2018				<0.02	<0.02	<0.02	0.0124 (J)
12/18/2018						<0.02	0.0121 (J)
1/3/2019						<0.02	0.0137 (J)
1/24/2019						<0.02	0.0134 (J)
2/5/2019	<0.02				<0.02	<0.02	0.0126 (J)
2/6/2019		<0.02	<0.02	<0.02			
6/24/2019						<0.02	
8/19/2019						<0.02	<0.02
8/20/2019					<0.02		
8/21/2019	<0.02						
8/22/2019		<0.02	<0.02	<0.02			
4/14/2020			<0.02	<0.02			
4/15/2020	<0.02	<0.02				<0.02	
4/16/2020					<0.02		0.0127 (J)
8/24/2020							<0.02
8/25/2020	<0.02				<0.02	<0.02	
8/26/2020		<0.02	<0.02	<0.02			
3/16/2021	<0.02						
3/22/2021					<0.02	<0.02	0.0083 (J)
3/23/2021		<0.02	<0.02	<0.02			
10/5/2021	<0.02			<0.02			
10/6/2021						<0.02	0.00881 (J)
10/11/2021		<0.02					
10/12/2021			<0.02		<0.02		
5/9/2022					<0.02		0.00859 (J)
5/10/2022	<0.02	<0.02		<0.02			
5/17/2022			<0.02			<0.02	
10/25/2022						<0.02	0.00897 (J)
10/26/2022	<0.02	<0.02	<0.02	<0.02	<0.02		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.092				<0.02
2/6/2018			0.0817				<0.02
4/23/2018			0.051				
4/24/2018							<0.02
6/27/2018			0.0734				<0.02
8/7/2018			0.0764				<0.02
10/22/2018			0.0804				<0.02
12/3/2018							<0.02
12/4/2018			0.0474				
2/5/2019			0.0545				<0.02
6/18/2019							<0.02
8/20/2019			0.0583				<0.02
4/13/2020							<0.02
4/14/2020		<0.02		<0.02			
4/15/2020	<0.02		0.0406		0.0783		
7/1/2020					0.069		
8/25/2020	<0.02		0.041		0.0666		
8/26/2020		<0.02		<0.02			<0.02
3/16/2021	<0.02						
3/22/2021					0.0666		<0.02
3/23/2021		<0.02		<0.02			
3/24/2021			0.0318				
3/30/2021						0.13	
10/5/2021							<0.02
10/6/2021					0.0685		
10/11/2021		<0.02	0.0225	<0.02			
10/12/2021	<0.02					0.129	
5/10/2022	<0.02						<0.02
5/16/2022		<0.02	0.0271		0.0612	0.111	
5/17/2022				<0.02			
10/25/2022			0.0304		0.0748	0.141	
10/26/2022	<0.02	<0.02		<0.02			<0.02

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02
2/6/2018	<0.02		<0.02				
2/8/2018				<0.02	<0.02	<0.02	<0.02
4/24/2018	<0.02						
4/25/2018			<0.02	<0.02	<0.02	<0.02	<0.02
6/26/2018	<0.02			<0.02	<0.02	<0.02	<0.02
6/27/2018			<0.02				
8/6/2018	<0.02						
8/7/2018			<0.02	<0.02			
8/8/2018					<0.02	<0.02	<0.02
10/22/2018	<0.02						
10/23/2018			<0.02	<0.02	<0.02	<0.02	<0.02
12/3/2018	<0.02			<0.02			
12/4/2018					<0.02	<0.02	
12/5/2018			<0.02				<0.02
2/5/2019	<0.02		<0.02	<0.02			
2/6/2019					<0.02	<0.02	<0.02
8/20/2019	<0.02		<0.02	<0.02			
8/21/2019					<0.02	<0.02	<0.02
4/13/2020			<0.02	<0.02			
4/14/2020						<0.02	<0.02
4/15/2020	<0.02	0.0219			<0.02		
8/24/2020			<0.02				
8/26/2020	<0.02	0.0203		<0.02	<0.02	<0.02	<0.02
3/16/2021			<0.02				
3/17/2021				<0.02			
3/23/2021					<0.02	<0.02	<0.02
3/24/2021	<0.02	0.0203					
10/5/2021	<0.02		<0.02	<0.02	<0.02		
10/11/2021		0.0198 (J)					
10/12/2021						<0.02	<0.02
5/9/2022			<0.02				
5/10/2022				<0.02	<0.02		
5/11/2022		0.0187 (J)				<0.02	<0.02
5/16/2022	<0.02						
10/26/2022	<0.02	0.0226	<0.02	<0.02	<0.02	<0.02	<0.02

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.02		<0.02	<0.02		
7/18/2018	<0.02		<0.02	<0.02		
8/7/2018	<0.02					
8/8/2018			<0.02	<0.02		
9/5/2018	<0.02		<0.02	<0.02		
9/24/2018	<0.02		<0.02	<0.02		
10/22/2018	<0.02					
10/23/2018			<0.02	<0.02		
12/3/2018	<0.02		<0.02	<0.02		
2/5/2019	<0.02					
2/7/2019			<0.02	<0.02		
8/20/2019	<0.02					
8/21/2019			<0.02	<0.02		
4/13/2020	<0.02	<0.02				
4/15/2020			<0.02	<0.02		
8/24/2020	<0.02	<0.02	<0.02	<0.02		
3/16/2021			<0.02	<0.02		
3/17/2021		<0.02				
3/24/2021	<0.02					
10/5/2021	<0.02	<0.02				
10/6/2021					0.227	
10/11/2021						0.0544
10/12/2021			<0.02	<0.02		
5/9/2022	<0.02	<0.02				
5/10/2022			<0.02	<0.02		
5/17/2022					0.196	0.0499
10/26/2022	<0.02	<0.02	<0.02	<0.02	0.262	0.0616

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0005	<0.0005	<0.0005	<0.0005			
2/6/2018	<0.0005						
2/7/2018		<0.0005	<0.0005				
2/8/2018				<0.0005			
4/23/2018	<0.0005						
4/24/2018		<0.0005	<0.0005	<0.0005			
6/26/2018	<0.0005						
6/27/2018		<0.0005	<0.0005	<0.0005	0.000661		
7/18/2018					0.000398 (J)		
8/6/2018					0.00042 (J)		
8/7/2018	<0.0005	<0.0005					
8/8/2018			<0.0005	<0.0005			
9/5/2018					0.00037 (J)		
9/24/2018					0.000329 (J)		
10/22/2018	<0.0005	<0.0005					
10/23/2018			<0.0005	<0.0005			
10/24/2018					<0.0005	<0.0005	<0.0005
11/14/2018						<0.0005	<0.0005
11/28/2018						<0.0005	<0.0005
12/4/2018	<0.0005	0.000302 (J)	<0.0005				
12/5/2018				<0.0005	0.000253 (J)	<0.0005	<0.0005
12/18/2018						<0.0005	<0.0005
1/3/2019						<0.0005	<0.0005
1/24/2019						0.000411 (J)	<0.0005
2/5/2019	<0.0005				0.000664	0.000473 (J)	<0.0005
2/6/2019		<0.0005	<0.0005	<0.0005			
8/19/2019						<0.0005	<0.0005
8/20/2019					0.000301 (J)		
8/21/2019	<0.0005						
8/22/2019		<0.0005	<0.0005	<0.0005			
4/14/2020			<0.0005	<0.0005			
4/15/2020	<0.0005	<0.0005				<0.0005	
4/16/2020					0.000558		<0.0005
8/24/2020							<0.0005
8/25/2020	<0.0005				<0.0005	<0.0005	
8/26/2020		<0.0005	<0.0005	<0.0005			
3/16/2021	<0.0005						
3/22/2021					0.000363 (J)	0.000775	<0.0005
3/23/2021		<0.0005	<0.0005	<0.0005			
10/5/2021	<0.0005			<0.0005			
10/6/2021						<0.0005	<0.0005
10/11/2021		<0.0005					
10/12/2021			<0.0005		<0.0005		
5/9/2022					0.00039 (J)		<0.0005
5/10/2022	<0.0005	<0.0005		<0.0005			
5/17/2022			<0.0005			<0.0005	
10/25/2022						<0.0005	<0.0005
10/26/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.0005				<0.0005
2/6/2018			<0.0005				<0.0005
4/23/2018			<0.0005				
4/24/2018							<0.0005
6/27/2018			<0.0005				<0.0005
8/7/2018			<0.0005				<0.0005
10/22/2018			<0.0005				<0.0005
12/3/2018							<0.0005
12/4/2018			<0.0005				
2/5/2019			<0.0005				<0.0005
8/20/2019			<0.0005				<0.0005
4/13/2020							<0.0005
4/14/2020		<0.0005		<0.0005			
4/15/2020	<0.0005		<0.0005		<0.0005		
8/25/2020	<0.0005		<0.0005		<0.0005		
8/26/2020		<0.0005		<0.0005			<0.0005
3/16/2021	<0.0005						
3/22/2021					<0.0005		<0.0005
3/23/2021		<0.0005		<0.0005			
3/24/2021			<0.0005				
3/30/2021						<0.0005	
10/5/2021							<0.0005
10/6/2021					<0.0005		
10/11/2021		<0.0005	<0.0005	<0.0005			
10/12/2021	<0.0005					<0.0005	
5/10/2022	<0.0005						<0.0005
5/16/2022		<0.0005	<0.0005		<0.0005	<0.0005	
5/17/2022				<0.0005			
10/25/2022			<0.0005		<0.0005	<0.0005	
10/26/2022	<0.0005	<0.0005		<0.0005			<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/6/2018	<0.0005		<0.0005				
2/8/2018				<0.0005	<0.0005	<0.0005	<0.0005
4/24/2018	<0.0005						
4/25/2018			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6/26/2018	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
6/27/2018			<0.0005				
8/6/2018	<0.0005						
8/7/2018			<0.0005	<0.0005			
8/8/2018					<0.0005	<0.0005	<0.0005
10/22/2018	<0.0005						
10/23/2018			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
12/3/2018	<0.0005			<0.0005			
12/4/2018					0.00034 (J)	0.000284 (J)	
12/5/2018			<0.0005				<0.0005
2/5/2019	<0.0005		<0.0005	<0.0005			
2/6/2019					<0.0005	<0.0005	<0.0005
8/20/2019	<0.0005		<0.0005	<0.0005			
8/21/2019					<0.0005	<0.0005	<0.0005
4/13/2020			<0.0005	<0.0005			
4/14/2020						<0.0005	<0.0005
4/15/2020	<0.0005	<0.0005			<0.0005		
8/24/2020			<0.0005				
8/26/2020	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
3/16/2021			<0.0005				
3/17/2021				<0.0005			
3/23/2021					<0.0005	<0.0005	<0.0005
3/24/2021	<0.0005	<0.0005					
10/5/2021	<0.0005		<0.0005	<0.0005	<0.0005		
10/11/2021		<0.0005					
10/12/2021						<0.0005	<0.0005
5/9/2022			<0.0005				
5/10/2022				<0.0005	<0.0005		
5/11/2022		<0.0005				<0.0005	<0.0005
5/16/2022	<0.0005						
10/26/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.0005		<0.0005	<0.0005		
7/18/2018	<0.0005		<0.0005	<0.0005		
8/7/2018	<0.0005					
8/8/2018			<0.0005	<0.0005		
9/5/2018	<0.0005		<0.0005	<0.0005		
9/24/2018	<0.0005		<0.0005	<0.0005		
10/22/2018	<0.0005					
10/23/2018			<0.0005	<0.0005		
12/3/2018	<0.0005		<0.0005	<0.0005		
2/5/2019	<0.0005					
2/7/2019			<0.0005	<0.0005		
8/20/2019	<0.0005					
8/21/2019			<0.0005	<0.0005		
4/13/2020	<0.0005	<0.0005				
4/15/2020			<0.0005	<0.0005		
8/24/2020	<0.0005	<0.0005	<0.0005	<0.0005		
3/16/2021			<0.0005	<0.0005		
3/17/2021		<0.0005				
3/24/2021	<0.0005					
10/5/2021	<0.0005	<0.0005				
10/6/2021					<0.0005	
10/11/2021						<0.0005
10/12/2021			<0.0005	<0.0005		
5/9/2022	<0.0005	<0.0005				
5/10/2022			<0.0005	0.00286		
5/17/2022					<0.0005	<0.0005
10/26/2022	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.01	<0.000203	<0.000203			
2/6/2018	<0.0002						
2/7/2018		<0.01	<0.000203				
2/8/2018				<0.000203			
4/23/2018	<0.0002						
4/24/2018		<0.01	<0.000203	<0.000203			
6/26/2018	<0.0002						
6/27/2018		<0.01	<0.000203	<0.000203	<0.000203		
7/18/2018					<0.000203		
8/6/2018					<0.000203		
8/7/2018	<0.0002	<0.01					
8/8/2018			<0.000203	<0.000203			
9/5/2018					<0.000203		
9/24/2018					<0.000203		
10/22/2018	<0.0002	<0.01					
10/23/2018			<0.000203	<0.000203			
10/24/2018					<0.000203	<0.000203	0.00507 (J)
11/14/2018						<0.000203	0.00358 (J)
11/28/2018						<0.000203	0.00322 (J)
12/4/2018	<0.0002	<0.01	<0.000203				
12/5/2018				<0.000203	<0.000203	<0.000203	0.00256 (J)
12/18/2018						<0.000203	0.00215 (J)
1/3/2019						<0.000203	0.00257 (J)
1/24/2019						<0.000203	0.00211 (J)
2/5/2019	<0.0002				<0.000203	<0.000203	0.00205 (J)
2/6/2019		<0.01	<0.000203	<0.000203			
6/24/2019						<0.000203	
8/19/2019						<0.000203	<0.01
8/20/2019					<0.000203		
8/21/2019	<0.0002						
8/22/2019		<0.01	<0.000203	<0.000203			
4/14/2020			<0.000203	<0.000203			
4/15/2020	<0.0002	<0.01				<0.000203	
4/16/2020					<0.000203		<0.01
8/24/2020							<0.01
8/25/2020	<0.0002				<0.000203	<0.000203	
8/26/2020		<0.01	<0.000203	<0.000203			
3/16/2021	<0.0002						
3/22/2021					<0.000203	<0.000203	0.000723
3/23/2021		0.000204	0.000124 (J)	<0.000203			
10/5/2021	<0.0002			<0.000203			
10/6/2021						<0.000203	0.00045
10/11/2021		0.00045					
10/12/2021			0.00015 (J)		<0.000203		
5/9/2022					<0.000203		0.00046
5/10/2022	<0.0002	0.00047		<0.000203			
5/17/2022			0.00012 (J)			<0.000203	
10/25/2022						<0.000203	0.000466
10/26/2022	0.000198 (J)	0.000438	<0.000203	<0.000203	<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			0.0254				<0.000203
2/6/2018			0.0239				<0.000203
4/23/2018			0.0165				
4/24/2018							<0.000203
6/27/2018			0.0302				<0.000203
8/7/2018			0.0209				<0.000203
10/22/2018			0.0198				<0.000203
12/3/2018							<0.000203
12/4/2018			0.0118				
2/5/2019			0.0196				<0.000203
6/18/2019							<0.000203
8/20/2019			0.027				<0.000203
4/13/2020							<0.000203
4/14/2020		<0.0002		<0.01			
4/15/2020	<0.000203		0.0202		<0.01		
8/25/2020	<0.000203		0.0269		0.00323 (J)		
8/26/2020		<0.0002		<0.01			<0.000203
3/16/2021	<0.000203						
3/22/2021					0.00386		<0.000203
3/23/2021		<0.0002		0.000481			
3/24/2021			0.0164				
3/30/2021						0.000673	
10/5/2021							<0.000203
10/6/2021					0.00363		
10/11/2021		0.00012 (J)	0.0204	0.00031			
10/12/2021	<0.000203					0.00156	
5/10/2022	<0.000203						<0.000203
5/16/2022		<0.0002	0.0201		0.00357	0.00095	
5/17/2022				0.0004			
10/25/2022			0.0202		0.00361	0.00135	
10/26/2022	<0.000203	0.000136 (J)		0.00033			<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.01		<0.000203	<0.000203	<0.0002	<0.01	<0.01
2/6/2018	<0.01		<0.000203				
2/8/2018				<0.000203	<0.0002	<0.01	<0.01
4/24/2018	<0.01						
4/25/2018			<0.000203	<0.000203	<0.0002	<0.01	<0.01
6/26/2018	<0.01			<0.000203	<0.0002	<0.01	<0.01
6/27/2018			<0.000203				
8/6/2018	<0.01						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.0002	<0.01	<0.01
10/22/2018	<0.01						
10/23/2018			<0.000203	<0.000203	<0.0002	<0.01	<0.01
12/3/2018	<0.01			<0.000203			
12/4/2018					<0.0002	<0.01	
12/5/2018			<0.000203				<0.01
2/5/2019	<0.01		<0.000203	<0.000203			
2/6/2019					<0.0002	<0.01	<0.01
8/20/2019	<0.01		<0.000203	<0.000203			
8/21/2019					<0.0002	<0.01	<0.01
4/13/2020			<0.000203	<0.000203			
4/14/2020						<0.01	<0.01
4/15/2020	<0.01	<0.01			<0.0002		
8/24/2020			<0.000203				
8/26/2020	<0.01	<0.01		<0.000203	<0.0002	<0.01	<0.01
3/16/2021			<0.000203				
3/17/2021				<0.000203			
3/23/2021					<0.0002	0.000357	0.00027
3/24/2021	0.00118	0.00188					
10/5/2021	0.00111		0.00015 (J)	<0.000203	0.0001 (J)		
10/11/2021		0.00173					
10/12/2021						0.00032	0.00018 (J)
5/9/2022			0.00011 (J)				
5/10/2022				<0.000203	<0.0002		
5/11/2022		0.00135				0.0004	0.00024
5/16/2022	0.00122						
10/26/2022	0.00106	0.00135	0.000371	<0.000203	0.000169 (J)	0.000422	0.000276

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		<0.000203	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.0002				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.0002	<0.000203	<0.000203		
3/16/2021			<0.000203	<0.000203		
3/17/2021		<0.0002				
3/24/2021	9.88E-05 (J)					
10/5/2021	7E-05 (J)	0.00028				
10/6/2021					0.00107	
10/11/2021						0.00538
10/12/2021			<0.000203	<0.000203		
5/9/2022	<0.000203	<0.0002				
5/10/2022			<0.000203	<0.000203		
5/17/2022					0.00194	0.0028
10/26/2022	<0.000203	0.00022	<0.000203	<0.000203	0.00238	0.0019

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (pH) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.5	6.83	6.81	5.6			
2/6/2018	6.48						
2/7/2018		6.82	6.74				
2/8/2018				5.44			
4/23/2018	6.36						
4/24/2018		6.74	6.62	5.41			
6/26/2018	6.32						
6/27/2018		6.67	6.69	5.45	3.95		
7/18/2018					4.02		
8/6/2018					4.07		
8/7/2018	6.32	6.72					
8/8/2018			6.67	5.46			
9/5/2018					4.07		
9/24/2018					4.07		
10/22/2018	6.2	6.73					
10/23/2018			6.73	5.47			
10/24/2018					4.1	5.27	7.92
11/14/2018						4.99	8.23
11/28/2018						4.74	8.95
12/4/2018	6.31	6.77	6.67				
12/5/2018				5.45	4.1	4.76	8.77
12/18/2018						4.57	8.99
1/3/2019						4.56	9.35
1/24/2019						4.45	9.42
2/5/2019	6.1				4.02	4.3	9.23
2/6/2019		6.67	6.58	5.31			
2/26/2019	6.11	6.77					
2/27/2019			6.56	5.4			
2/28/2019					3.94 (E)	4.35	9.48
8/19/2019						4.57	7.93
8/20/2019					4		
8/21/2019	6.01						
8/22/2019		6.37	6.26	5.35			
4/14/2020			6.63	5.39			
4/15/2020	5.65	6.85				4.49	
4/16/2020					3.93		8.1
8/24/2020							8.17
8/25/2020	6				4.03	4.2	
8/26/2020		6.73	6.38	5.63			
3/16/2021	5.87						
3/22/2021					3.25	3.45	7.85
3/23/2021		6.87	6.58	5.5			
10/5/2021	5.79			5.19			
10/6/2021						4.16	7.92
10/11/2021		6.72					
10/12/2021			6.66		4.04		
5/9/2022					3.6		7.29
5/10/2022	5.77	6.39		4.78			
5/17/2022			6.44			4.34	
10/25/2022						4.64	7.97
10/26/2022	5.86	6.84	6.2	5.52	4.07		

Time Series

Constituent: pH (pH) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			6.61				6.54
2/6/2018			6.66				6.39
4/23/2018			6.54				
4/24/2018							6.02
6/27/2018			6.63				6.07
8/7/2018			6.57				6.28
10/22/2018			6.55				6.3
12/3/2018							6.38
12/4/2018			6.52				
2/5/2019			6.47				5.83
2/25/2019							5.93
2/26/2019			6.54				
8/20/2019			6.3				5.73
4/13/2020							5.83
4/14/2020		5.79		6.02			
4/15/2020	5.1		6.45		8.6		
7/1/2020					8.36		
8/25/2020	5.13		6.65		8.43		
8/26/2020		6.33		6.36			5.87
3/16/2021	5.08						
3/22/2021					8.34		5.51
3/23/2021		5.88		6.38			
3/24/2021			6.49				
3/30/2021						8.52	
10/5/2021							5.76
10/6/2021					8.36		
10/11/2021		6.08	6.59	6.36			
10/12/2021	5.12					8.62	
5/10/2022	4.87						5.95
5/16/2022		5.24	6.16		8.1	8.48	
5/17/2022				5.74			
10/25/2022			6.64		8.33	8.33	
10/26/2022	4.81	6.25		6.36			5.97

Time Series

Constituent: pH (pH) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	6.73		6.32	6.38	6.62	6.81	6.93
2/6/2018	6.76		6.27				
2/8/2018				6.29	6.39	6.73	6.96
2/12/2018							6.88
4/24/2018	6.66						
4/25/2018			6.14	6.15	6.17	6.61	6.89
6/26/2018	6.61			6.09	6.38	6.59	6.85
6/27/2018			6.15				
8/6/2018	6.68						
8/7/2018			6.18	6.16			
8/8/2018					6.56	6.6	6.94
10/22/2018	6.63						
10/23/2018			6.15	6.1	6.54	6.64	6.93
12/3/2018	6.67			6.09			
12/4/2018					6.33	6.68	
12/5/2018			6.15				6.94
2/5/2019	6.63		6.08	6.04			
2/6/2019					6.13	6.62	6.73
2/26/2019	6.64			6.17			
2/27/2019			6.11		6.12	6.56	6.85
8/20/2019	6.33		6.11	5.4			
8/21/2019					5.97	6.16	6.61
4/13/2020			6.18	5.82			
4/14/2020						6.49	7.02
4/15/2020	6.77	7.93			6.16		
8/24/2020			6.11				
8/26/2020	6.68	7.83		5.96	6.11	6.29	6.75
3/16/2021			6.22				
3/17/2021				5.92			
3/23/2021					6.04	6.47	6.85
3/24/2021	6.86	8.01					
10/5/2021	6.58		6.24	5.74	6.06		
10/11/2021		7.82					
10/12/2021						6.61	6.9
5/9/2022			5.43				
5/10/2022				5.51	5.08		
5/11/2022		7.91				6.25	6.7
5/16/2022	6.61						
10/26/2022	6.67	7.92	6.44	5.98	6.44	6.68	7.07

Time Series

Constituent: pH (pH) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	6.79		5.81	5.44		
7/18/2018	6.8		5.74	5.58		
8/7/2018	6.73					
8/8/2018			5.7	5.55		
9/5/2018	6.75		5.61	5.56		
9/24/2018	6.83		5.59	5.57		
10/22/2018	6.76					
10/23/2018			5.6	5.55		
12/3/2018	6.6		5.73	5.6		
2/5/2019	6.66					
2/7/2019			5.44	5.51		
2/25/2019	6.6		5.46	5.54		
8/20/2019	6.3					
8/21/2019			5.13	5.44		
4/13/2020	6.66	5.84				
4/15/2020			5.31	5.52		
8/24/2020	6.64	6	4.65	5.38		
3/16/2021			5.47	5.56		
3/17/2021		5.34				
3/24/2021	5.85					
10/5/2021	6.46	5.72				
10/6/2021					8.53	
10/11/2021						8.13
10/12/2021			5.33	5.41		
5/9/2022	6.03	4.35				
5/10/2022			5.38	5.57		
5/17/2022					8.31	8.29
10/26/2022	6.66	6.16	5.31	5.43	8.31	8.11

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.001015	<0.001015	<0.001015	<0.001015			
2/6/2018	<0.001015						
2/7/2018		<0.001015	<0.001015				
2/8/2018				<0.001015			
4/23/2018	<0.001015						
4/24/2018		<0.001015	<0.001015	<0.001015			
6/26/2018	<0.001015						
6/27/2018		<0.001015	<0.001015	<0.001015	<0.01		
7/18/2018					<0.01		
8/6/2018					<0.01		
8/7/2018	<0.001015	<0.001015					
8/8/2018			<0.001015	<0.001015			
9/5/2018					<0.01		
9/24/2018					<0.01		
10/22/2018	<0.001015	<0.001015					
10/23/2018			<0.001015	<0.001015			
10/24/2018					<0.01	<0.01	<0.001015
11/14/2018						<0.01	<0.001015
11/28/2018						<0.01	<0.001015
12/4/2018	<0.001015	<0.001015	<0.001015				
12/5/2018				<0.001015	0.00208 (J)	0.00349 (J)	<0.001015
12/18/2018						0.00395 (J)	<0.001015
1/3/2019						0.00488 (J)	<0.001015
1/24/2019						0.00707 (J)	<0.001015
2/5/2019	<0.001015				0.00387 (J)	0.00938 (J)	<0.001015
2/6/2019		<0.001015	<0.001015	<0.001015			
6/24/2019						0.00563 (J)	
8/19/2019						0.00316 (J)	<0.001015
8/20/2019					0.00328 (J)		
8/21/2019	<0.001015						
8/22/2019		<0.001015	<0.001015	<0.001015			
4/14/2020			<0.001015	<0.001015			
4/15/2020	<0.001015	<0.001015				0.00434 (J)	
4/16/2020					0.00608 (J)		<0.001015
8/24/2020							<0.001015
8/25/2020	<0.001015				0.00247 (J)	0.00262 (J)	
8/26/2020		<0.001015	<0.001015	<0.001015			
3/16/2021	<0.001015						
3/22/2021					0.00488	0.0134	<0.001015
3/23/2021		<0.001015	<0.001015	<0.001015			
10/5/2021	<0.001015			<0.001015			
10/6/2021						0.00262	<0.001015
10/11/2021		<0.001015					
10/12/2021			<0.001015		0.00287		
5/9/2022					0.00394		<0.001015
5/10/2022	<0.001015	<0.001015		<0.001015			
5/17/2022			<0.001015			0.00609	
10/25/2022						0.00118	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	0.00151		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.001015				<0.001015
2/6/2018			<0.001015				<0.001015
4/23/2018			<0.001015				
4/24/2018							<0.001015
6/27/2018			<0.001015				<0.001015
8/7/2018			<0.001015				<0.001015
10/22/2018			<0.001015				<0.001015
12/3/2018							<0.001015
12/4/2018			<0.001015				
2/5/2019			<0.001015				<0.001015
6/18/2019							<0.001015
8/20/2019			<0.001015				<0.001015
4/13/2020							<0.001015
4/14/2020		<0.001015		<0.001015			
4/15/2020	<0.01		<0.001015		<0.001015		
8/25/2020	<0.01		<0.001015		<0.001015		
8/26/2020		<0.001015		<0.001015			<0.001015
3/16/2021	0.000935 (J)						
3/22/2021					<0.001015		<0.001015
3/23/2021		<0.001015		<0.001015			
3/24/2021			<0.001015				
3/30/2021						<0.001015	
10/5/2021							<0.001015
10/6/2021					<0.001015		
10/11/2021		<0.001015	<0.001015	<0.001015			
10/12/2021	0.00068 (J)					<0.001015	
5/10/2022	0.00125						<0.001015
5/16/2022		<0.001015	<0.001015		<0.001015	<0.001015	
5/17/2022				<0.001015			
10/25/2022			<0.001015		<0.001015	<0.001015	
10/26/2022	0.00117	<0.001015		<0.001015			<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/6/2018	<0.001015		<0.001015				
2/8/2018				<0.001015	<0.001015	<0.001015	<0.001015
4/24/2018	<0.001015						
4/25/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
6/26/2018	<0.001015			<0.001015	<0.001015	<0.001015	<0.001015
6/27/2018			<0.001015				
8/6/2018	<0.001015						
8/7/2018			<0.001015	<0.001015			
8/8/2018					<0.001015	<0.001015	<0.001015
10/22/2018	<0.001015						
10/23/2018			<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
12/3/2018	<0.001015			<0.001015			
12/4/2018					<0.001015	<0.001015	
12/5/2018			<0.001015				<0.001015
2/5/2019	<0.001015		<0.001015	<0.001015			
2/6/2019					<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015		<0.001015	<0.001015			
8/21/2019					<0.001015	<0.001015	<0.001015
4/13/2020			<0.001015	<0.001015			
4/14/2020						<0.001015	<0.001015
4/15/2020	<0.001015	<0.001015			<0.001015		
8/24/2020			<0.001015				
8/26/2020	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
3/16/2021			<0.001015				
3/17/2021				<0.001015			
3/23/2021					<0.001015	<0.001015	<0.001015
3/24/2021	<0.001015	<0.001015					
10/5/2021	<0.001015		<0.001015	<0.001015	<0.001015		
10/11/2021		<0.001015					
10/12/2021						<0.001015	<0.001015
5/9/2022			<0.001015				
5/10/2022				<0.001015	<0.001015		
5/11/2022		<0.001015				<0.001015	<0.001015
5/16/2022	<0.001015						
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.001015		<0.001015	<0.001015		
7/18/2018	<0.001015		<0.001015	<0.001015		
8/7/2018	<0.001015					
8/8/2018			<0.001015	<0.001015		
9/5/2018	<0.001015		<0.001015	<0.001015		
9/24/2018	<0.001015		<0.001015	<0.001015		
10/22/2018	<0.001015					
10/23/2018			<0.001015	<0.001015		
12/3/2018	<0.001015		<0.001015	<0.001015		
2/5/2019	<0.001015					
2/7/2019			<0.001015	<0.001015		
8/20/2019	<0.001015					
8/21/2019			<0.001015	<0.001015		
4/13/2020	<0.001015	<0.001015				
4/15/2020			<0.001015	<0.001015		
8/24/2020	<0.001015	<0.001015	<0.001015	<0.001015		
3/16/2021			<0.001015	<0.001015		
3/17/2021		<0.001015				
3/24/2021	<0.001015					
10/5/2021	<0.001015	<0.001015				
10/6/2021					<0.001015	
10/11/2021						<0.001015
10/12/2021			<0.001015	<0.001015		
5/9/2022	<0.001015	<0.001015				
5/10/2022			<0.001015	<0.001015		
5/17/2022					<0.001015	<0.001015
10/26/2022	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	650	11	83	200			
2/6/2018	560						
2/7/2018		19	84				
2/8/2018				200			
4/23/2018	640						
4/24/2018		27	98	210			
6/26/2018	670						
6/27/2018		<5	95	240	120		
7/18/2018					120		
8/6/2018					110		
8/7/2018	660	<5					
8/8/2018			110	260			
9/5/2018					86		
9/24/2018					80		
10/22/2018	580	<5					
10/23/2018			78	280			
10/24/2018					68	44	16
11/14/2018						44	13
11/28/2018						46	11
12/4/2018	580	11	97				
12/5/2018				280	54	51	12
12/18/2018						76	11
1/3/2019						94	10
1/24/2019						135	10.2
2/5/2019	702				126	183	10.4
2/6/2019		16.8	113	239			
2/26/2019	748	38.4					
2/27/2019			135	257			
2/28/2019					207	192	9.86
6/24/2019						129 (D)	
8/19/2019						66.6	8.74
8/20/2019					106		
8/21/2019	708						
8/22/2019		6.74	305	339			
4/14/2020			146	155			
4/15/2020	647	50.7				92.8	
4/16/2020					191		11.5
8/24/2020							10
8/25/2020	642				98.4	74.1	
8/26/2020		10.5	280	282			
3/16/2021	593						
3/22/2021					83.8	128	10.6
3/23/2021		60.1	135	160			
10/5/2021	567			195			
10/6/2021						93.5	10.2
10/11/2021		7.75					
10/12/2021			142		95.7		
5/9/2022					125		10
5/10/2022	508	11.6		193			
5/17/2022			145			139	
10/25/2022						37.099998	9.25
10/26/2022	512	4.42	278	230	50.700001		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			210				250
2/6/2018			190				230
4/23/2018			140				
4/24/2018							260
6/27/2018			130				230
8/7/2018			150				200
10/22/2018			160				190
12/3/2018							200
12/4/2018			170				
2/5/2019			145				263
2/25/2019							246
2/26/2019			148				
6/18/2019							245
8/20/2019			110				222
4/13/2020							256
4/14/2020		75.3		135			
4/15/2020	67.1		116		4.18		
8/25/2020	52.6		114		4.83		
8/26/2020		72.9		112			246
3/16/2021	18.5						
3/22/2021					2.04		254
3/23/2021		71.8		168			
3/24/2021			101				
3/30/2021						10.3	
10/5/2021							228
10/6/2021					2.44		
10/11/2021		61.7	112	174			
10/12/2021	36.7					15.2	
5/10/2022	42.1						215
5/16/2022		60.2	93.1		1.15 (J)	10	
5/17/2022				187			
10/25/2022			111		2.13	18	
10/26/2022	37.299999	55.099998		158			206

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<5		19	10	14	6.5	9
2/6/2018	<5		20				
2/8/2018				11	10	8.9	
2/12/2018							8.3
4/24/2018	<5						
4/25/2018			22	13	11	7.9	12
6/26/2018	<5			11	11	7.5	8.5
6/27/2018			18				
8/6/2018	<5						
8/7/2018			20	12			
8/8/2018					13	7.3	6.7
10/22/2018	<5						
10/23/2018			18	11	13	7.8	9.4
12/3/2018	<5			12			
12/4/2018					9.8	8.2	
12/5/2018			20				7.8
2/5/2019	5.38		24.3	13.9			
2/6/2019					10.8	9.53	17
2/26/2019	5.1			14.1			
2/27/2019			24.7		8.98	8.25	12.4
8/20/2019	7.34		21.3	12.3			
8/21/2019					11.8	10.8	11.3
4/13/2020			21.9	13.9			
4/14/2020						12.5	15.9
4/15/2020	17.2	1.25			7.95		
8/24/2020			21.2				
8/26/2020	15.5	1.21		13.1	9.19	16.1	12.9
3/16/2021			18.8				
3/17/2021				13.7			
3/23/2021					8.08	9.21	15.7
3/24/2021	19.9	1.39					
10/5/2021	37.8		14.4	14.2	9.19		
10/11/2021		1.7					
10/12/2021						16	18
5/9/2022			15.5				
5/10/2022				14.8	7.13		
5/11/2022		1.73 (J)				11.8	17.7
5/16/2022	51.8						
10/26/2022	61.799999	2.36	16.1	12.2	11.4	10.1	13.8

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	2.2 (J)		<1	<5		
7/18/2018	2.5 (J)		<1	<5		
8/7/2018	<5					
8/8/2018			<1	<5		
9/5/2018	1.4 (J)		<1	<5		
9/24/2018	<5		<1	<5		
10/22/2018	1.7 (J)					
10/23/2018			<1	<5		
12/3/2018	2.1 (J)		<1	<5		
2/5/2019	3.99					
2/7/2019			0.639 (J)	1.69		
2/25/2019	4.01		<1	1.53		
8/20/2019	3.73					
8/21/2019			1.21	1.62		
4/13/2020	3.83	1.48				
4/15/2020			0.554 (J)	1.68		
8/24/2020	4.16	3.88	<1	1.31		
3/16/2021			1.02	1.7		
3/17/2021		1.64				
3/24/2021	2.88					
10/5/2021	2.17	5.29				
10/6/2021					8.35	
10/11/2021						13.8
10/12/2021			0.895 (J)	1.34		
5/9/2022	2.51	1.15 (J)				
5/10/2022			1.02 (J)	1.28 (J)		
5/17/2022					19.1	6.55
10/26/2022	3.43	3.32	0.992 (J)	1.7 (J)	23.9	3.55

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.000203	<0.000203	<0.000203	<0.000203			
2/6/2018	<0.000203						
2/7/2018		<0.000203	<0.000203				
2/8/2018				<0.000203			
4/23/2018	<0.000203						
4/24/2018		<0.000203	<0.000203	<0.000203			
6/26/2018	<0.000203						
6/27/2018		<0.000203	<0.000203	<0.000203	<0.000203		
7/18/2018					<0.000203		
8/6/2018					<0.000203		
8/7/2018	<0.000203	<0.000203					
8/8/2018			<0.000203	<0.000203			
9/5/2018					<0.000203		
9/24/2018					<0.000203		
10/22/2018	<0.000203	<0.000203					
10/23/2018			<0.000203	<0.000203			
10/24/2018					<0.000203	<0.000203	<0.0002
11/14/2018						<0.000203	<0.0002
11/28/2018						<0.000203	<0.0002
12/4/2018	<0.000203	<0.000203	<0.000203				
12/5/2018				<0.000203	<0.000203	<0.000203	<0.0002
12/18/2018						<0.000203	<0.0002
1/3/2019						<0.000203	<0.0002
1/24/2019						<0.000203	<0.0002
2/5/2019	<0.000203				<0.000203	<0.000203	<0.0002
2/6/2019		<0.000203	<0.000203	<0.000203			
6/24/2019						<0.000203	
8/19/2019						<0.000203	<0.0002
8/20/2019					<0.000203		
8/21/2019	<0.000203						
8/22/2019		<0.000203	<0.000203	<0.000203			
4/14/2020			<0.000203	<0.000203			
4/15/2020	<0.000203	<0.000203				<0.000203	
4/16/2020					<0.000203		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.000203				<0.000203	<0.000203	
8/26/2020		<0.000203	<0.000203	<0.000203			
3/16/2021	0.000112 (J)						
3/22/2021					<0.000203	<0.000203	<0.0002
3/23/2021		<0.000203	<0.000203	<0.000203			
10/5/2021	<0.000203			<0.000203			
10/6/2021						<0.000203	<0.0002
10/11/2021		<0.000203					
10/12/2021			<0.000203		<0.000203		
5/9/2022					<0.000203		<0.0002
5/10/2022	0.00013 (J)	<0.000203		<0.000203			
5/17/2022			<0.000203			<0.000203	
10/25/2022						<0.000203	7E-05 (J)
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			<0.001				<0.001
2/6/2018			<0.001				<0.001
4/23/2018			<0.001				
4/24/2018							<0.001
6/27/2018			<0.001				<0.001
8/7/2018			<0.001				<0.001
10/22/2018			0.000213 (J)				<0.001
12/3/2018							<0.001
12/4/2018			<0.001				
2/5/2019			0.000256 (J)				<0.001
6/18/2019							<0.001
8/20/2019			0.000322 (J)				<0.001
4/13/2020							<0.001
4/14/2020		<0.000203		<0.001			
4/15/2020	<0.000203		0.000318 (J)		<0.000203		
8/25/2020	<0.000203		0.000347 (J)		<0.000203		
8/26/2020		<0.000203		<0.001			<0.001
3/16/2021	<0.000203						
3/22/2021					<0.000203		0.000121 (J)
3/23/2021		<0.000203		0.000145 (J)			
3/24/2021			0.00037				
3/30/2021						<0.000203	
10/5/2021							0.00014 (J)
10/6/2021					<0.000203		
10/11/2021		<0.000203	0.00029	0.00013 (J)			
10/12/2021	<0.000203					<0.000203	
5/10/2022	<0.000203						0.00011 (J)
5/16/2022		<0.000203	0.00041		<0.000203	<0.000203	
5/17/2022				0.00013 (J)			
10/25/2022			0.000361		<0.000203	<0.000203	
10/26/2022	<0.000203	<0.000203		0.000149 (J)			0.00011 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
2/6/2018	<0.000203		<0.000203				
2/8/2018				<0.000203	<0.000203	<0.000203	<0.000203
4/24/2018	<0.000203						
4/25/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
6/26/2018	<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
6/27/2018			<0.000203				
8/6/2018	<0.000203						
8/7/2018			<0.000203	<0.000203			
8/8/2018					<0.000203	<0.000203	<0.000203
10/22/2018	<0.000203						
10/23/2018			<0.000203	<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018	<0.000203			<0.000203			
12/4/2018					<0.000203	<0.000203	
12/5/2018			<0.000203				<0.000203
2/5/2019	<0.000203		<0.000203	<0.000203			
2/6/2019					<0.000203	<0.000203	<0.000203
8/20/2019	<0.000203		<0.000203	<0.000203			
8/21/2019					<0.000203	<0.000203	<0.000203
4/13/2020			<0.000203	<0.000203			
4/14/2020						<0.000203	<0.000203
4/15/2020	<0.000203	<0.000203			<0.000203		
8/24/2020			<0.000203				
8/26/2020	<0.000203	<0.000203		<0.000203	<0.000203	<0.000203	<0.000203
3/16/2021			<0.000203				
3/17/2021				<0.000203			
3/23/2021					<0.000203	<0.000203	<0.000203
3/24/2021	<0.000203	<0.000203					
10/5/2021	<0.000203		<0.000203	<0.000203	<0.000203		
10/11/2021		<0.000203					
10/12/2021						<0.000203	<0.000203
5/9/2022			<0.000203				
5/10/2022				<0.000203	<0.000203		
5/11/2022		<0.000203				<0.000203	<0.000203
5/16/2022	<0.000203						
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	<0.000203		<0.000203	<0.000203		
7/18/2018	<0.000203		<0.000203	<0.000203		
8/7/2018	<0.000203					
8/8/2018			<0.000203	<0.000203		
9/5/2018	<0.000203		<0.000203	<0.000203		
9/24/2018	<0.000203		<0.000203	<0.000203		
10/22/2018	<0.000203					
10/23/2018			<0.000203	<0.000203		
12/3/2018	<0.000203		<0.000203	<0.000203		
2/5/2019	<0.000203					
2/7/2019			<0.000203	<0.000203		
8/20/2019	<0.000203					
8/21/2019			<0.000203	<0.000203		
4/13/2020	<0.000203	<0.000203				
4/15/2020			<0.000203	<0.000203		
8/24/2020	<0.000203	<0.000203	<0.000203	<0.000203		
3/16/2021			<0.000203	<0.000203		
3/17/2021		<0.000203				
3/24/2021	<0.000203					
10/5/2021	<0.000203	<0.000203				
10/6/2021					<0.000203	
10/11/2021						<0.000203
10/12/2021			<0.000203	<0.000203		
5/9/2022	<0.000203	<0.000203				
5/10/2022			<0.000203	<0.000203		
5/17/2022					<0.000203	<0.000203
10/26/2022	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1300	215	312	371			
2/6/2018	1310						
2/7/2018		237	323				
2/8/2018				367			
4/23/2018	1210						
4/24/2018		242	324	365			
6/26/2018	1250						
6/27/2018		194	333	421	219		
7/18/2018					195		
8/6/2018					175		
8/7/2018	1220	195					
8/8/2018			346	479			
9/5/2018					153		
9/24/2018					127		
10/22/2018	1150	184					
10/23/2018			311	507			
10/24/2018					125	107	184
11/14/2018						96.7	170
11/28/2018						102	167
12/4/2018	1090	215	343				
12/5/2018				479	101	103	185
12/18/2018						126	164
1/3/2019						191	167
1/24/2019						212	137
2/5/2019	1200				180	269	138
2/6/2019		208	317	399			
2/26/2019	1210	252					
2/27/2019			360	422			
2/28/2019					287	261	140
6/24/2019						203.5 (D)	
8/19/2019						121	240
8/20/2019					265		
8/21/2019	1200						
8/22/2019		194	555	501			
4/14/2020			372	278			
4/15/2020	1060	262				155	
4/16/2020					280		166
8/24/2020							162
8/25/2020	1060				160	131	
8/26/2020		186	517	472			
3/16/2021	1040						
3/22/2021					126	204	157
3/23/2021		273	361	286			
10/5/2021	964			378			
10/6/2021						136	182
10/11/2021		190					
10/12/2021			352		142		
5/9/2022					185		152
5/10/2022	780	199		319			
5/17/2022			367			226	
10/25/2022						72.699997	159
10/26/2022	840	202	545	402	98		

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-2VA	GSD-AP-MW-2VB	GSD-AP-MW-3
12/6/2017			574				628
2/6/2018			572				556
4/23/2018			414				
4/24/2018							510
6/27/2018			440				486
8/7/2018			485				487
10/22/2018			484				450
12/3/2018							492
12/4/2018			504				
2/5/2019			366				428
2/25/2019							441
2/26/2019			372				
6/18/2019							422
8/20/2019			369				416
4/13/2020							433
4/14/2020		190		323			
4/15/2020	126		300		324		
8/25/2020	107		339		321		
8/26/2020		202		310			455
3/16/2021	52						
3/22/2021					314		427
3/23/2021		174		385			
3/24/2021			287				
3/30/2021						528	
10/5/2021							389
10/6/2021					317		
10/11/2021		202	337	384			
10/12/2021	78.7					536	
5/10/2022	90						362
5/16/2022		138	244		316	508	
5/17/2022				401			
10/25/2022			337		330	588	
10/26/2022	82.699997	207		364			328

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/7/2017	189		215	136	137	253	183
2/6/2018	206		204				
2/8/2018				122	124	229	
2/12/2018							201
4/24/2018	193						
4/25/2018			192	102	106	223	180
6/26/2018	180			106	129	232	191
6/27/2018			180				
8/6/2018	182						
8/7/2018			183	71.3			
8/8/2018					142	208	192
10/22/2018	204						
10/23/2018			169	105	142	209	185
12/3/2018	168			102			
12/4/2018					121	213	
12/5/2018			177				200
2/5/2019	158		198	107			
2/6/2019					108	212	151
2/26/2019	191			99.3			
2/27/2019			185		103	211	186
8/20/2019	164		174	98.7			
8/21/2019					133	226	200
4/13/2020			192	90.7			
4/14/2020						222	187
4/15/2020	170	218			102		
8/24/2020			175				
8/26/2020	168	239		91.3	109	215	192
3/16/2021			184				
3/17/2021				80			
3/23/2021					92.7	200	178
3/24/2021	180	222					
10/5/2021	200		168	96.7	113		
10/11/2021		220					
10/12/2021						245	169
5/9/2022			174				
5/10/2022				73.3	82.7		
5/11/2022		220				216	181
5/16/2022	218						
10/26/2022	247	221	178	91.300003	121	226	194

Time Series

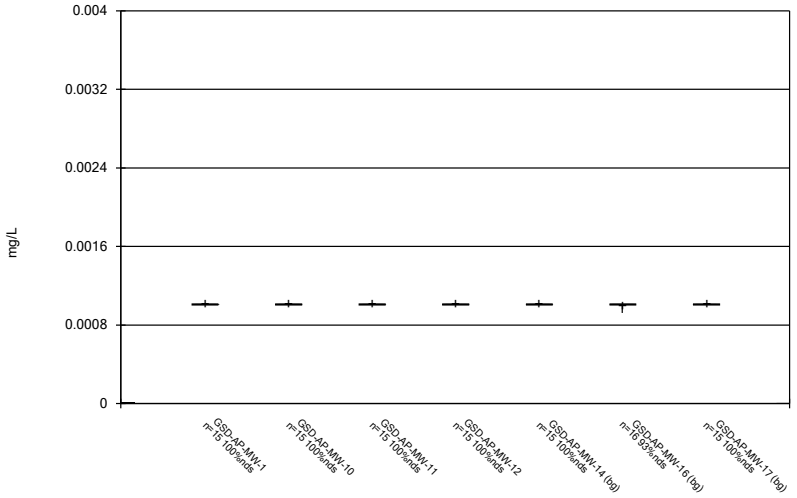
Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6	GSD-AP-MW-21VC	GSD-AP-MW-22VB
6/27/2018	144		48.7	44		
7/18/2018	156		46	42.7		
8/7/2018	140					
8/8/2018			48	46		
9/5/2018	154		47.3	67.3		
9/24/2018	165		44.7	49.3		
10/22/2018	148					
10/23/2018			35.3	31.3		
12/3/2018	127		48.7	46		
2/5/2019	113					
2/7/2019			42.7	32.7		
2/25/2019	106		40.7	31.3		
8/20/2019	141					
8/21/2019			46	42.7		
4/13/2020	104	88				
4/15/2020			41.3	37.3		
8/24/2020	114	115	42.7	37.3		
3/16/2021			42	41.3		
3/17/2021		53.3				
3/24/2021	94					
10/5/2021	108	101				
10/6/2021					864	
10/11/2021						230
10/12/2021			38.7	35.3		
5/9/2022	85.3	53.3				
5/10/2022			33.3	33.3		
5/17/2022					921	238
10/26/2022	96	119	45.299999	38	952	239

FIGURE B.

Box & Whiskers Plot

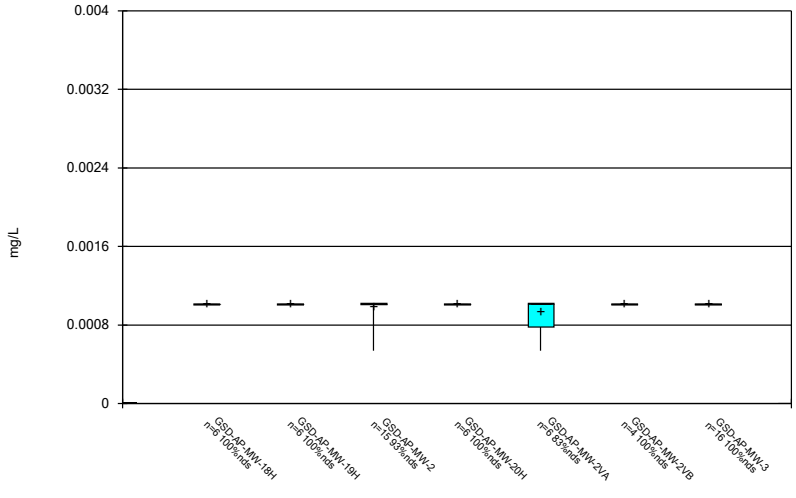


Constituent: Antimony Analysis Run 12/27/2022 6:37 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot

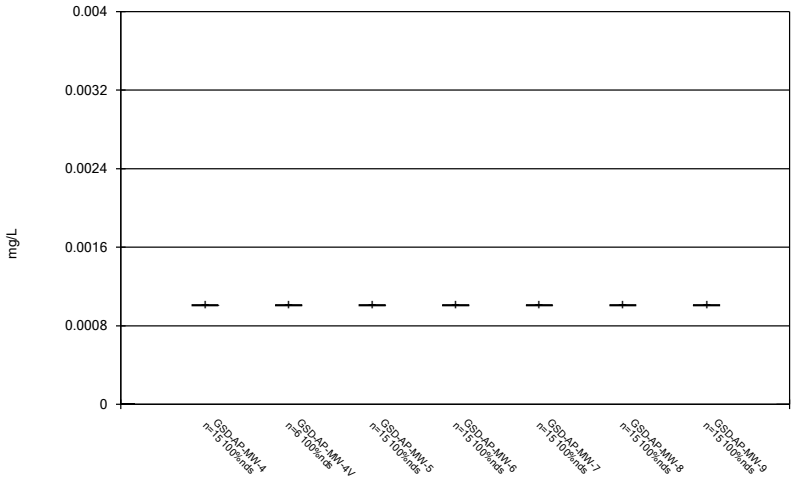


Constituent: Antimony Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot

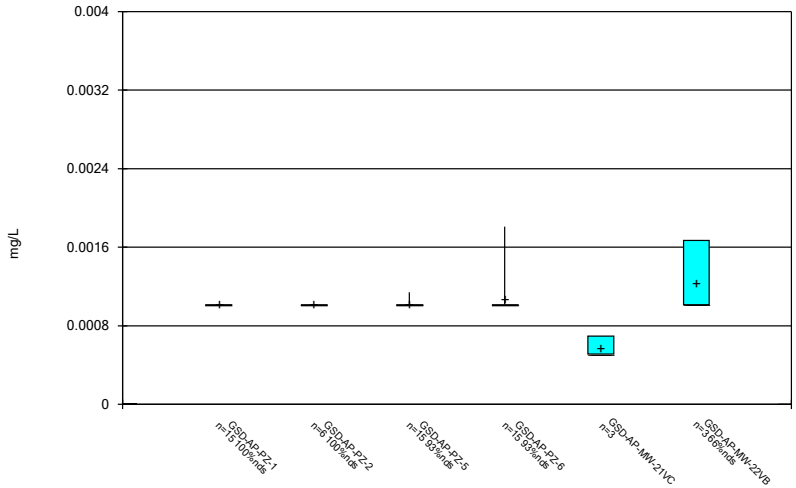


Constituent: Antimony Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

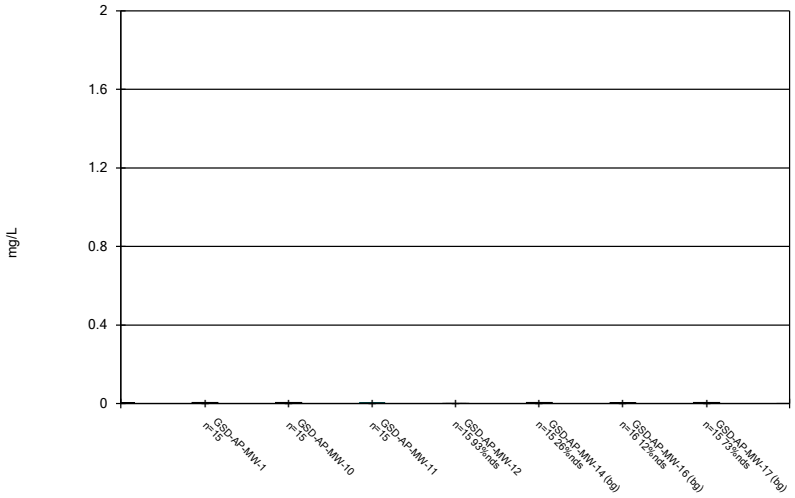
Box & Whiskers Plot



Constituent: Antimony Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

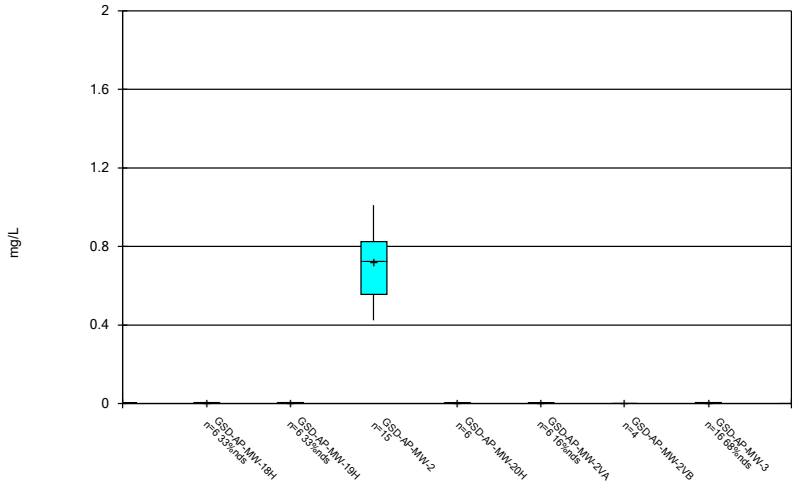


Constituent: Arsenic Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot

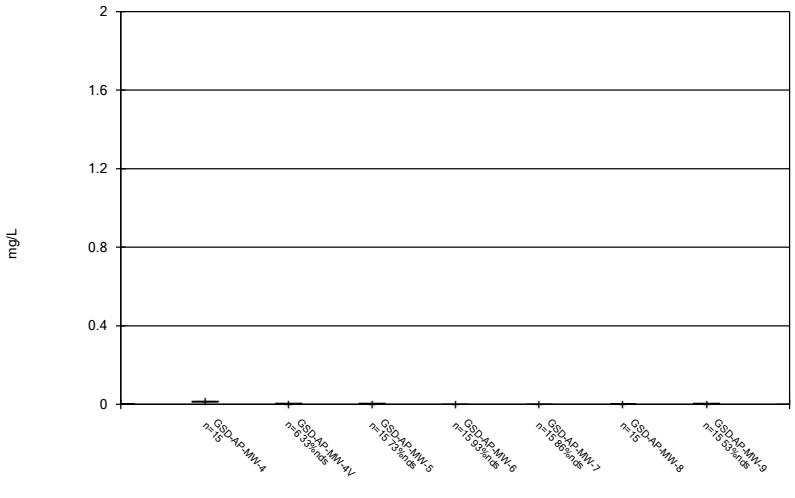


Constituent: Arsenic Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot

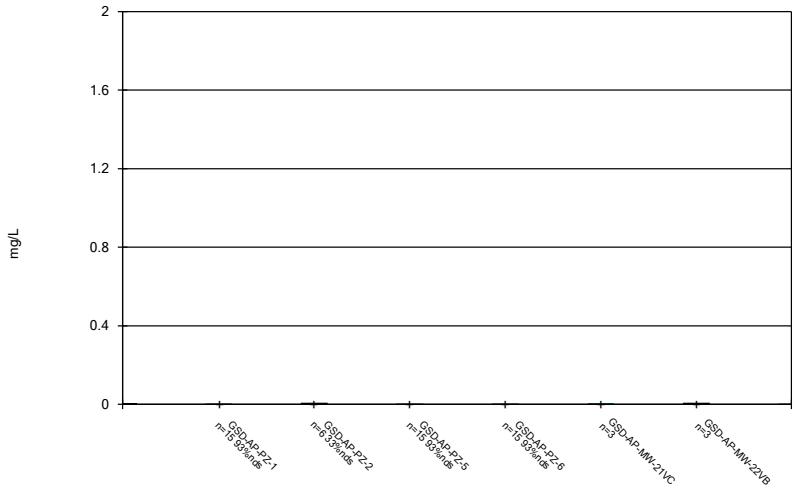


Constituent: Arsenic Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

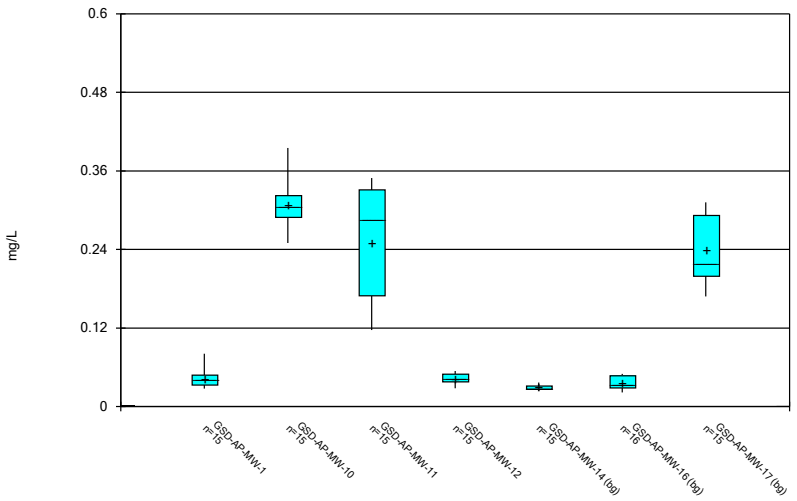
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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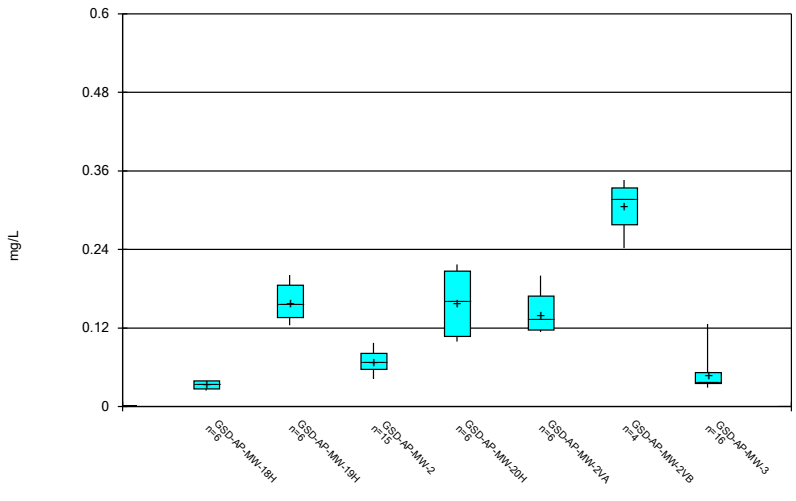
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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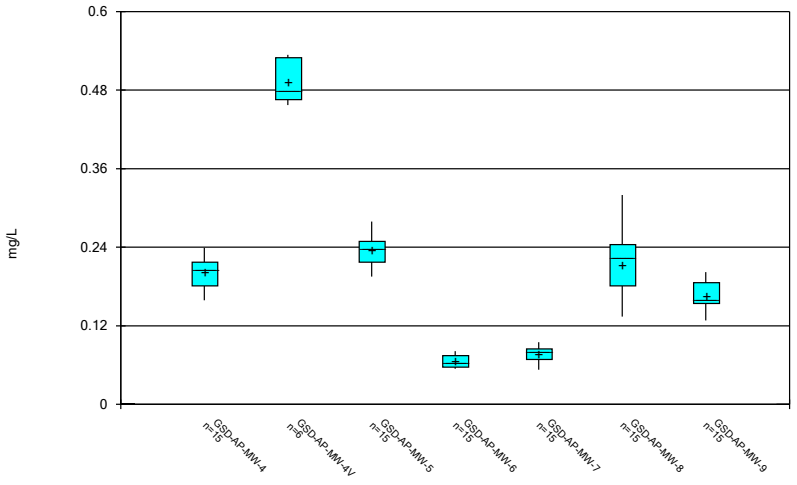
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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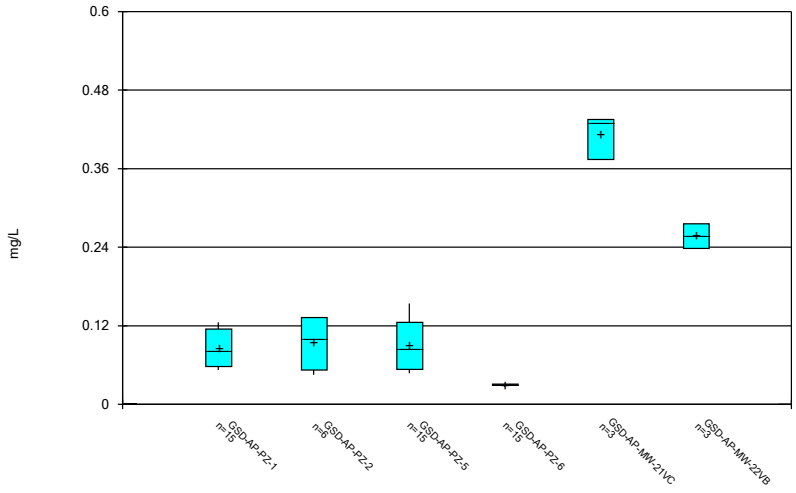
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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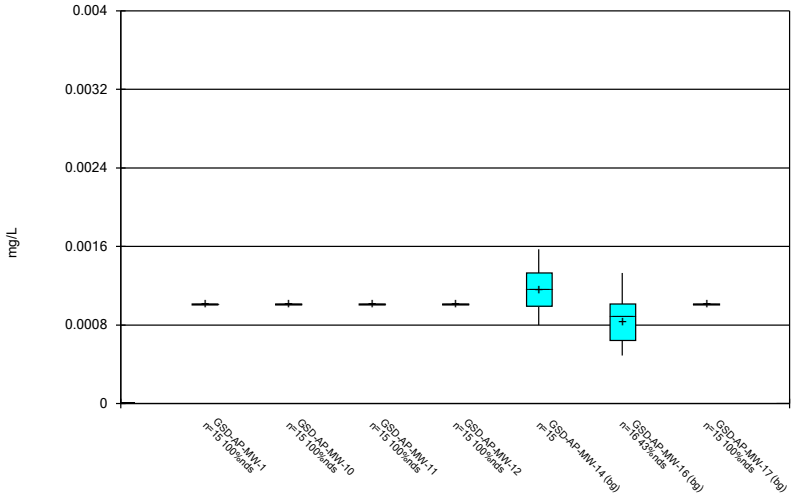
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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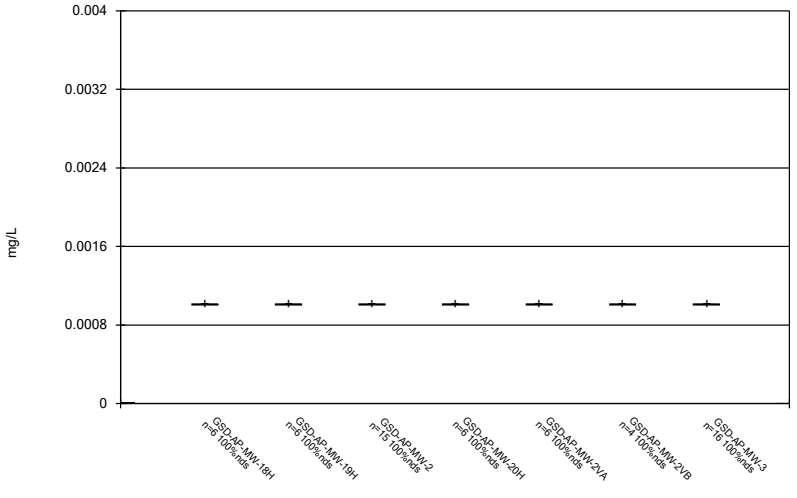
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

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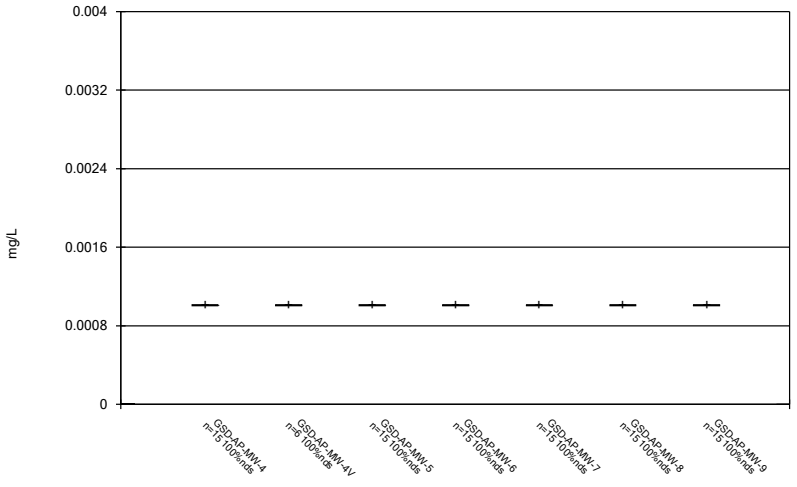

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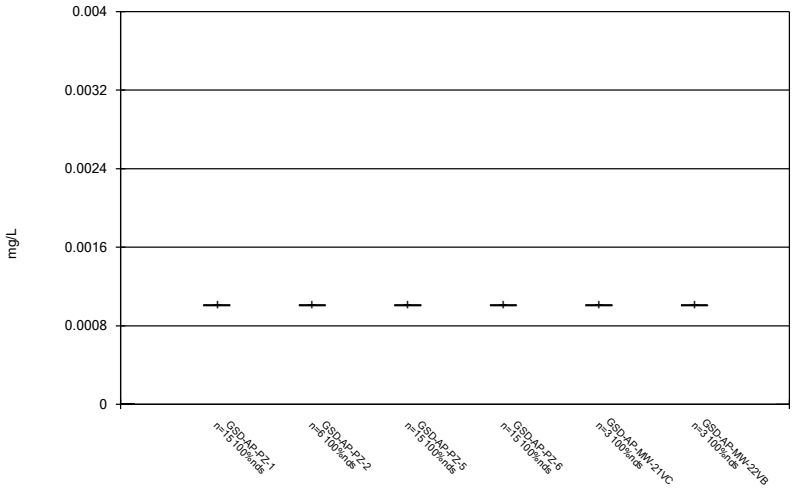
Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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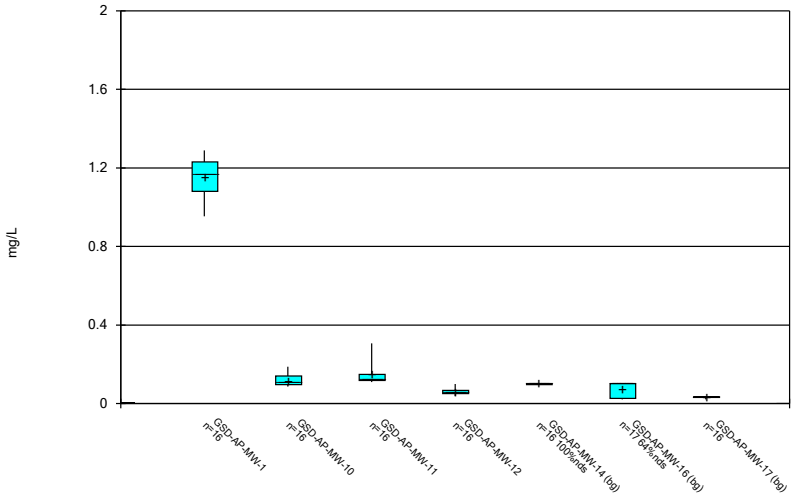
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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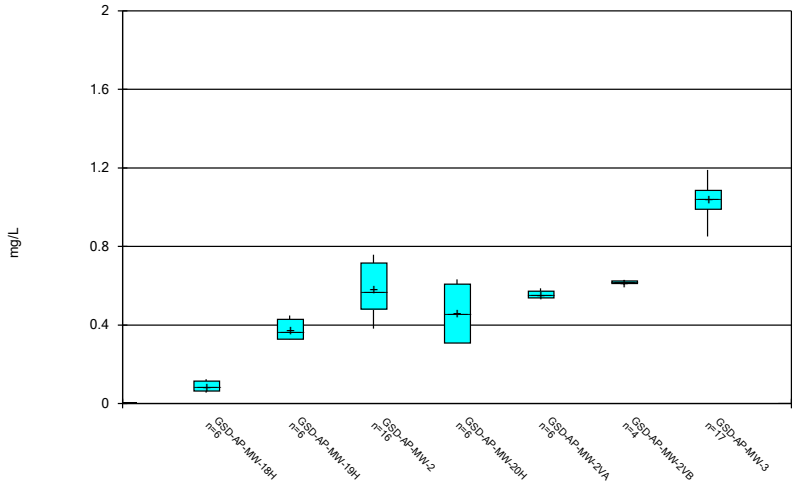
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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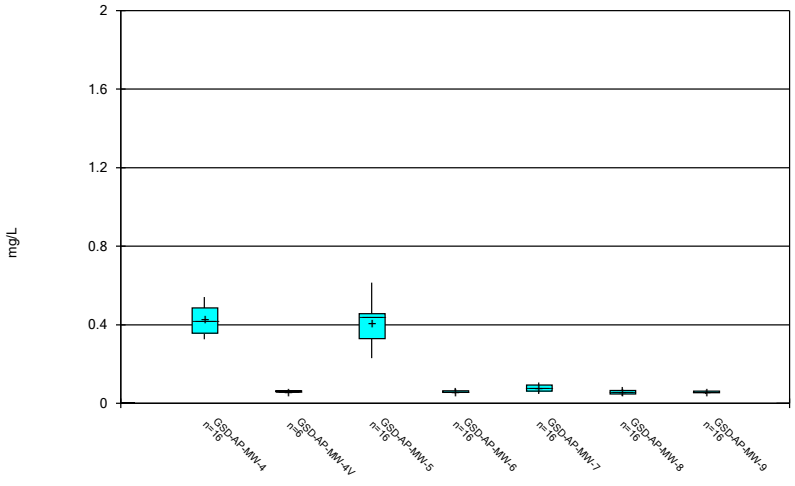
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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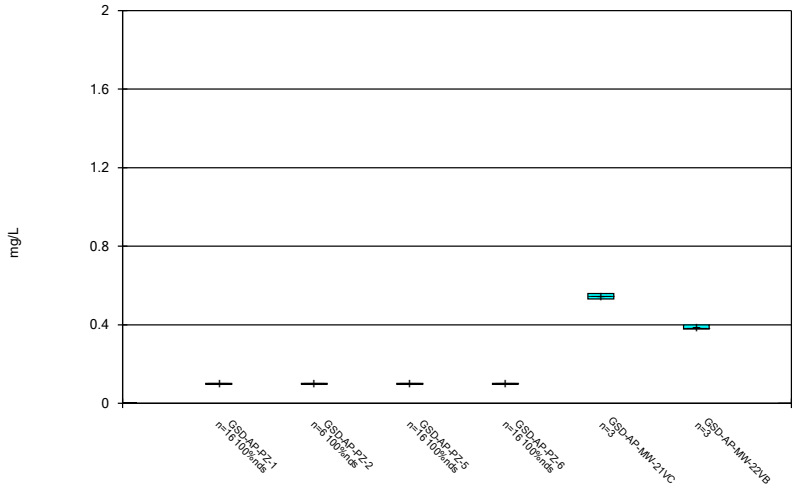
Box & Whiskers Plot



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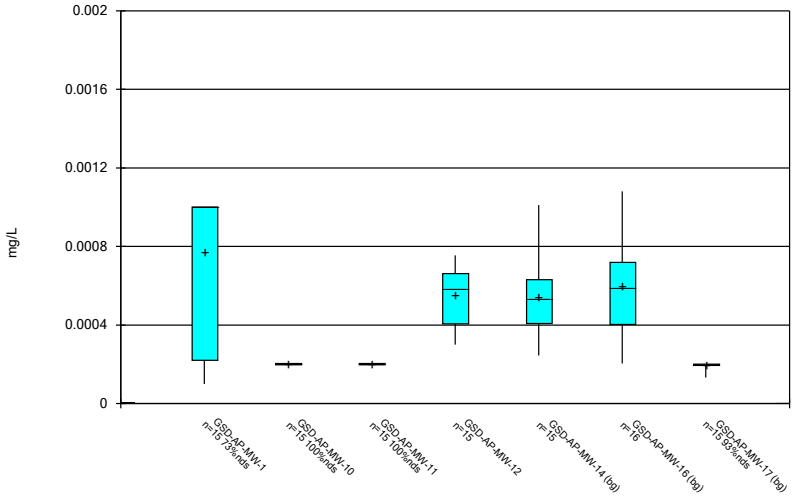
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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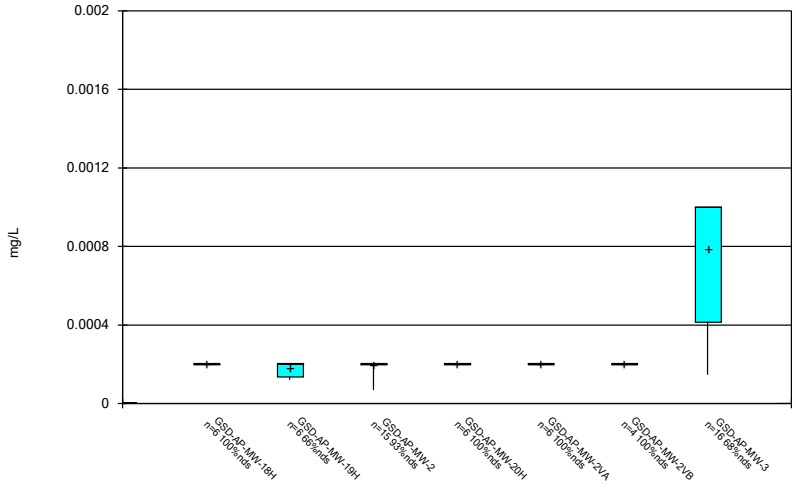
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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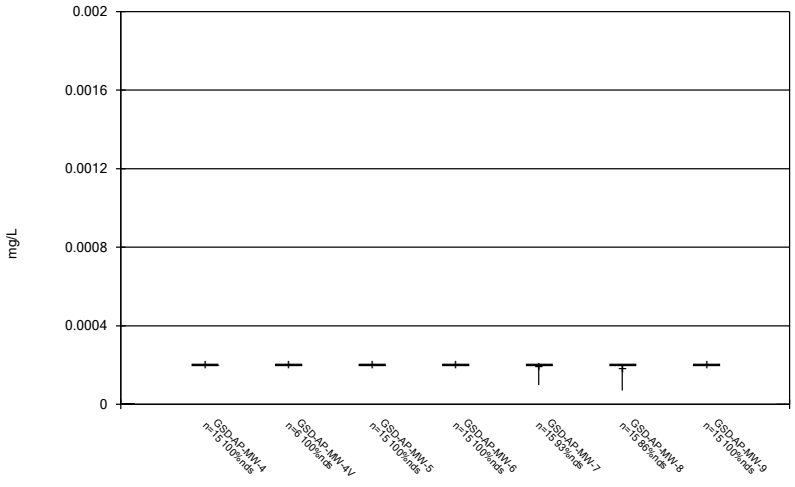
Box & Whiskers Plot



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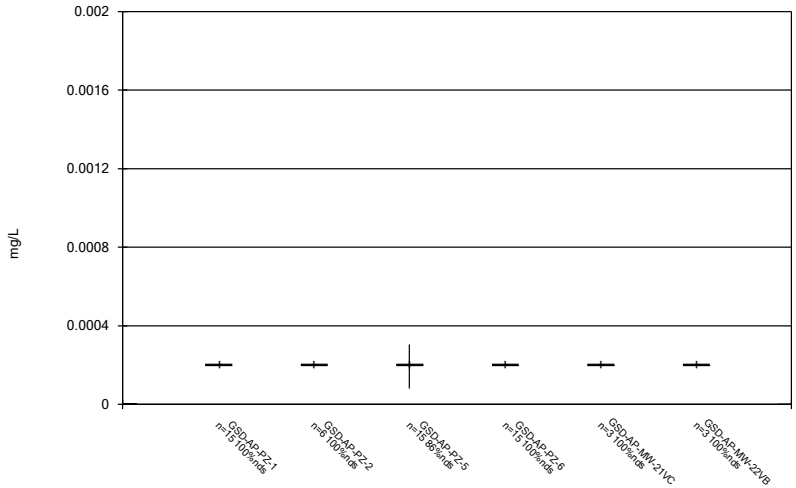
Box & Whiskers Plot



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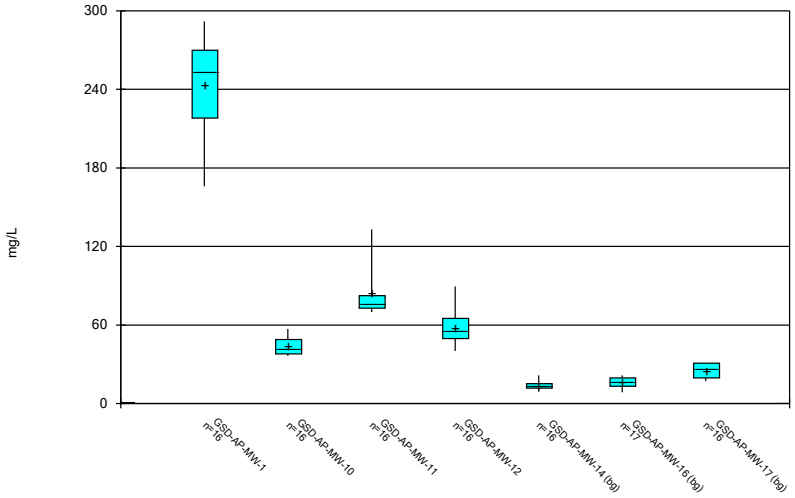
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot

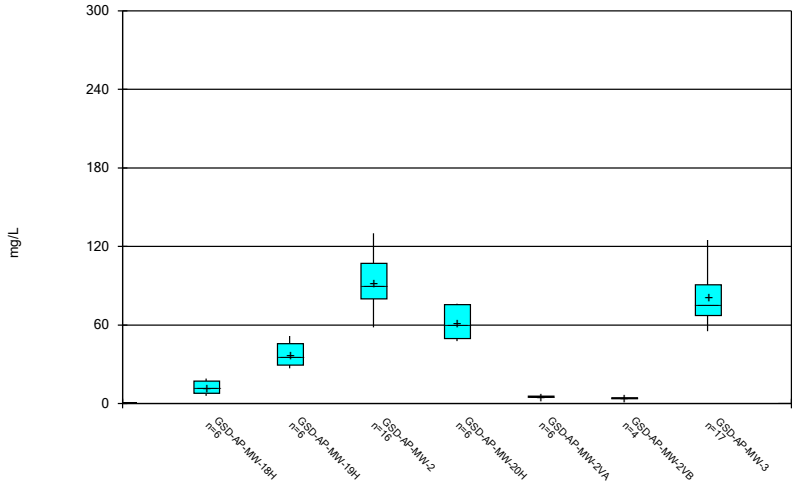


Constituent: Calcium Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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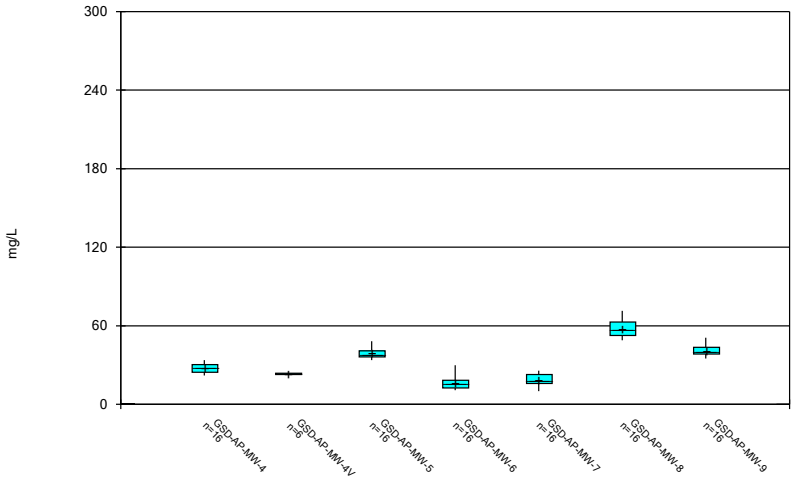
Box & Whiskers Plot



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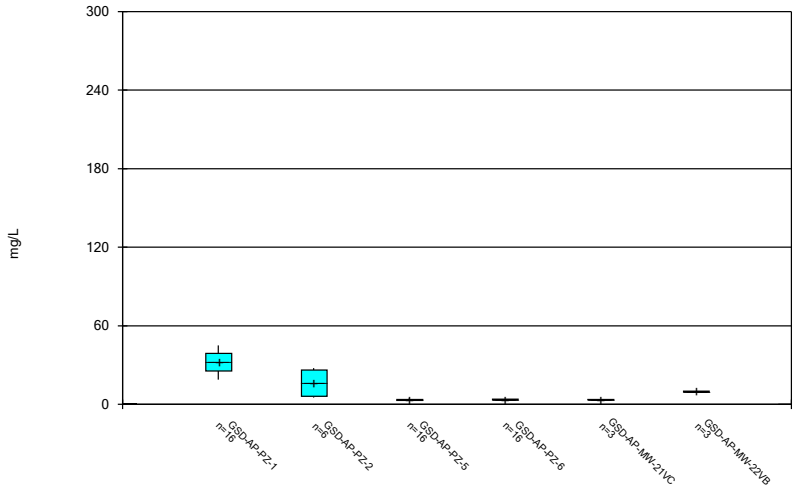
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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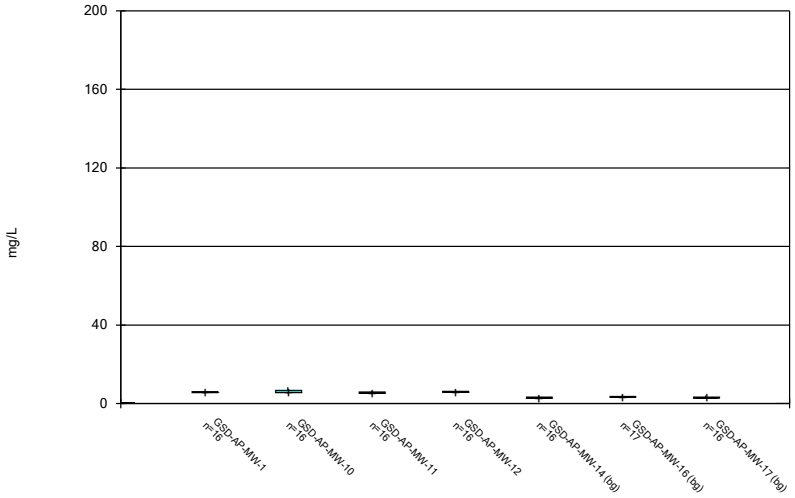
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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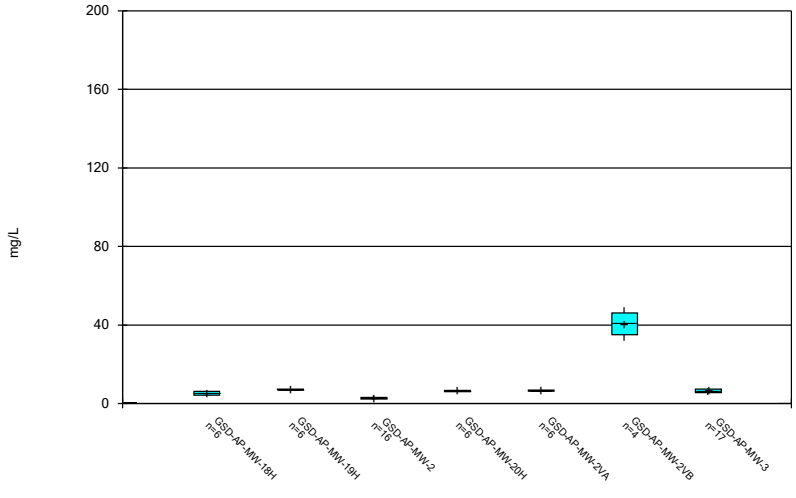
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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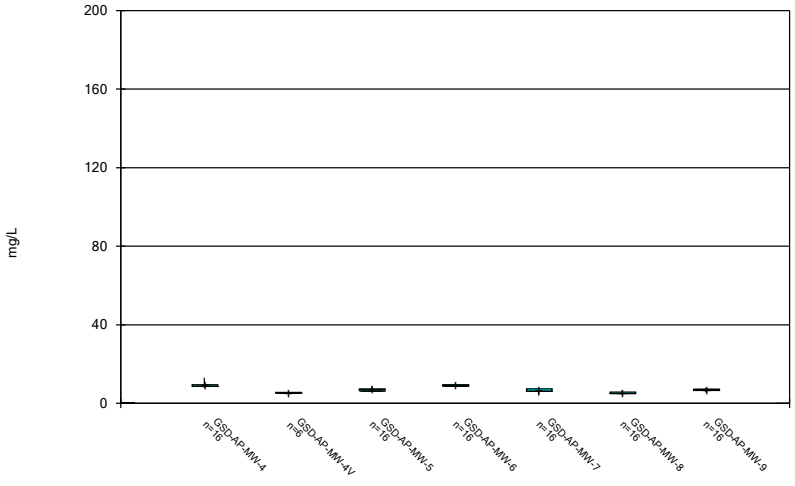
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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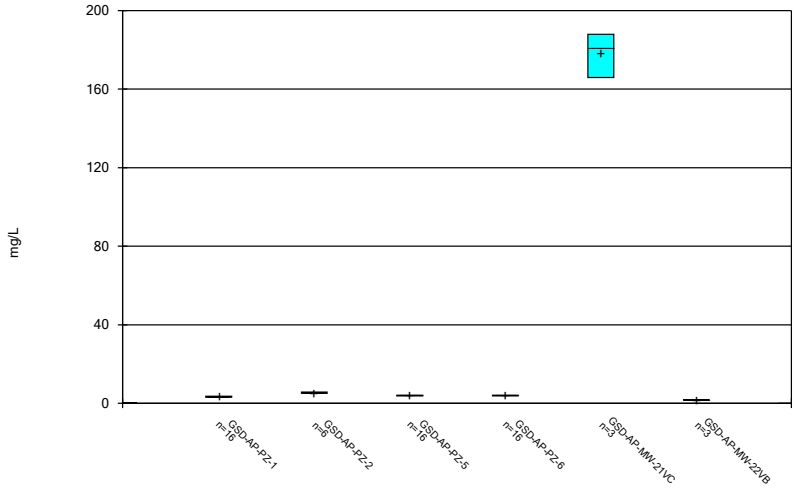
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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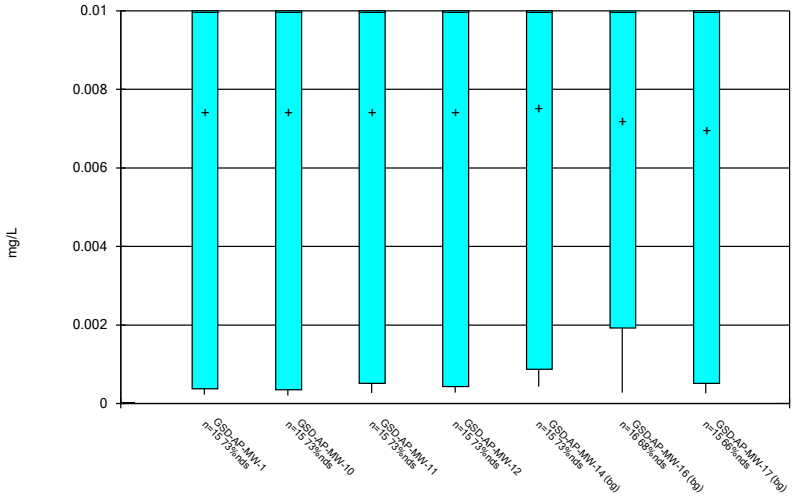
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

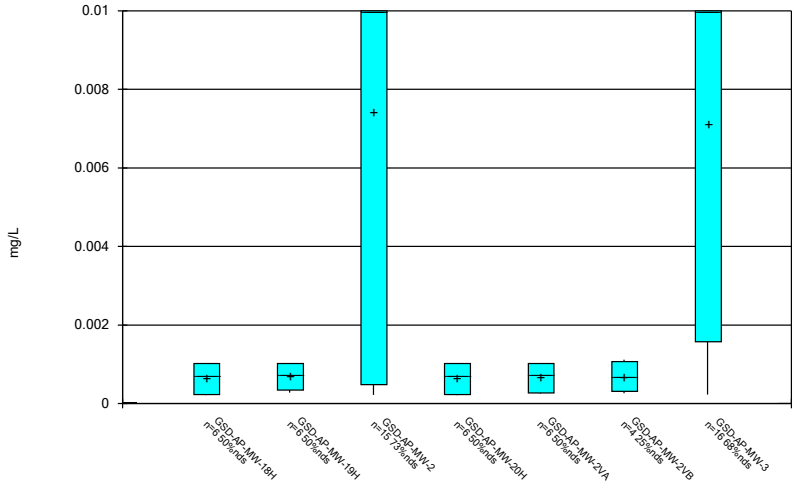


Constituent: Chromium Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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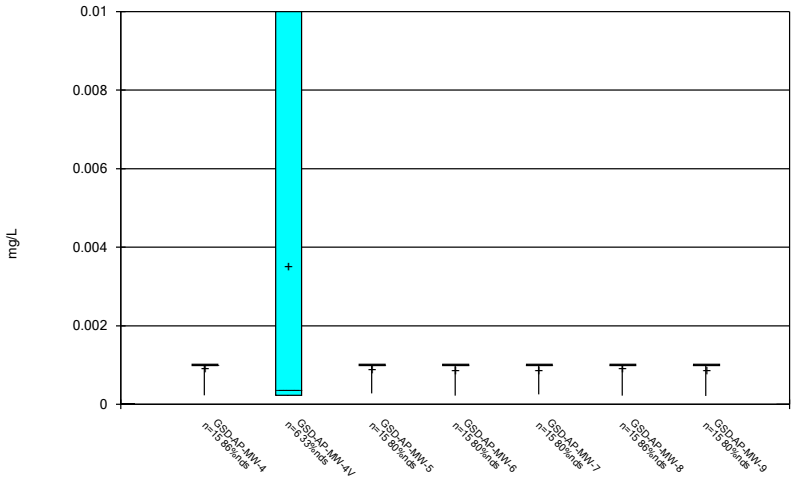
Box & Whiskers Plot



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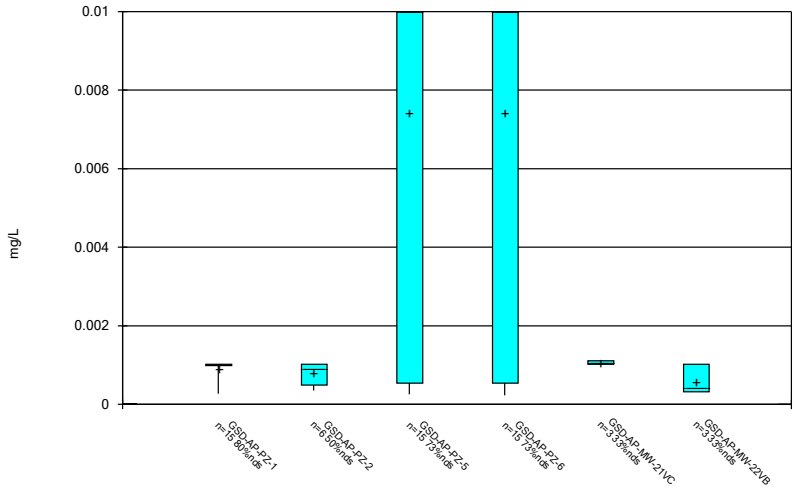
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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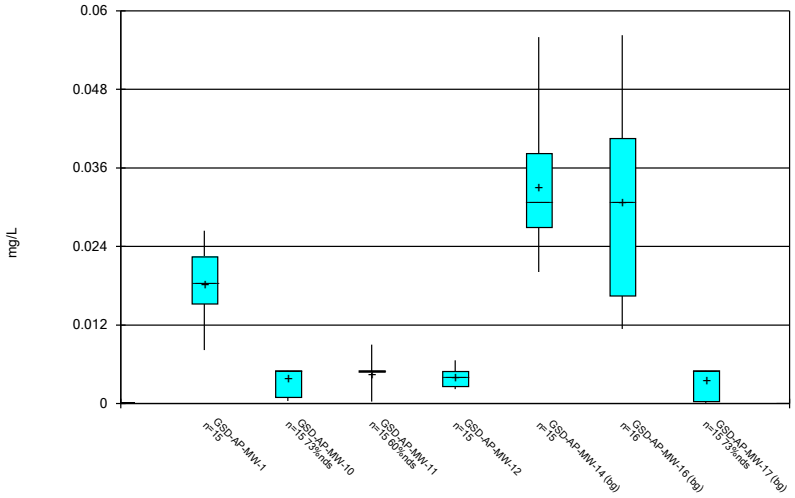
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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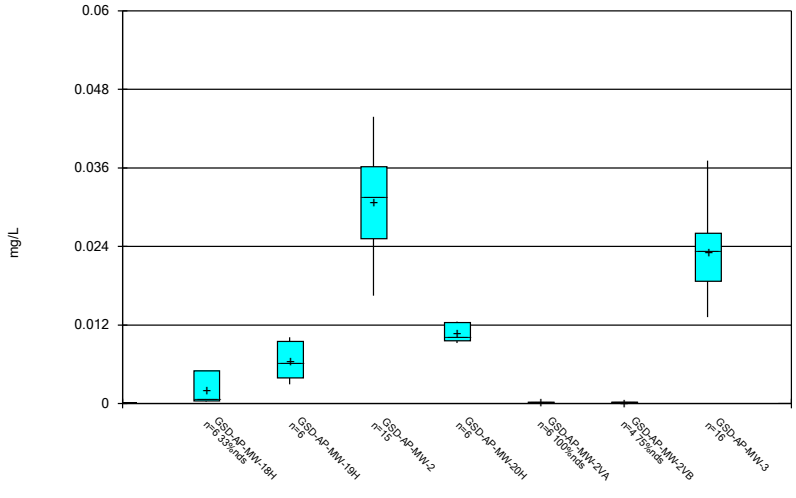
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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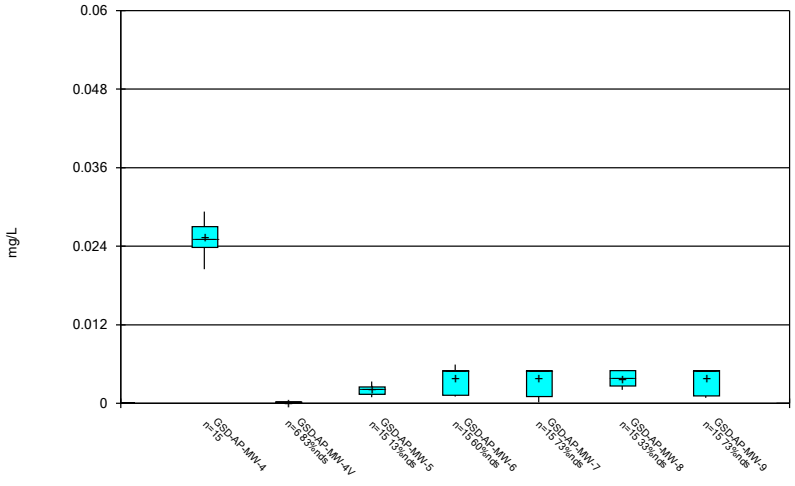
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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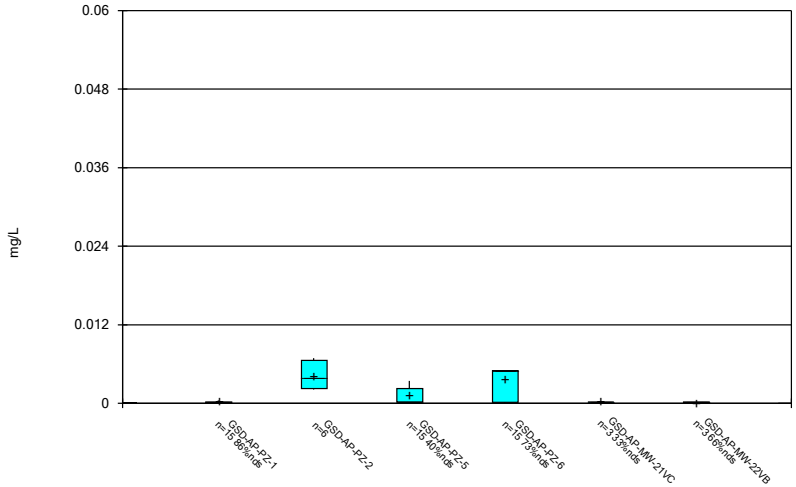
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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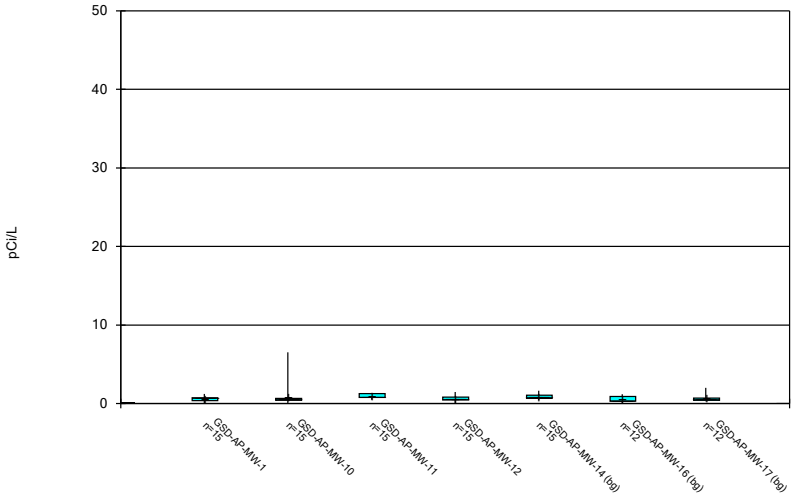
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

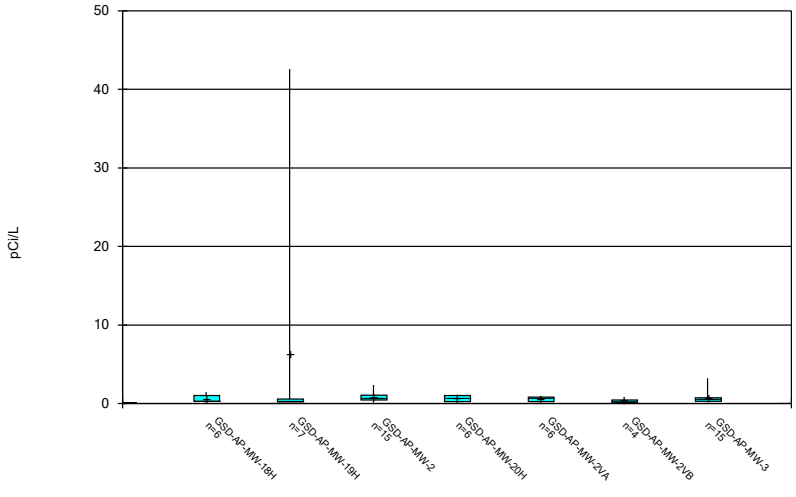
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 12/27/2022 6:38 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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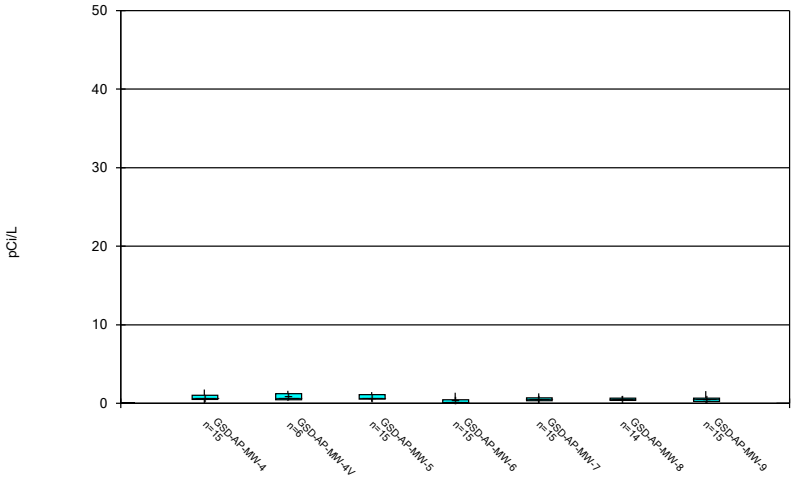
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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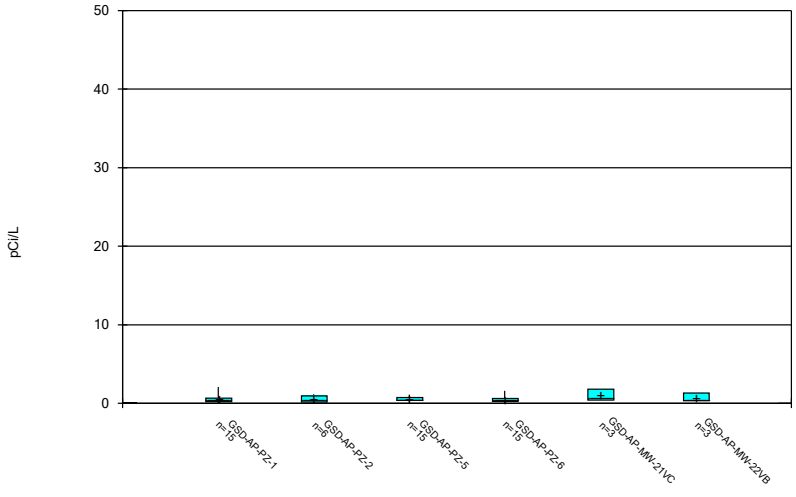
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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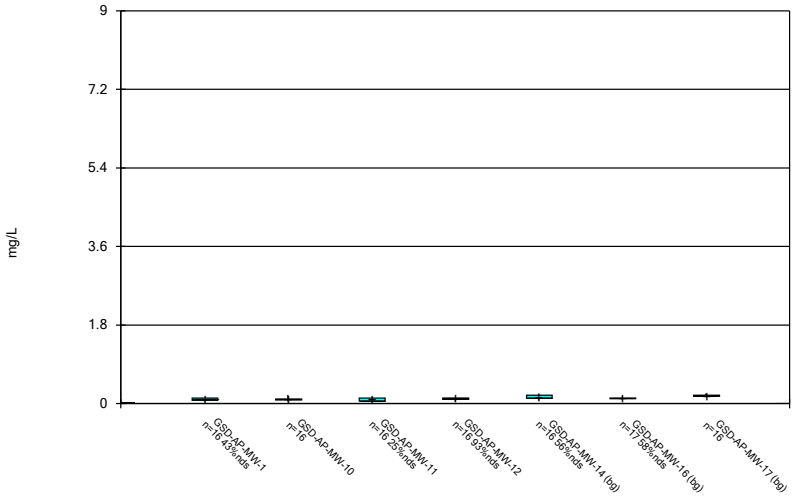
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

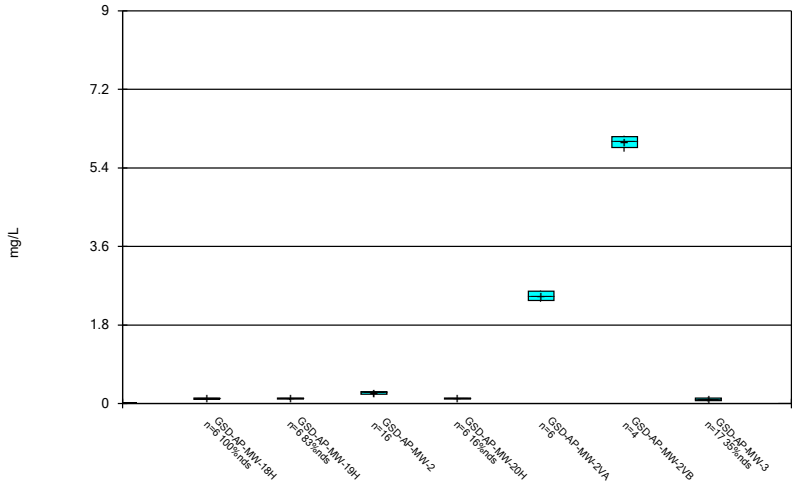


Constituent: Fluoride Analysis Run 12/27/2022 6:38 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

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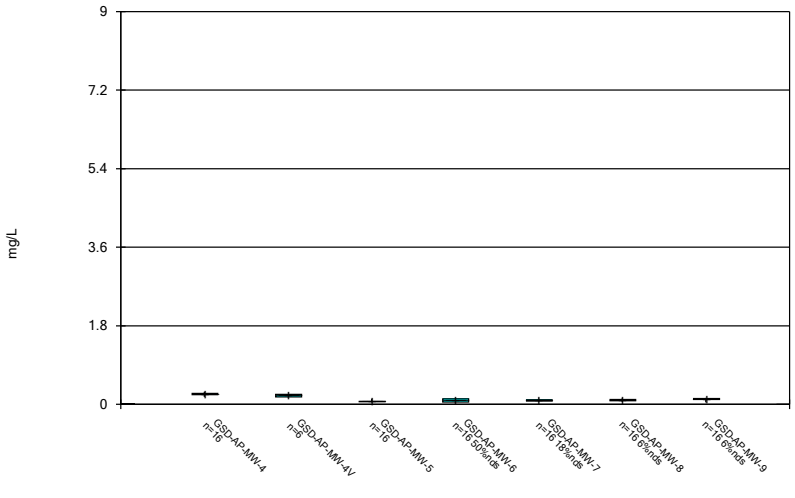

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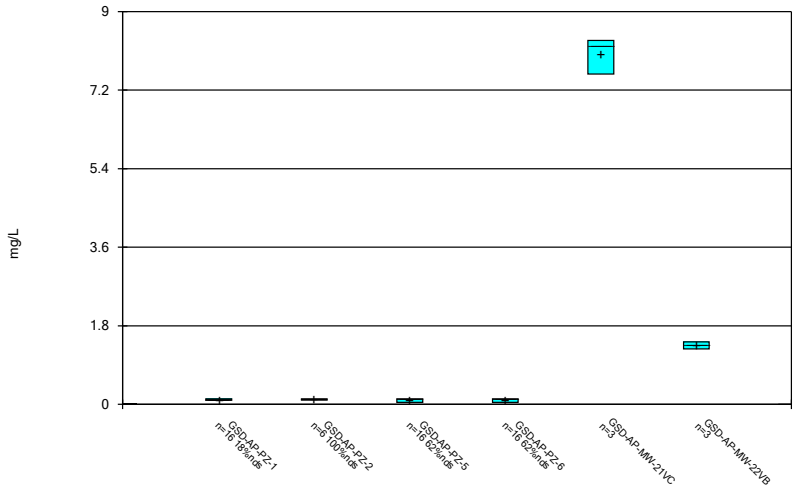
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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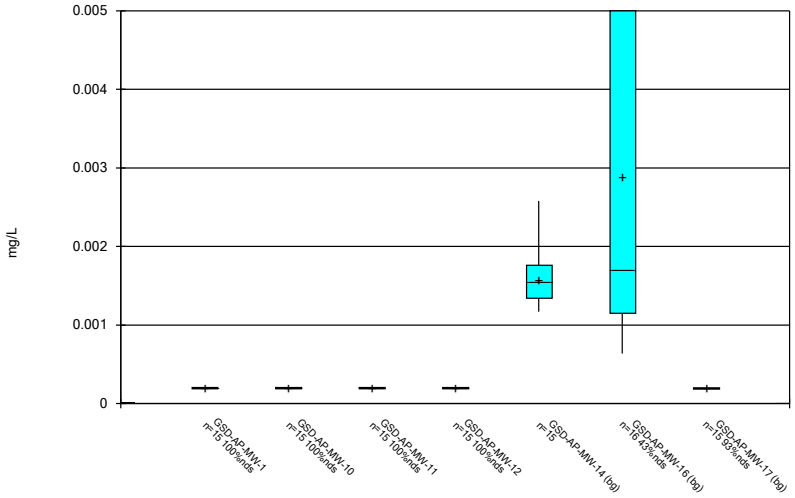
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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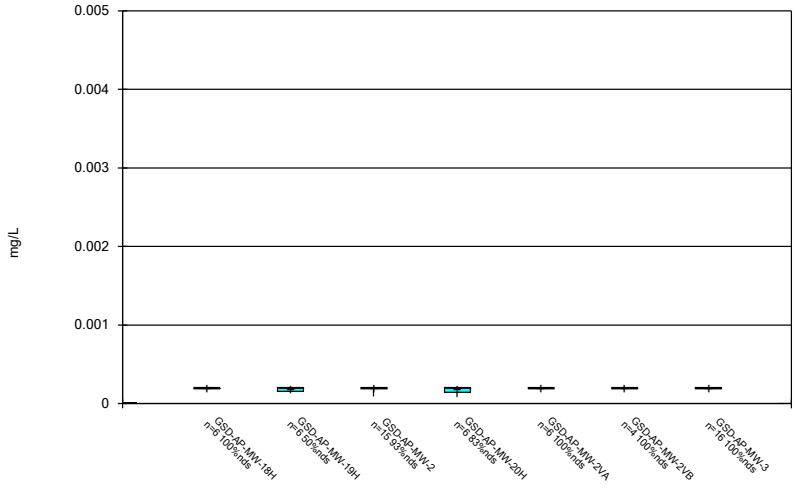
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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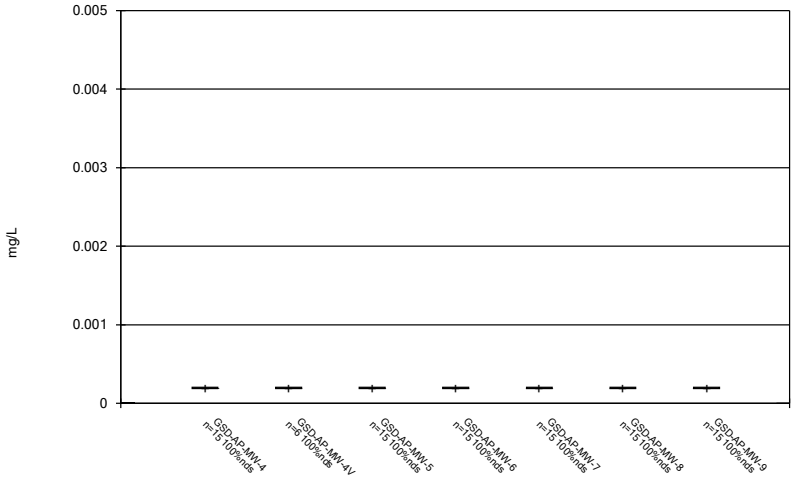
Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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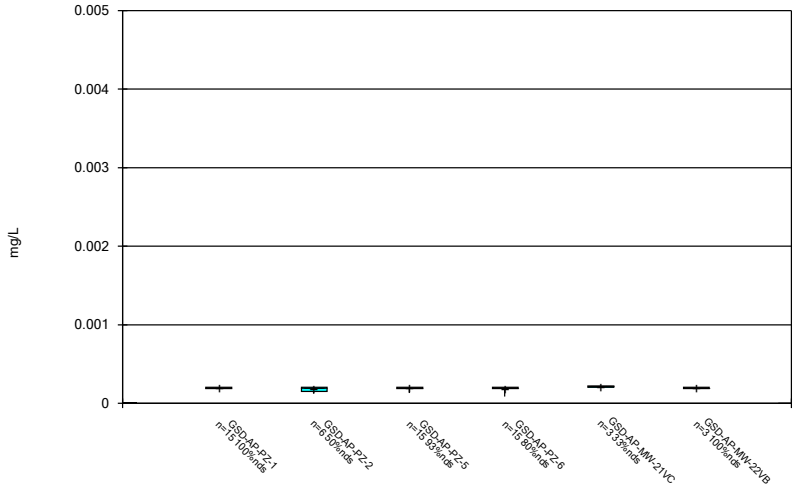
Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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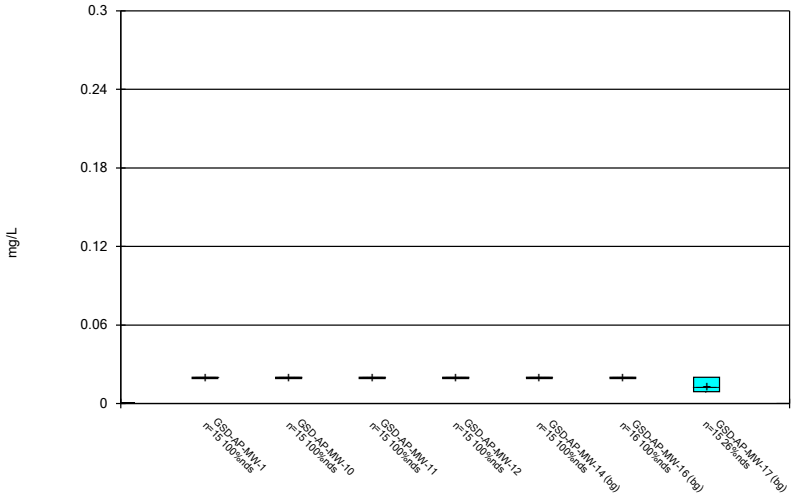
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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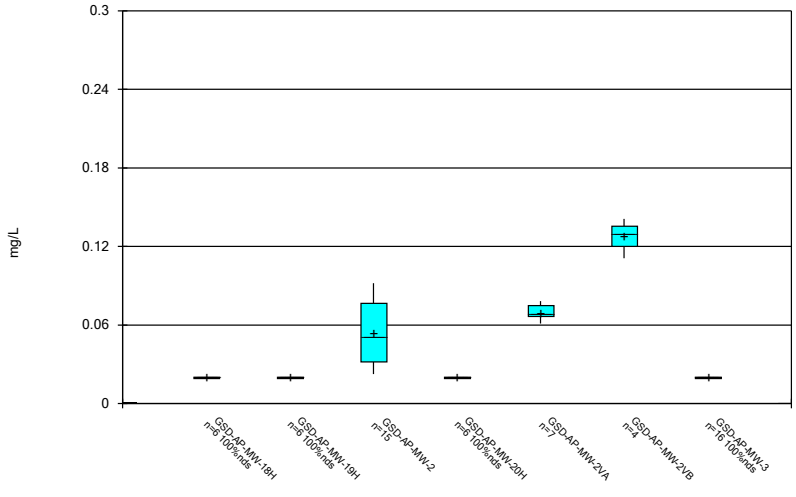
Box & Whiskers Plot



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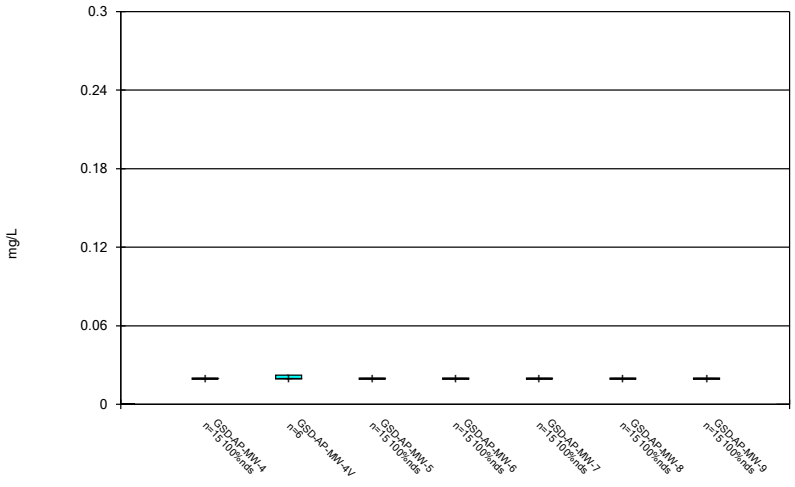
Box & Whiskers Plot



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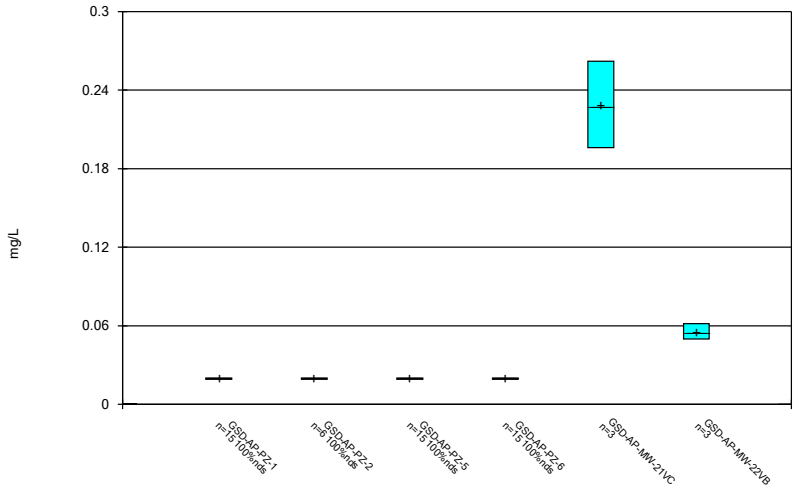
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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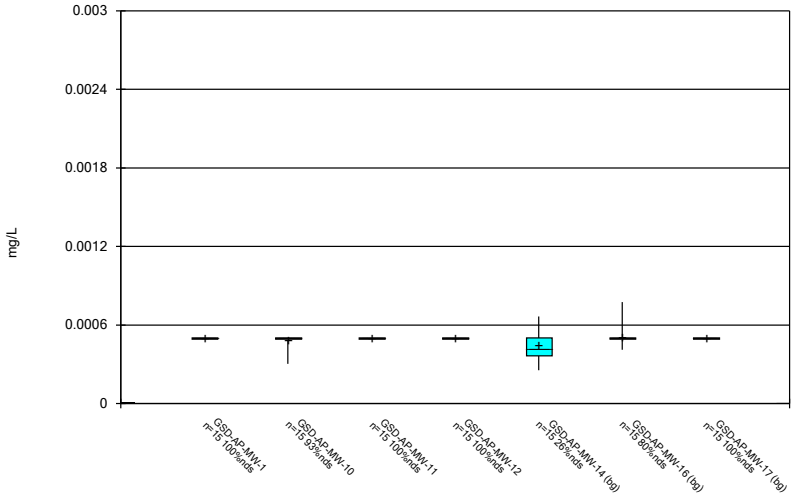
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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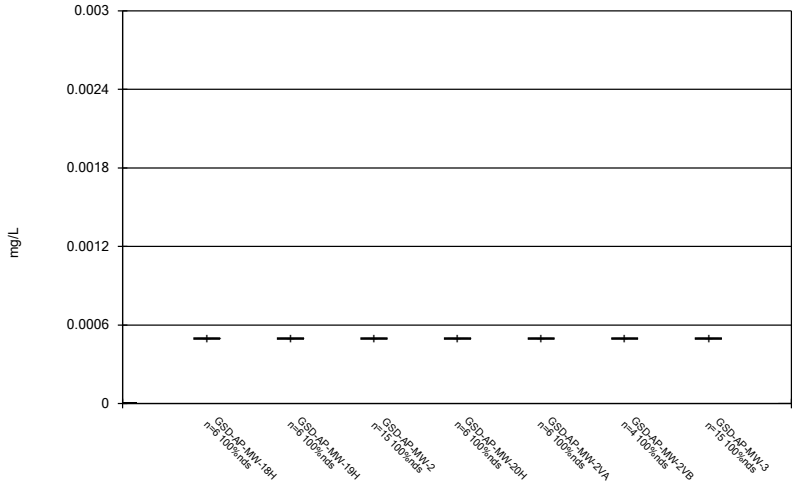
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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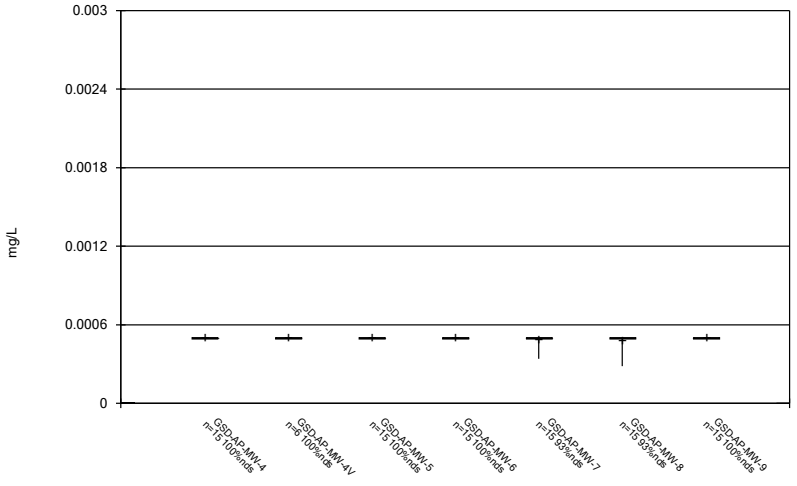
Box & Whiskers Plot



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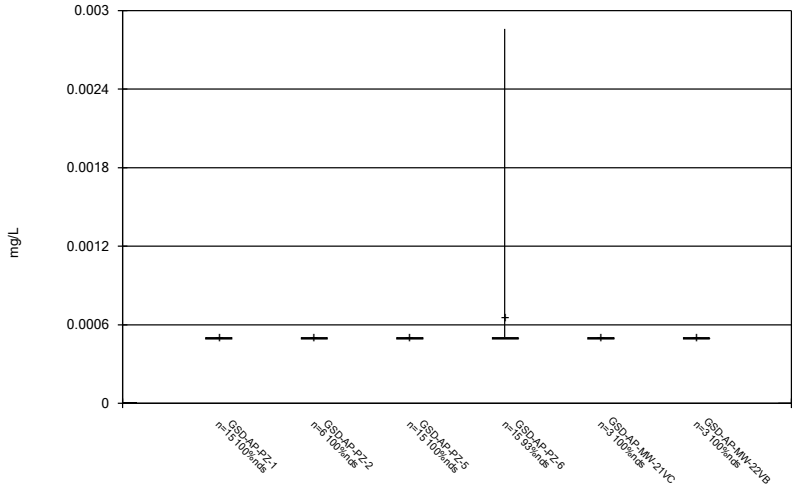
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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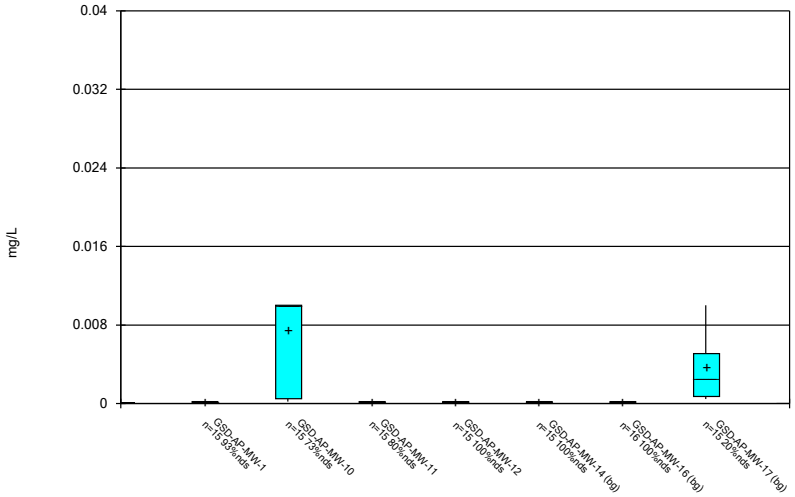
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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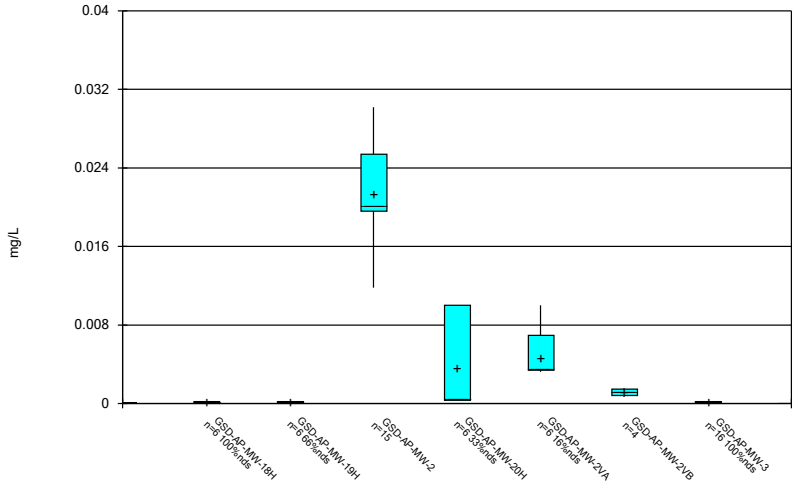
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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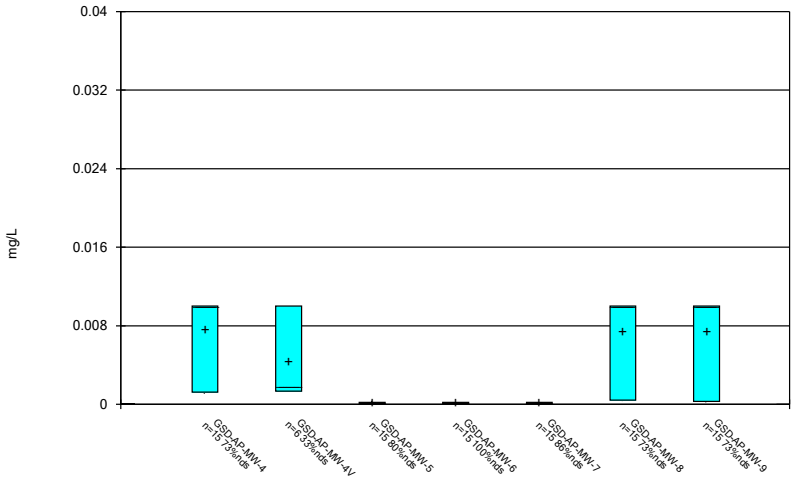
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot

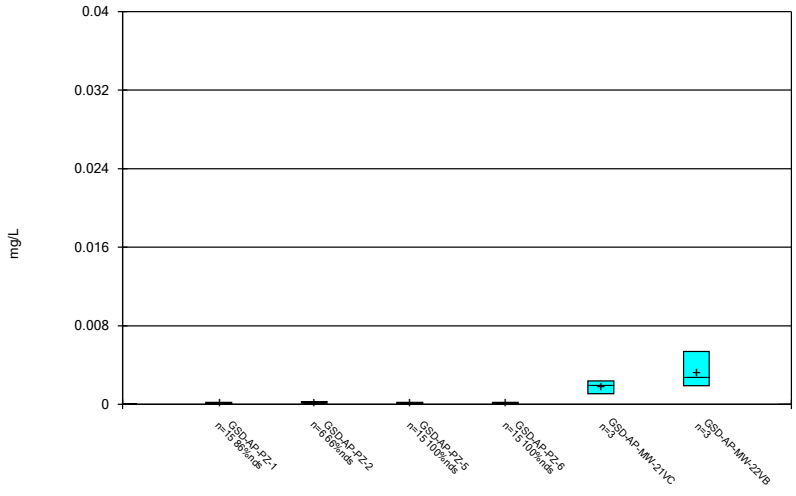


Constituent: Molybdenum Analysis Run 12/27/2022 6:39 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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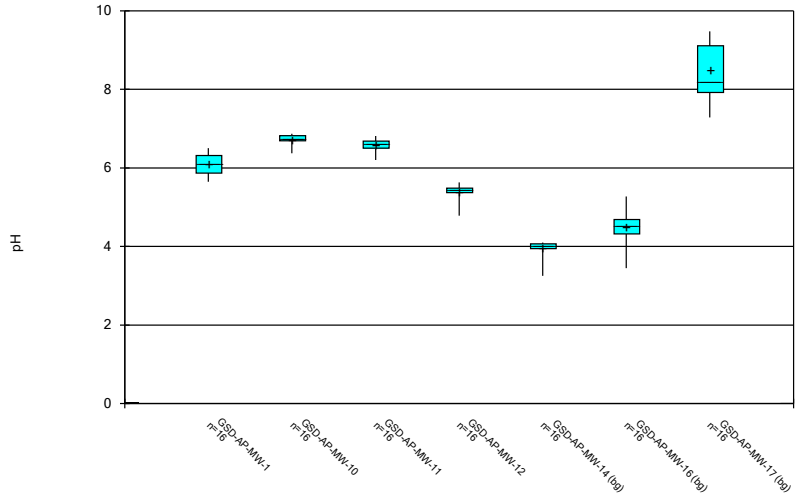
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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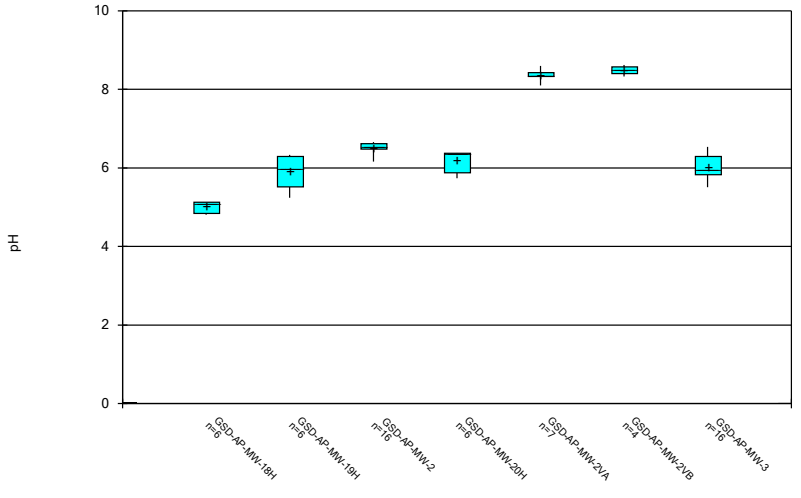
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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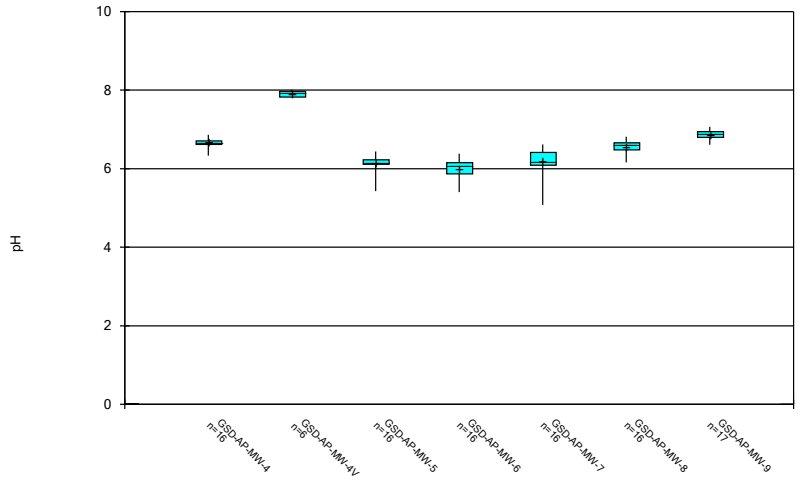

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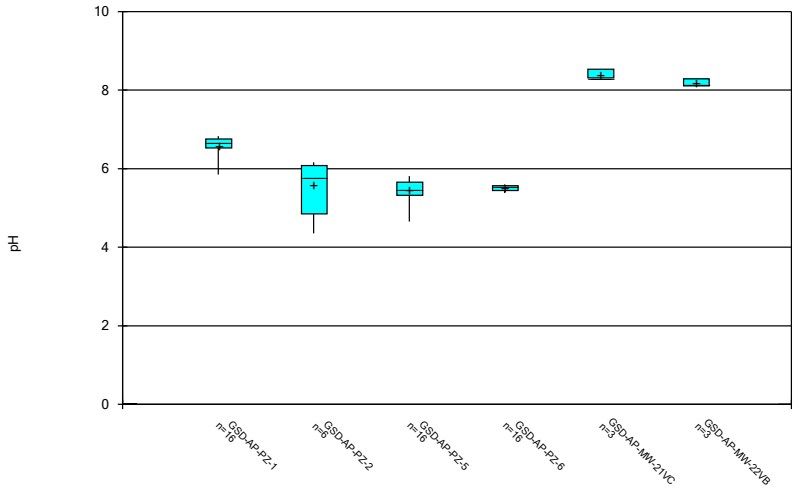
Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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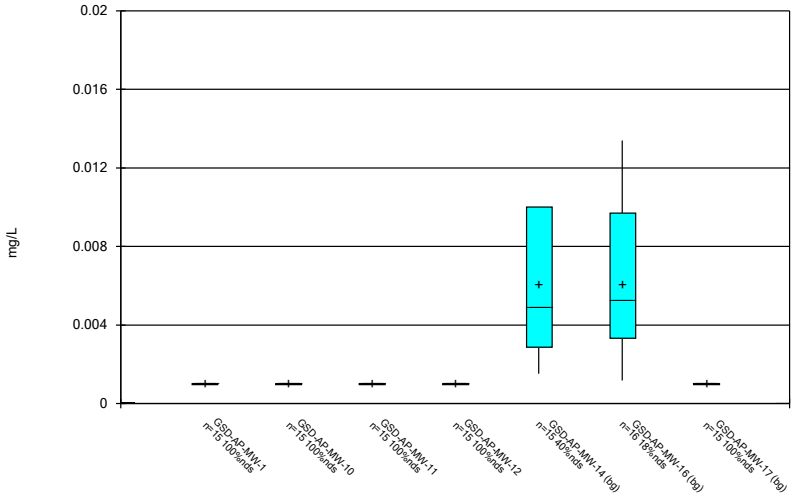
Box & Whiskers Plot



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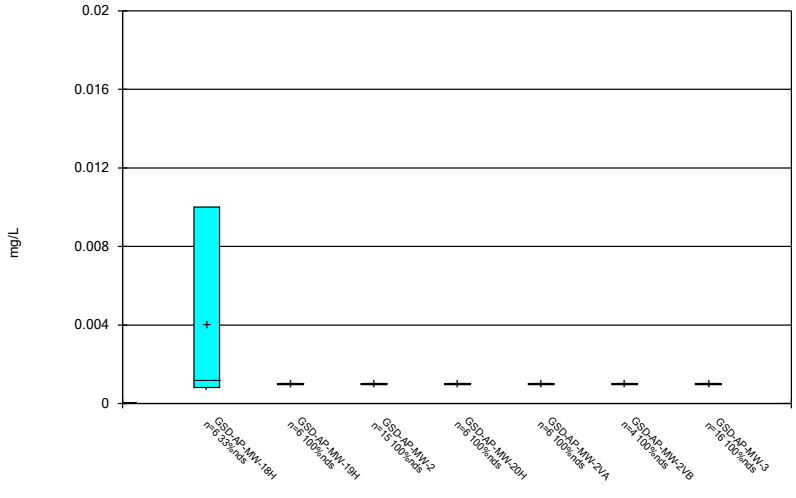
Box & Whiskers Plot



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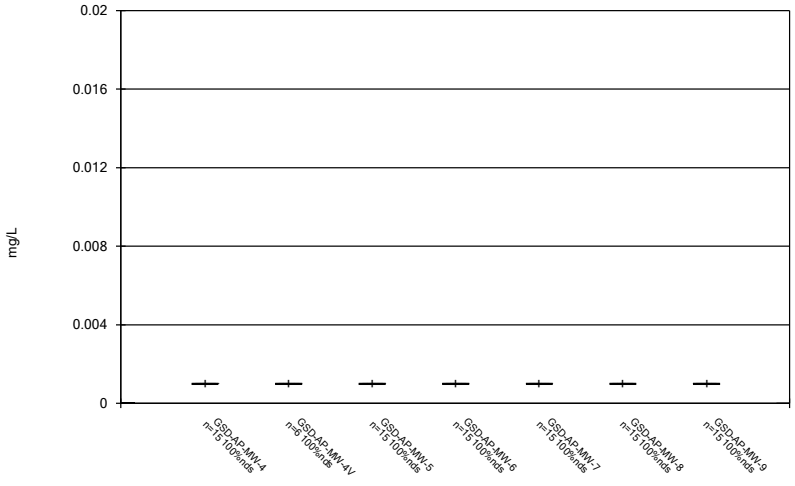
Box & Whiskers Plot



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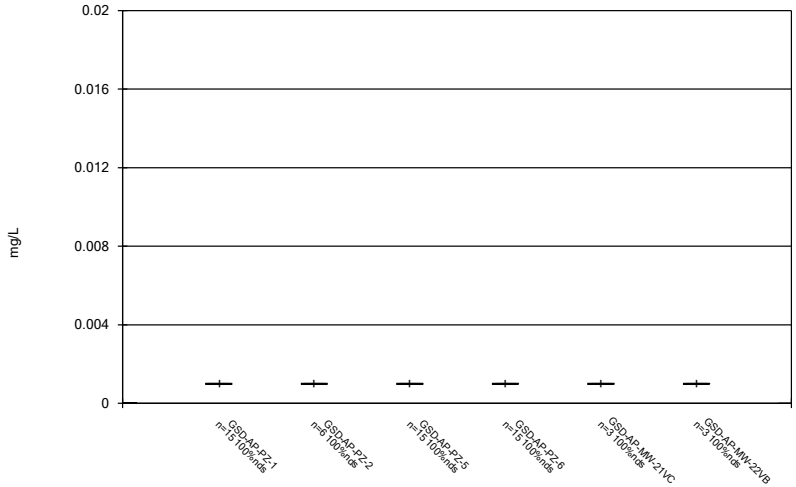
Box & Whiskers Plot



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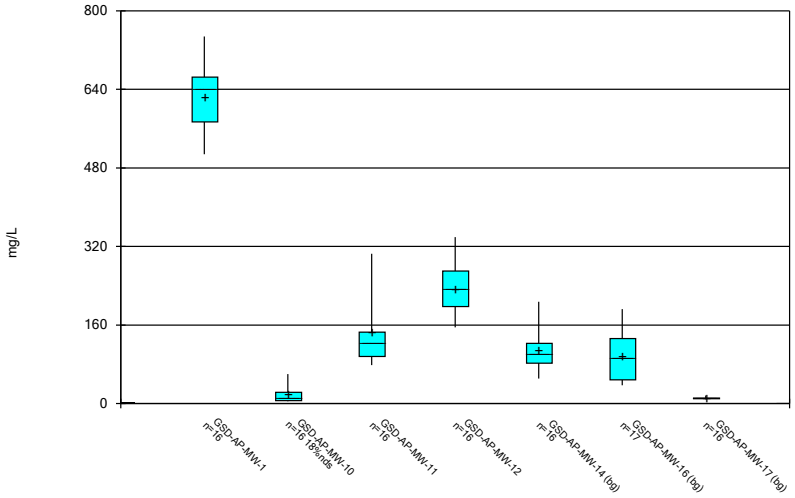
Box & Whiskers Plot



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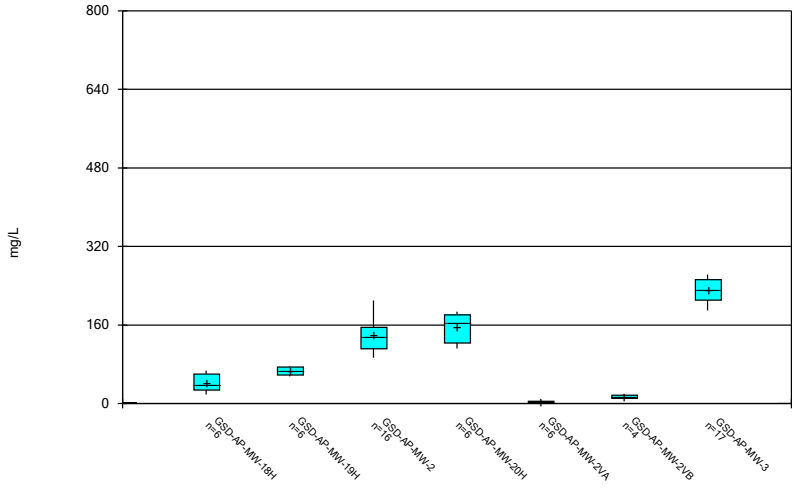

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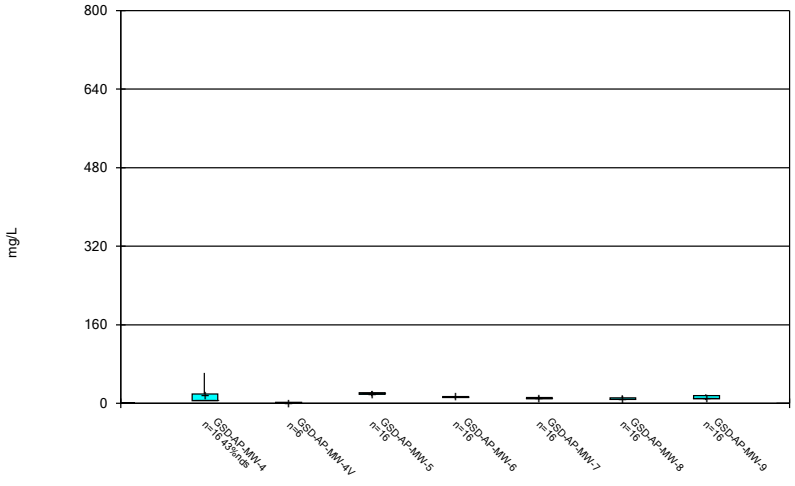

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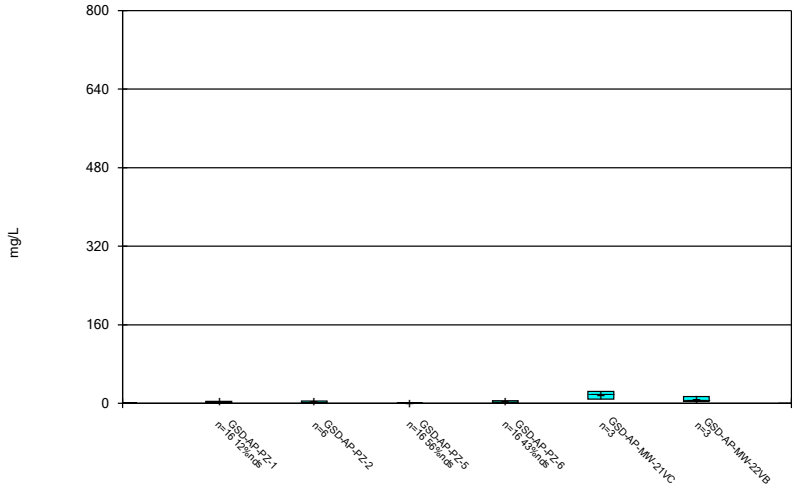

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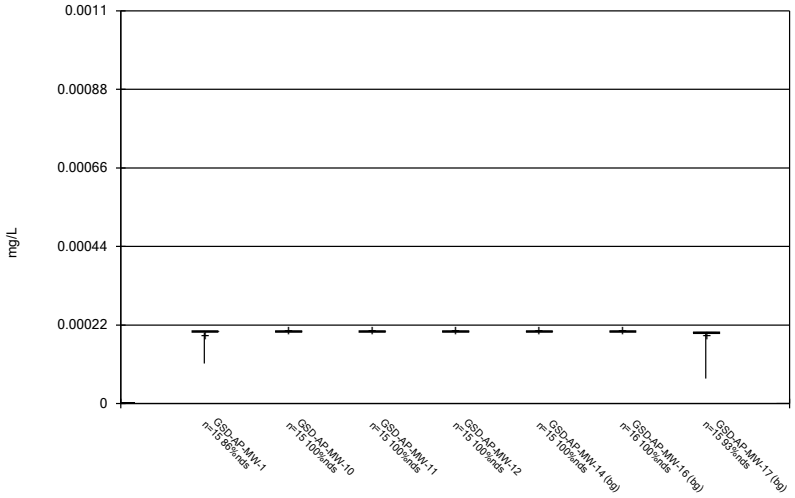
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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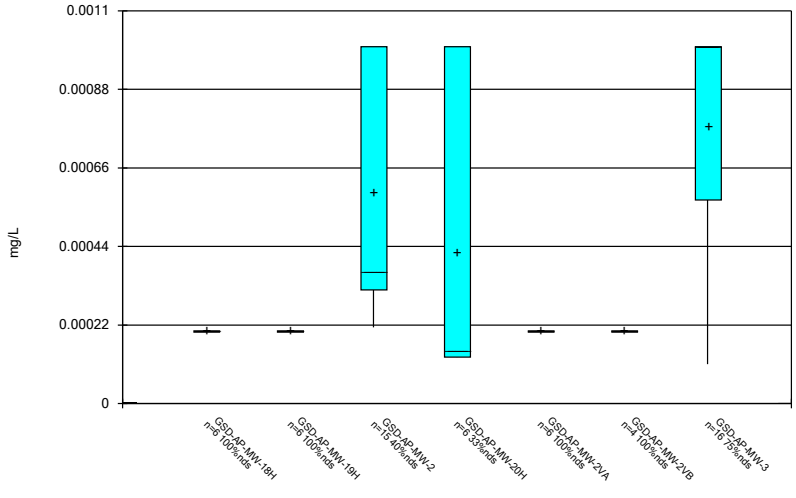
Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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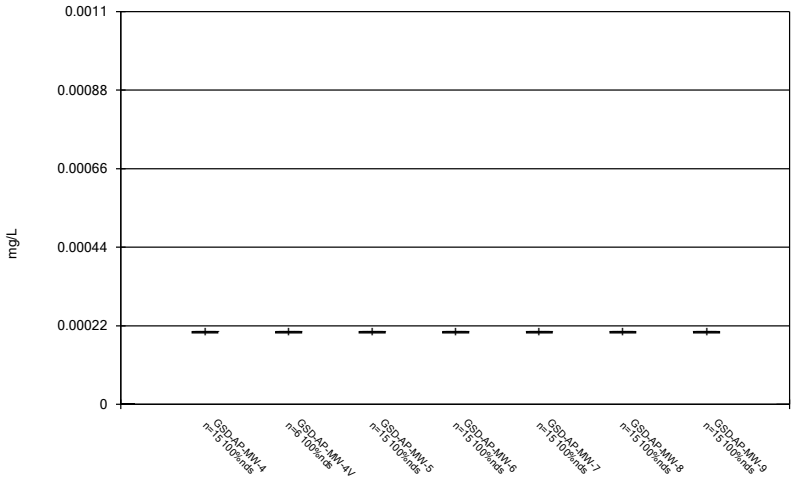
Box & Whiskers Plot



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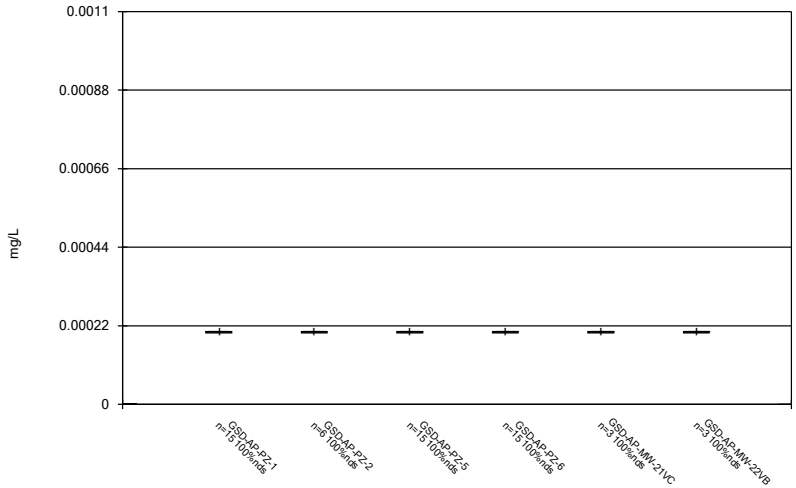
Box & Whiskers Plot



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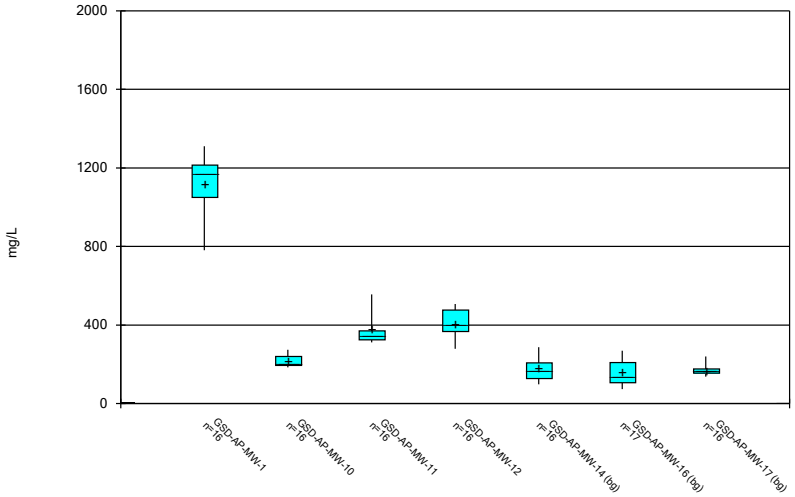
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

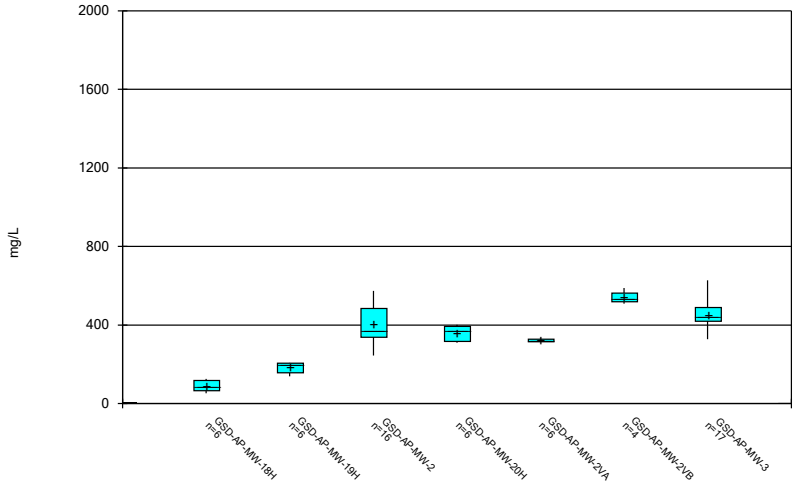
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:39 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

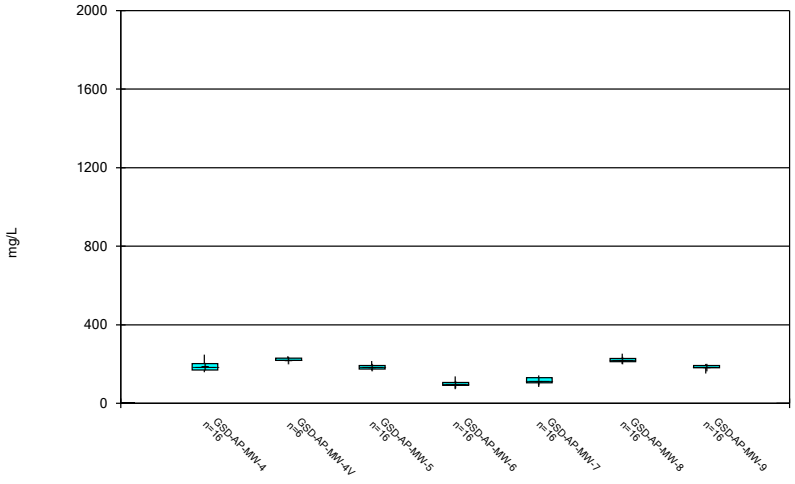
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:39 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

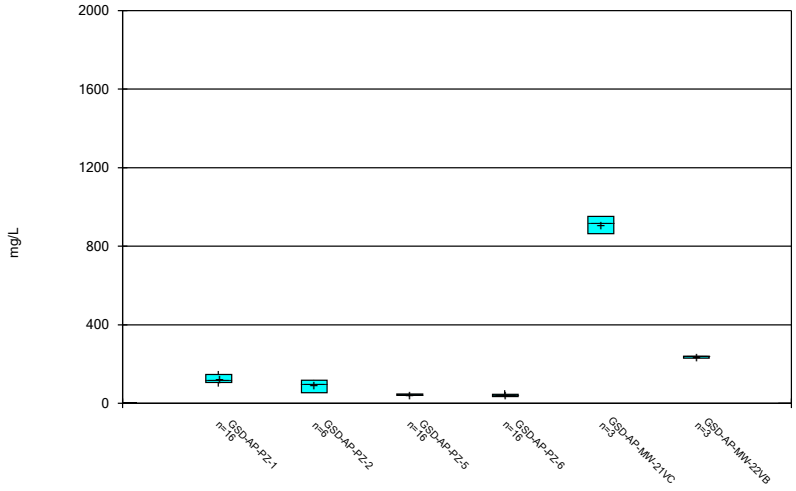
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:39 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:39 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE C.

Outlier Summary

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:41 PM

	GSD-AP-MW-8 Combined Radium 226 + 228 (pCi/L)
12/7/2017	7.45 (o)

FIGURE D.

Intrawell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	**GSD-AP-MW-7**	**0.109**	**n/a**	**10/26/2022**	**0.128**	**Yes**	**13**	**0.0755**	**0.01236**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-11**	**7.012**	**6.206**	**10/26/2022**	**6.2**	**Yes**	**13**	**6.609**	**0.1486**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**10/26/2022**	**6.44**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:46 PM

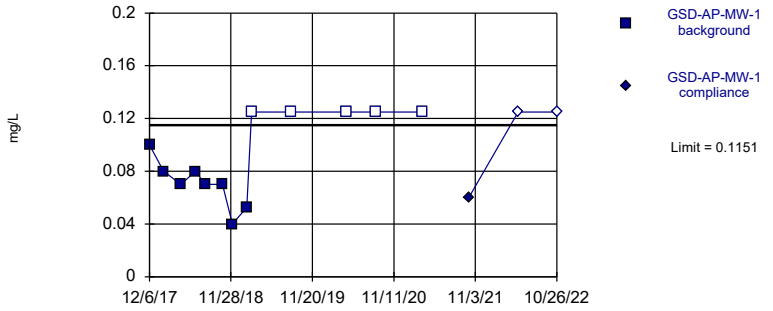
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	10/26/2022	0.125ND	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-10	0.1381	n/a	10/26/2022	0.0929J	No	13	0.08731	0.01872	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-11	0.1122	n/a	10/26/2022	0.069J	No	13	0.0646	0.01756	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-12	0.125	n/a	10/26/2022	0.125ND	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	10/26/2022	0.125ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.1599	n/a	10/25/2022	0.125ND	No	14	0.1026	0.02163	50	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	10/25/2022	0.15	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	10/25/2022	0.271	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1359	n/a	10/26/2022	0.125ND	No	14	0.07651	0.02239	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	10/26/2022	0.283	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-5	0.08126	n/a	10/26/2022	0.0845J	No	13	0.05878	0.008293	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-6	0.09393	n/a	10/26/2022	0.125ND	No	13	0.3704	0.03104	38.46	Kaplan-Meier	x^(1/3)	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	**GSD-AP-MW-7**	**0.109**	**n/a**	**10/26/2022**	**0.128**	**Yes**	**13**	**0.0755**	**0.01236**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	GSD-AP-MW-8	0.1549	n/a	10/26/2022	0.0911J	No	13	0.09159	0.02334	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1718	n/a	10/26/2022	0.119J	No	13	0.01358	0.00588	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1638	n/a	10/26/2022	0.125ND	No	13	0.109	0.02021	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	n/a	10/26/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	n/a	10/26/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	10/26/2022	5.86	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	10/26/2022	6.84	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-11**	**7.012**	**6.206**	**10/26/2022**	**6.2**	**Yes**	**13**	**6.609**	**0.1486**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-12	5.692	5.209	10/26/2022	5.52	No	13	5.451	0.08911	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-14	4.1	3.25	10/26/2022	4.07	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	10/25/2022	4.64	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	10/25/2022	7.97	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-2	6.801	6.273	10/25/2022	6.64	No	13	6.537	0.09742	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-3	6.88	5.224	10/26/2022	5.97	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	10/26/2022	6.67	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**10/26/2022**	**6.44**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-6	6.703	5.385	10/26/2022	5.98	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-7	6.847	5.694	10/26/2022	6.44	No	13	6.271	0.2126	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-8	7.032	6.084	10/26/2022	6.68	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	10/26/2022	7.07	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	10/26/2022	6.66	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	10/26/2022	5.31	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-6	5.699	5.348	10/26/2022	5.43	No	13	5.523	0.06473	0	None	No	0.0002508	Param Intra 1 of 2

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.06075, Std. Dev.=0.02003, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8592, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

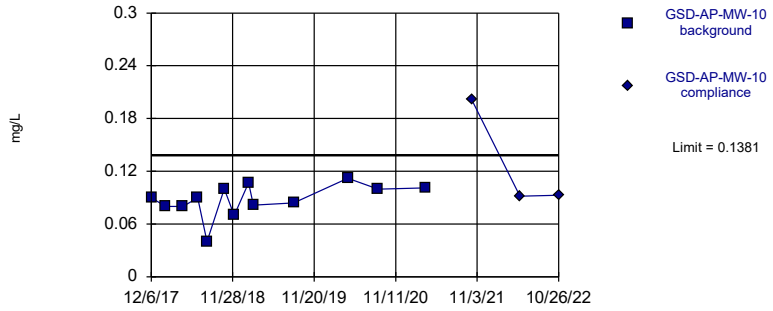
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.08731, Std. Dev.=0.01872, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9056, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

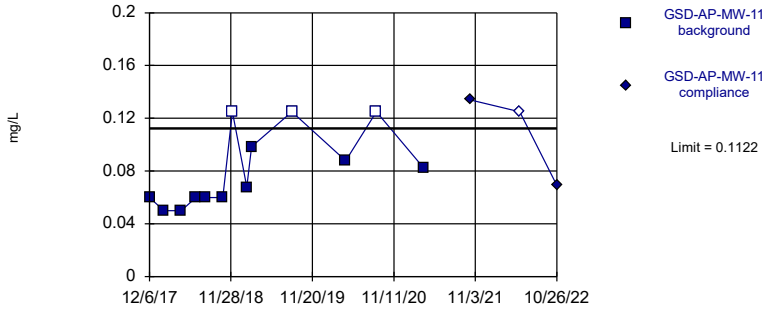
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0646, Std. Dev.=0.01756, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8376, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

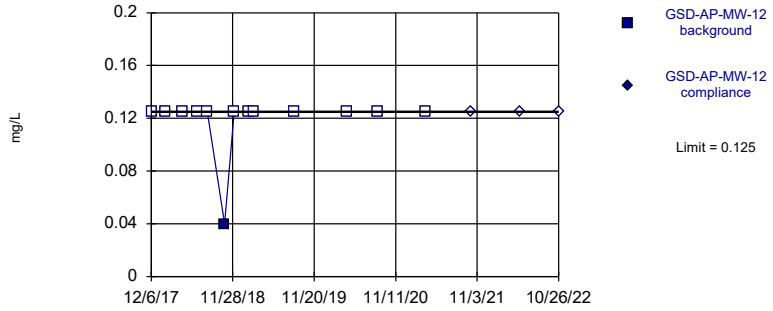
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



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

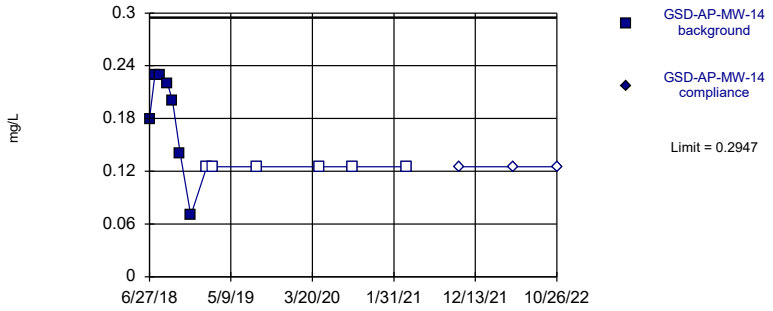
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1209, Std. Dev.=0.06411, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8602, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

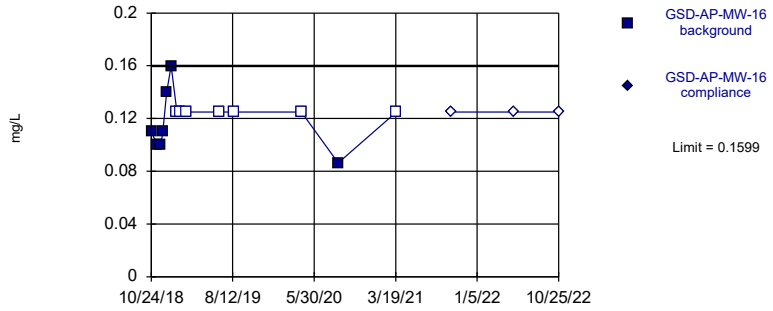
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1026, Std. Dev.=0.02163, n=14, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9116, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

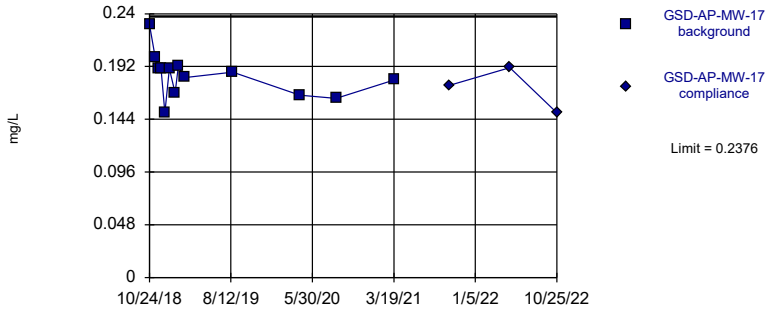
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1837, Std. Dev.=0.01989, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9377, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

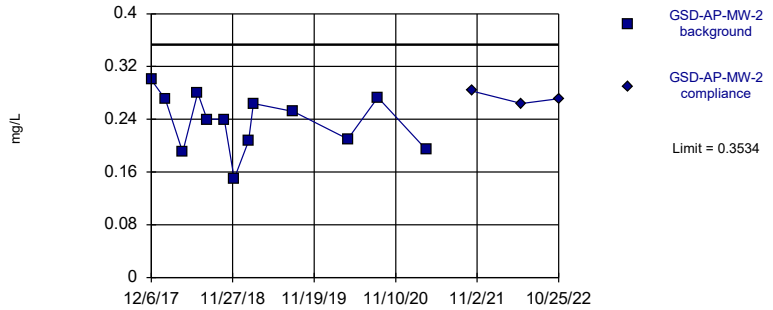
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2362, Std. Dev.=0.04323, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9598, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

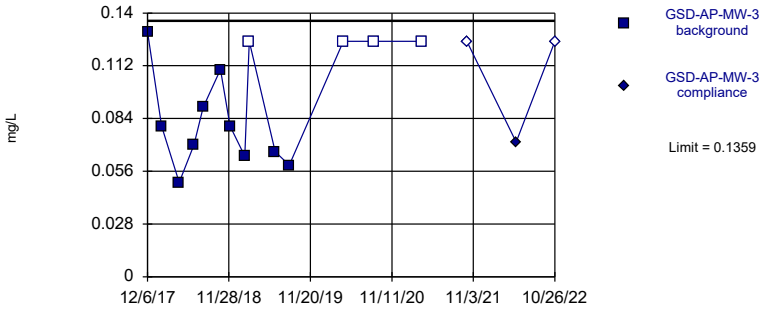
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.07651, Std. Dev.=0.02239, n=14, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8712, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

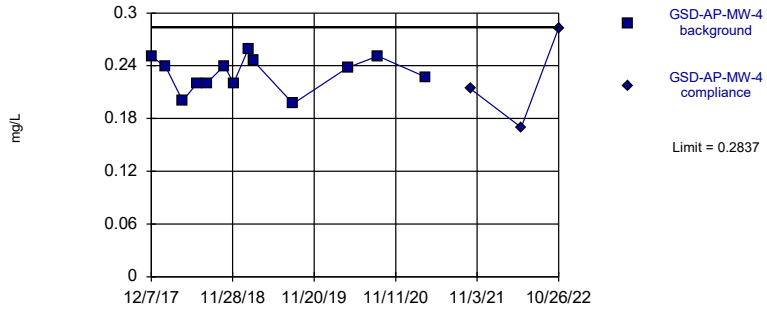
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2314, Std. Dev.=0.01931, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.937, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

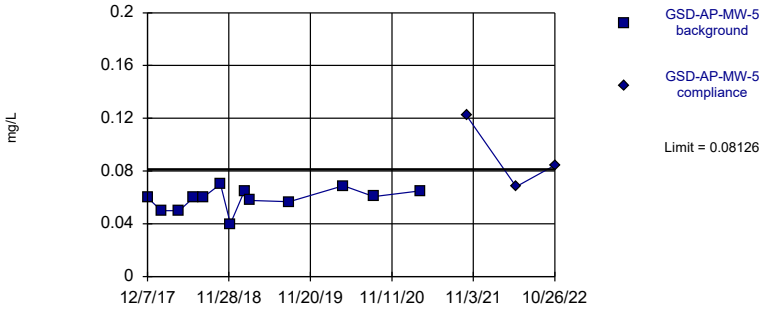
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.05878, Std. Dev.=0.008293, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9302, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

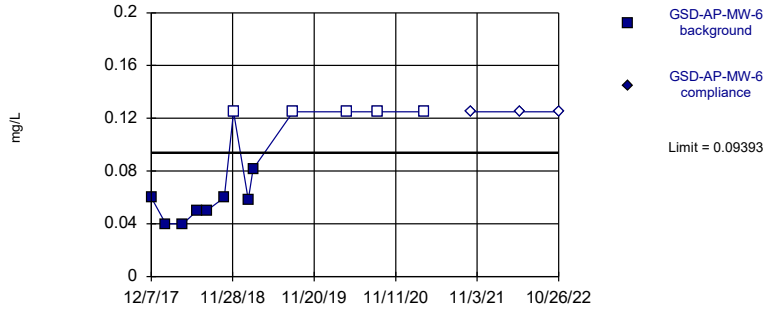
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.3704, Std. Dev.=0.03104, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8158, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

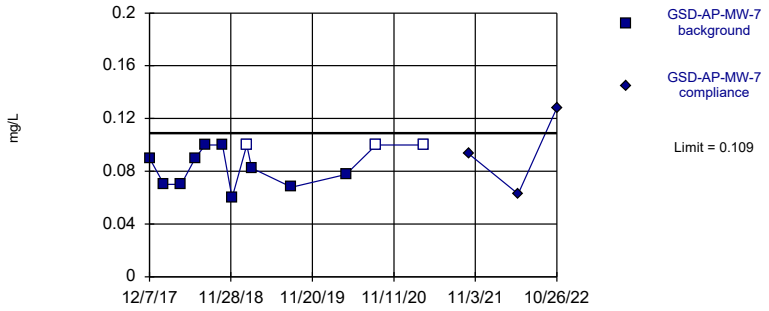
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0755, Std. Dev.=0.01236, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8606, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

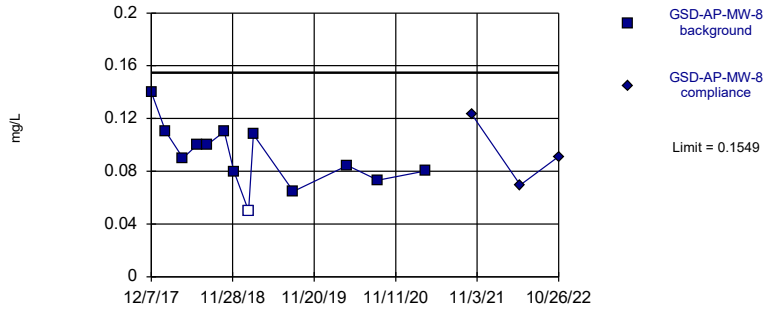
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.09159, Std. Dev.=0.02334, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9776, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

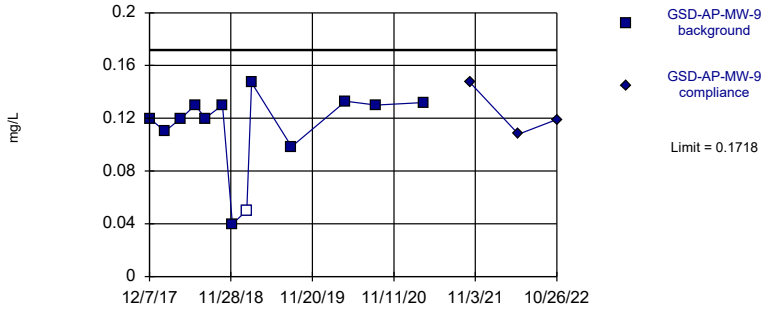
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=0.01358, Std. Dev.=0.00588, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8582, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

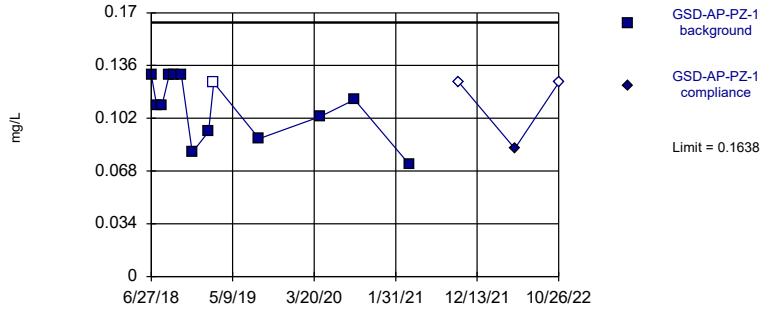
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.109, Std. Dev.=0.02021, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8946, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

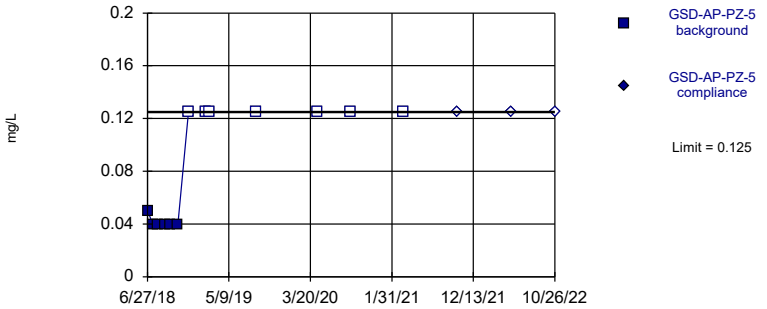
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

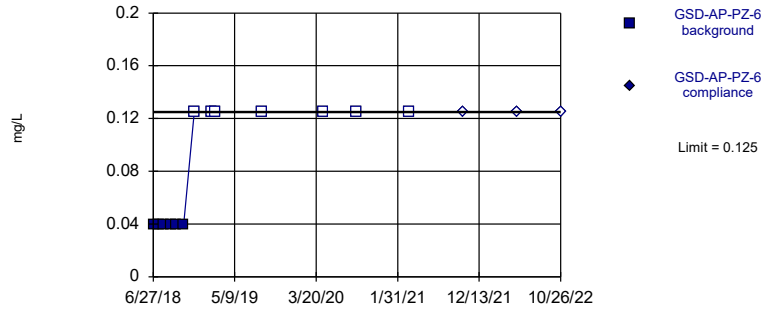
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

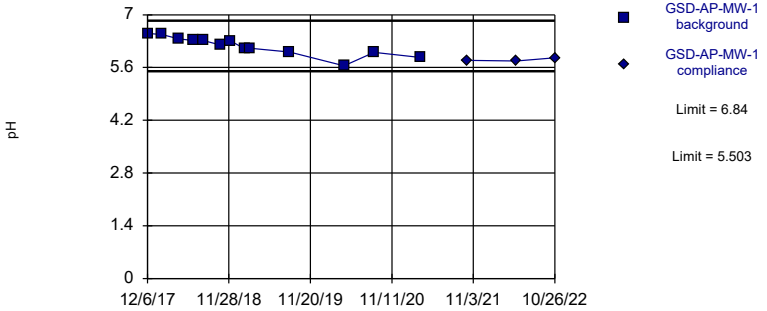
Constituent: Fluoride Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.172, Std. Dev.=0.2466, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9507, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

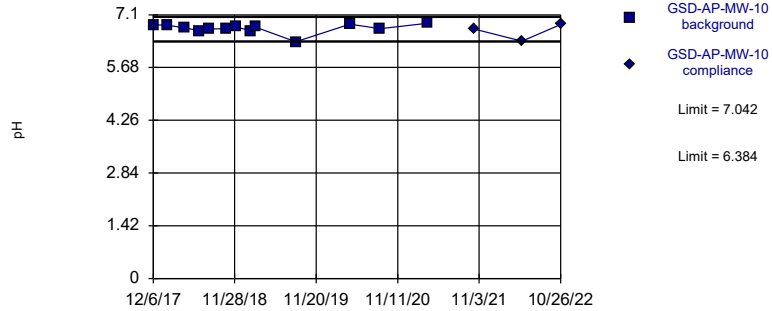
Constituent: pH Analysis Run 12/27/2022 6:43 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



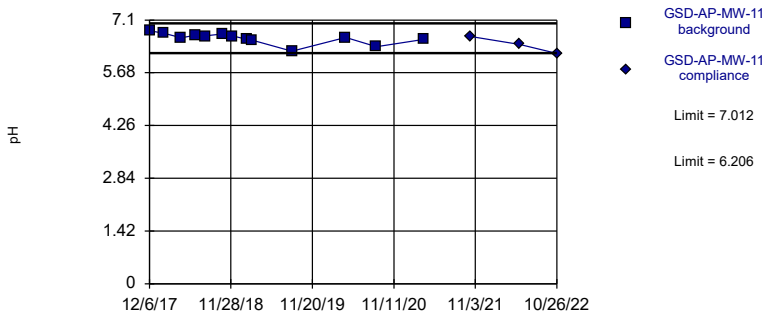
Background Data Summary (based on x^4 transformation): Mean=2060, Std. Dev.=147.3, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8204, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.609, Std. Dev.=0.1486, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.894, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

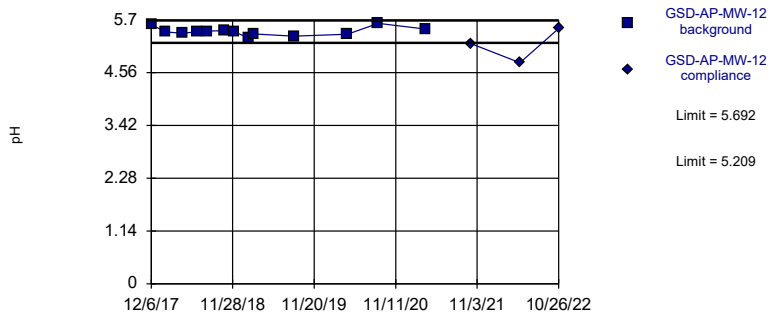
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.451, Std. Dev.=0.08911, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.939, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

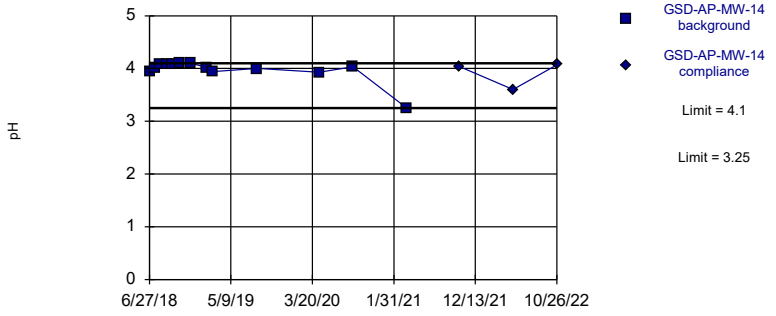
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

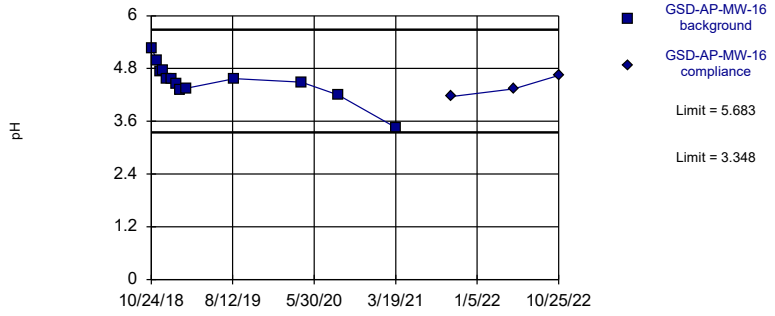
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.515, Std. Dev.=0.4307, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9225, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

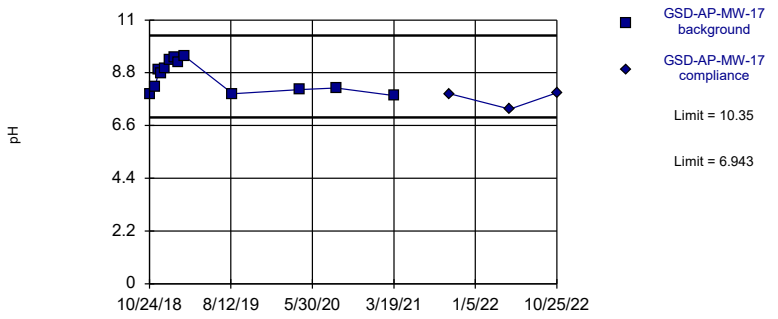
Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.645, Std. Dev.=0.6277, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8772, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

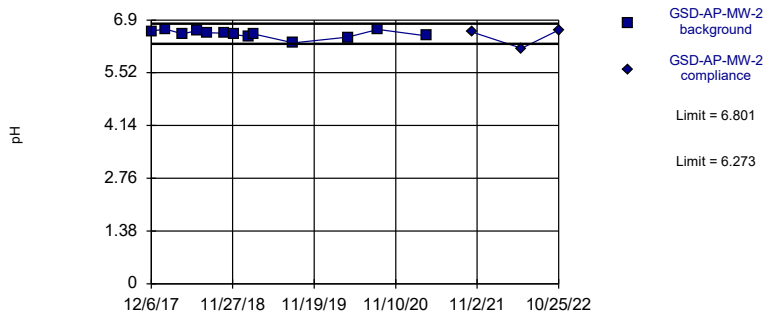
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.537, Std. Dev.=0.09742, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

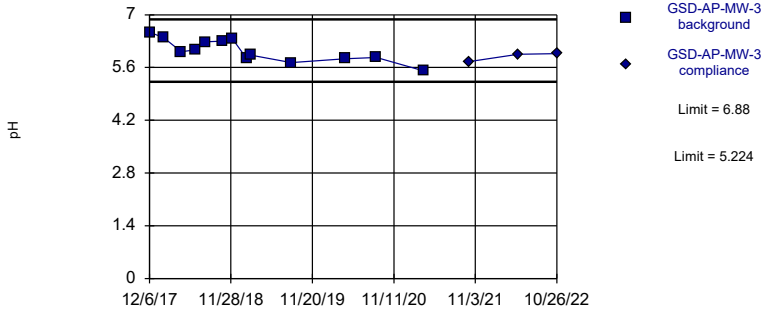
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.052, Std. Dev.=0.3053, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

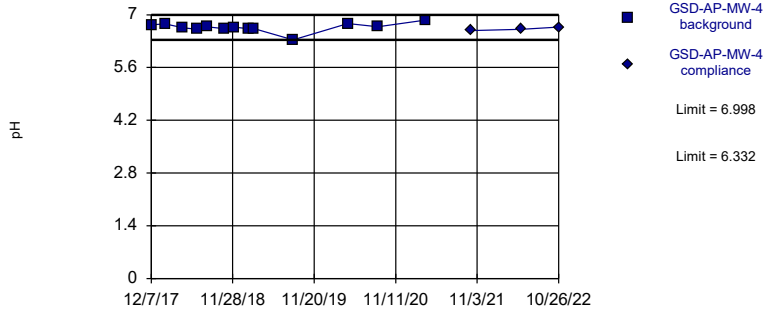
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.665, Std. Dev.=0.1229, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8446, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

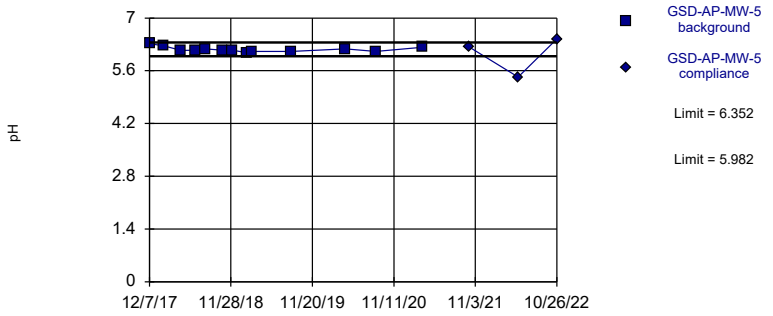
Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.167, Std. Dev.=0.06836, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9003, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

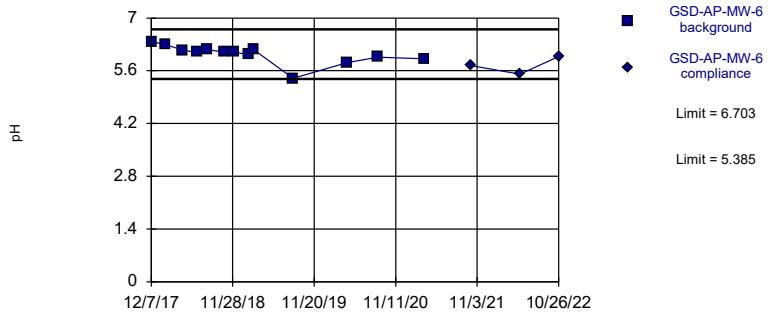
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.044, Std. Dev.=0.243, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8773, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

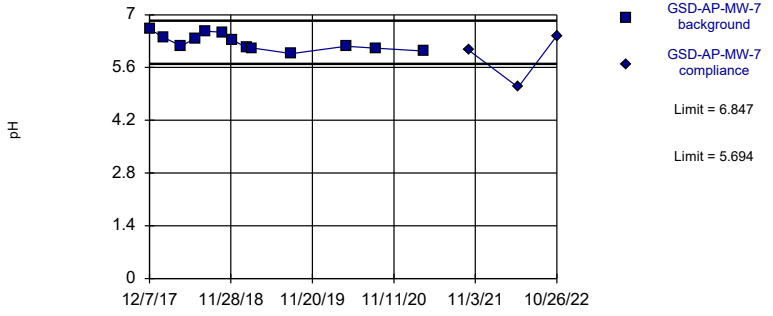
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.271, Std. Dev.=0.2126, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9235, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

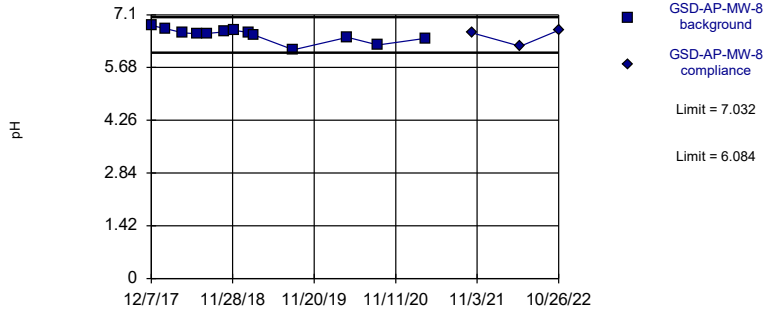
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.558, Std. Dev.=0.1748, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

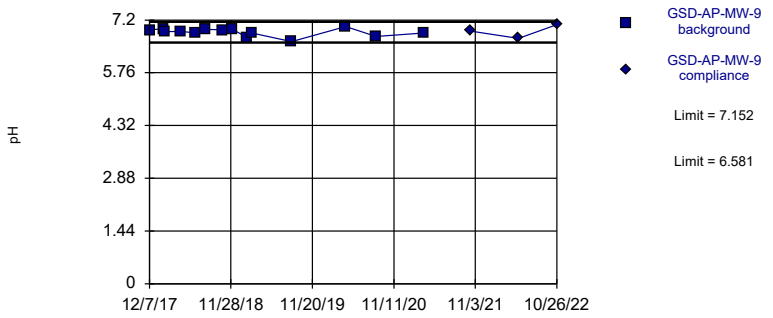
Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.866, Std. Dev.=0.1077, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9109, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

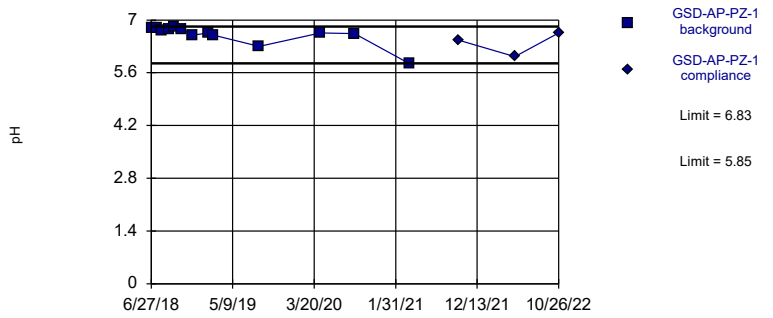
Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

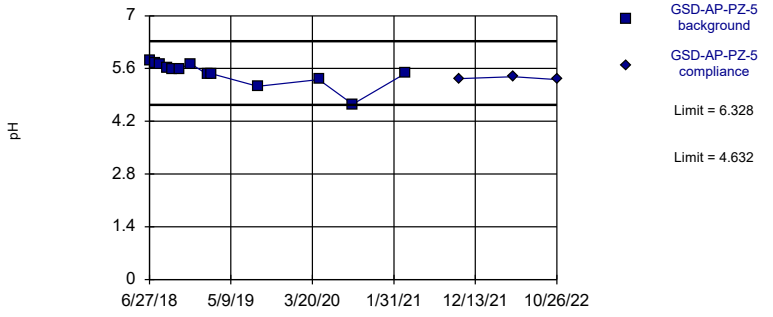
Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.48, Std. Dev.=0.3127, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8416, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

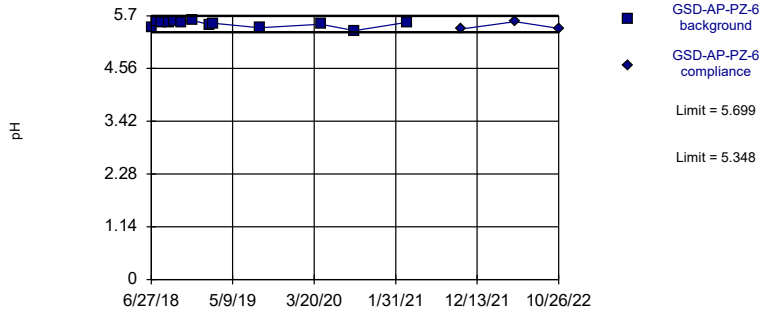
Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.523, Std. Dev.=0.06473, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8711, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 12/27/2022 6:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	0.1	
2/6/2018	0.08 (J)	
4/23/2018	0.07 (J)	
6/26/2018	0.08 (J)	
8/7/2018	0.07 (J)	
10/22/2018	0.07 (J)	
12/4/2018	0.04 (J)	
2/5/2019	0.0525 (J)	
2/26/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/25/2020	<0.125	
3/16/2021	<0.125	
10/5/2021		0.0601 (J)
5/10/2022		<0.125
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	0.09 (J)	
2/7/2018	0.08 (J)	
4/24/2018	0.08 (J)	
6/27/2018	0.09 (J)	
8/7/2018	0.04 (J)	
10/22/2018	0.1	
12/4/2018	0.07 (J)	
2/6/2019	0.107	
2/26/2019	0.0813 (J)	
8/22/2019	0.084 (J)	
4/15/2020	0.112	
8/26/2020	0.0997 (J)	
3/23/2021	0.101	
10/11/2021		0.201
5/10/2022		0.0918 (J)
10/26/2022		0.0929 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	0.06 (J)	
2/7/2018	0.05 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/8/2018	0.06 (J)	
10/23/2018	0.06 (J)	
12/4/2018	<0.125	
2/6/2019	0.0678 (J)	
2/27/2019	0.0985 (J)	
8/22/2019	<0.125	
4/14/2020	0.0878 (J)	
8/26/2020	<0.125	
3/23/2021	0.0819 (J)	
10/12/2021		0.134
5/17/2022		<0.125
10/26/2022		0.069 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	<0.125	
2/8/2018	<0.125	
4/24/2018	<0.125	
6/27/2018	<0.125	
8/8/2018	<0.125	
10/23/2018	0.04 (J)	
12/5/2018	<0.125	
2/6/2019	<0.125	
2/27/2019	<0.125	
8/22/2019	<0.125	
4/14/2020	<0.125	
8/26/2020	<0.125	
3/23/2021	<0.125	
10/5/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	0.18	
7/18/2018	0.23	
8/6/2018	0.23	
9/5/2018	0.22	
9/24/2018	0.2	
10/24/2018	0.14	
12/5/2018	0.07 (J)	
2/5/2019	<0.125	
2/28/2019	<0.125	
8/20/2019	<0.125	
4/16/2020	<0.125	
8/25/2020	<0.125	
3/22/2021	<0.125	
10/12/2021		<0.125
5/9/2022		<0.125
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	0.11	
11/14/2018	0.1	
11/28/2018	0.1	
12/5/2018	0.11	
12/18/2018	0.14	
1/3/2019	0.16	
1/24/2019	<0.125	
2/5/2019	<0.125	
2/28/2019	<0.125	
6/24/2019	<0.125 (D)	
8/19/2019	<0.125	
4/15/2020	<0.125	
8/25/2020	0.0863 (J)	
3/22/2021	<0.125	
10/6/2021		<0.125
5/17/2022		<0.125
10/25/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	0.23	
11/14/2018	0.2	
11/28/2018	0.19	
12/5/2018	0.19	
12/18/2018	0.15	
1/3/2019	0.19	
1/24/2019	0.168	
2/5/2019	0.192	
2/28/2019	0.182	
8/19/2019	0.187	
4/16/2020	0.166	
8/24/2020	0.163	
3/22/2021	0.18	
10/6/2021		0.175
5/9/2022		0.191
10/25/2022		0.15

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	0.3	
2/6/2018	0.27	
4/23/2018	0.19	
6/27/2018	0.28	
8/7/2018	0.24	
10/22/2018	0.24	
12/4/2018	0.15	
2/5/2019	0.207	
2/26/2019	0.264	
8/20/2019	0.252	
4/15/2020	0.21	
8/25/2020	0.273	
3/24/2021	0.194	
10/11/2021		0.283
5/16/2022		0.264
10/25/2022		0.271

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	0.13	
2/6/2018	0.08 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.07 (J)	
8/7/2018	0.09 (J)	
10/22/2018	0.11	
12/3/2018	0.08 (J)	
2/5/2019	0.064 (J)	
2/25/2019	<0.125	
6/18/2019	0.0664 (J)	
8/20/2019	0.0592 (J)	
4/13/2020	<0.125	
8/26/2020	<0.125	
3/22/2021	<0.125	
10/5/2021		<0.125
5/10/2022		0.0714 (J)
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	0.25	
2/6/2018	0.24	
4/24/2018	0.2	
6/26/2018	0.22	
8/6/2018	0.22	
10/22/2018	0.24	
12/3/2018	0.22	
2/5/2019	0.259	
2/26/2019	0.246	
8/20/2019	0.197	
4/15/2020	0.238	
8/26/2020	0.251	
3/24/2021	0.227	
10/5/2021		0.214
5/16/2022		0.17
10/26/2022		0.283

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	0.06 (J)	
2/6/2018	0.05 (J)	
4/25/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/7/2018	0.06 (J)	
10/23/2018	0.07 (J)	
12/5/2018	0.04 (J)	
2/5/2019	0.0651 (J)	
2/27/2019	0.0578 (J)	
8/20/2019	0.0567 (J)	
4/13/2020	0.0688 (J)	
8/24/2020	0.0607 (J)	
3/16/2021	0.065 (J)	
10/5/2021		0.122
5/9/2022		0.0682 (J)
10/26/2022		0.0845 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	0.06 (J)	
2/8/2018	0.04 (J)	
4/25/2018	0.04 (J)	
6/26/2018	0.05 (J)	
8/7/2018	0.05 (J)	
10/23/2018	0.06 (J)	
12/3/2018	<0.125	
2/5/2019	0.0581 (J)	
2/26/2019	0.0816 (J)	
8/20/2019	<0.125	
4/13/2020	<0.125	
8/26/2020	<0.125	
3/17/2021	<0.125	
10/5/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	0.09 (J)	
2/8/2018	0.07 (J)	
4/25/2018	0.07 (J)	
6/26/2018	0.09 (J)	
8/8/2018	0.1	
10/23/2018	0.1	
12/4/2018	0.06 (J)	
2/6/2019	<0.1	
2/27/2019	0.0824 (J)	
8/21/2019	0.068 (J)	
4/15/2020	0.0775 (J)	
8/26/2020	<0.1	
3/23/2021	<0.1	
10/5/2021		0.0933 (J)
5/10/2022		0.0627 (J)
10/26/2022		0.128

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	0.14	
2/8/2018	0.11	
4/25/2018	0.09 (J)	
6/26/2018	0.1	
8/8/2018	0.1	
10/23/2018	0.11	
12/4/2018	0.08 (J)	
2/6/2019	<0.1	
2/27/2019	0.108	
8/21/2019	0.0648 (J)	
4/14/2020	0.0845 (J)	
8/26/2020	0.0732 (J)	
3/23/2021	0.0802 (J)	
10/12/2021		0.123
5/11/2022		0.0695 (J)
10/26/2022		0.0911 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	0.12	
2/12/2018	0.11	
4/25/2018	0.12	
6/26/2018	0.13	
8/8/2018	0.12	
10/23/2018	0.13	
12/5/2018	0.04 (J)	
2/6/2019	<0.1	
2/27/2019	0.147	
8/21/2019	0.0984 (J)	
4/14/2020	0.133	
8/26/2020	0.13	
3/23/2021	0.132	
10/12/2021		0.147
5/11/2022		0.108 (J)
10/26/2022		0.119 (J)

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	0.13	
7/18/2018	0.11	
8/7/2018	0.11	
9/5/2018	0.13	
9/24/2018	0.13	
10/22/2018	0.13	
12/3/2018	0.08 (J)	
2/5/2019	0.0934 (J)	
2/25/2019	<0.125	
8/20/2019	0.0889 (J)	
4/13/2020	0.103	
8/24/2020	0.114	
3/24/2021	0.0725 (J)	
10/5/2021		<0.125
5/9/2022		0.0824 (J)
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	0.05 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.125	
2/7/2019	<0.125	
2/25/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/24/2020	<0.125	
3/16/2021	<0.125	
10/12/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	0.04 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.125	
2/7/2019	<0.125	
2/25/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/24/2020	<0.125	
3/16/2021	<0.125	
10/12/2021		<0.125
5/10/2022		<0.125
10/26/2022		<0.125

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	6.5	
2/6/2018	6.48	
4/23/2018	6.36	
6/26/2018	6.32	
8/7/2018	6.32	
10/22/2018	6.2	
12/4/2018	6.31	
2/5/2019	6.1	
2/26/2019	6.11	
8/21/2019	6.01	
4/15/2020	5.65	
8/25/2020	6	
3/16/2021	5.87	
10/5/2021		5.79
5/10/2022		5.77
10/26/2022		5.86

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	6.83	
2/7/2018	6.82	
4/24/2018	6.74	
6/27/2018	6.67	
8/7/2018	6.72	
10/22/2018	6.73	
12/4/2018	6.77	
2/6/2019	6.67	
2/26/2019	6.77	
8/22/2019	6.37	
4/15/2020	6.85	
8/26/2020	6.73	
3/23/2021	6.87	
10/11/2021		6.72
5/10/2022		6.39
10/26/2022		6.84

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	6.81	
2/7/2018	6.74	
4/24/2018	6.62	
6/27/2018	6.69	
8/8/2018	6.67	
10/23/2018	6.73	
12/4/2018	6.67	
2/6/2019	6.58	
2/27/2019	6.56	
8/22/2019	6.26	
4/14/2020	6.63	
8/26/2020	6.38	
3/23/2021	6.58	
10/12/2021		6.66
5/17/2022		6.44
10/26/2022		6.2

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	5.6	
2/8/2018	5.44	
4/24/2018	5.41	
6/27/2018	5.45	
8/8/2018	5.46	
10/23/2018	5.47	
12/5/2018	5.45	
2/6/2019	5.31	
2/27/2019	5.4	
8/22/2019	5.35	
4/14/2020	5.39	
8/26/2020	5.63	
3/23/2021	5.5	
10/5/2021		5.19
5/10/2022		4.78
10/26/2022		5.52

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	3.95	
7/18/2018	4.02	
8/6/2018	4.07	
9/5/2018	4.07	
9/24/2018	4.07	
10/24/2018	4.1	
12/5/2018	4.1	
2/5/2019	4.02	
2/28/2019	3.94 (E)	
8/20/2019	4	
4/16/2020	3.93	
8/25/2020	4.03	
3/22/2021	3.25	
10/12/2021		4.04
5/9/2022		3.6
10/26/2022		4.07

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	5.27	
11/14/2018	4.99	
11/28/2018	4.74	
12/5/2018	4.76	
12/18/2018	4.57	
1/3/2019	4.56	
1/24/2019	4.45	
2/5/2019	4.3	
2/28/2019	4.35	
8/19/2019	4.57	
4/15/2020	4.49	
8/25/2020	4.2	
3/22/2021	3.45	
10/6/2021		4.16
5/17/2022		4.34
10/25/2022		4.64

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	7.92	
11/14/2018	8.23	
11/28/2018	8.95	
12/5/2018	8.77	
12/18/2018	8.99	
1/3/2019	9.35	
1/24/2019	9.42	
2/5/2019	9.23	
2/28/2019	9.48	
8/19/2019	7.93	
4/16/2020	8.1	
8/24/2020	8.17	
3/22/2021	7.85	
10/6/2021		7.92
5/9/2022		7.29
10/25/2022		7.97

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	6.61	
2/6/2018	6.66	
4/23/2018	6.54	
6/27/2018	6.63	
8/7/2018	6.57	
10/22/2018	6.55	
12/4/2018	6.52	
2/5/2019	6.47	
2/26/2019	6.54	
8/20/2019	6.3	
4/15/2020	6.45	
8/25/2020	6.65	
3/24/2021	6.49	
10/11/2021		6.59
5/16/2022		6.16
10/25/2022		6.64

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	6.54	
2/6/2018	6.39	
4/24/2018	6.02	
6/27/2018	6.07	
8/7/2018	6.28	
10/22/2018	6.3	
12/3/2018	6.38	
2/5/2019	5.83	
2/25/2019	5.93	
8/20/2019	5.73	
4/13/2020	5.83	
8/26/2020	5.87	
3/22/2021	5.51	
10/5/2021		5.76
5/10/2022		5.95
10/26/2022		5.97

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	6.73	
2/6/2018	6.76	
4/24/2018	6.66	
6/26/2018	6.61	
8/6/2018	6.68	
10/22/2018	6.63	
12/3/2018	6.67	
2/5/2019	6.63	
2/26/2019	6.64	
8/20/2019	6.33	
4/15/2020	6.77	
8/26/2020	6.68	
3/24/2021	6.86	
10/5/2021		6.58
5/16/2022		6.61
10/26/2022		6.67

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	6.32	
2/6/2018	6.27	
4/25/2018	6.14	
6/27/2018	6.15	
8/7/2018	6.18	
10/23/2018	6.15	
12/5/2018	6.15	
2/5/2019	6.08	
2/27/2019	6.11	
8/20/2019	6.11	
4/13/2020	6.18	
8/24/2020	6.11	
3/16/2021	6.22	
10/5/2021		6.24
5/9/2022		5.43
10/26/2022		6.44

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	6.38	
2/8/2018	6.29	
4/25/2018	6.15	
6/26/2018	6.09	
8/7/2018	6.16	
10/23/2018	6.1	
12/3/2018	6.09	
2/5/2019	6.04	
2/26/2019	6.17	
8/20/2019	5.4	
4/13/2020	5.82	
8/26/2020	5.96	
3/17/2021	5.92	
10/5/2021		5.74
5/10/2022		5.51
10/26/2022		5.98

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	6.62	
2/8/2018	6.39	
4/25/2018	6.17	
6/26/2018	6.38	
8/8/2018	6.56	
10/23/2018	6.54	
12/4/2018	6.33	
2/6/2019	6.13	
2/27/2019	6.12	
8/21/2019	5.97	
4/15/2020	6.16	
8/26/2020	6.11	
3/23/2021	6.04	
10/5/2021		6.06
5/10/2022		5.08
10/26/2022		6.44

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	6.81	
2/8/2018	6.73	
4/25/2018	6.61	
6/26/2018	6.59	
8/8/2018	6.6	
10/23/2018	6.64	
12/4/2018	6.68	
2/6/2019	6.62	
2/27/2019	6.56	
8/21/2019	6.16	
4/14/2020	6.49	
8/26/2020	6.29	
3/23/2021	6.47	
10/12/2021		6.61
5/11/2022		6.25
10/26/2022		6.68

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	6.93	
2/8/2018	6.96	
2/12/2018	6.88	
4/25/2018	6.89	
6/26/2018	6.85	
8/8/2018	6.94	
10/23/2018	6.93	
12/5/2018	6.94	
2/6/2019	6.73	
2/27/2019	6.85	
8/21/2019	6.61	
4/14/2020	7.02	
8/26/2020	6.75	
3/23/2021	6.85	
10/12/2021		6.9
5/11/2022		6.7
10/26/2022		7.07

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	6.79	
7/18/2018	6.8	
8/7/2018	6.73	
9/5/2018	6.75	
9/24/2018	6.83	
10/22/2018	6.76	
12/3/2018	6.6	
2/5/2019	6.66	
2/25/2019	6.6	
8/20/2019	6.3	
4/13/2020	6.66	
8/24/2020	6.64	
3/24/2021	5.85	
10/5/2021		6.46
5/9/2022		6.03
10/26/2022		6.66

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	5.81	
7/18/2018	5.74	
8/8/2018	5.7	
9/5/2018	5.61	
9/24/2018	5.59	
10/23/2018	5.6	
12/3/2018	5.73	
2/7/2019	5.44	
2/25/2019	5.46	
8/21/2019	5.13	
4/15/2020	5.31	
8/24/2020	4.65	
3/16/2021	5.47	
10/12/2021		5.33
5/10/2022		5.38
10/26/2022		5.31

Prediction Limit

Constituent: pH (pH) Analysis Run 12/27/2022 6:46 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	5.44	
7/18/2018	5.58	
8/8/2018	5.55	
9/5/2018	5.56	
9/24/2018	5.57	
10/23/2018	5.55	
12/3/2018	5.6	
2/7/2019	5.51	
2/25/2019	5.54	
8/21/2019	5.44	
4/15/2020	5.52	
8/24/2020	5.38	
3/16/2021	5.56	
10/12/2021		5.41
5/10/2022		5.57
10/26/2022		5.43

FIGURE E.

Interwell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	0.1015	n/a	10/26/2022	0.977	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-11	0.1015	n/a	10/26/2022	0.306	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-2	0.1015	n/a	10/25/2022	0.5	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-3	0.1015	n/a	10/26/2022	0.85	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-4	0.1015	n/a	10/26/2022	0.371	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-5	0.1015	n/a	10/26/2022	0.23	Yes	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GSD-AP-MW-1	33.58	n/a	10/26/2022	200	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-10	33.58	n/a	10/26/2022	39.5	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-11	33.58	n/a	10/26/2022	129	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-12	33.58	n/a	10/26/2022	60.2	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-2	33.58	n/a	10/25/2022	86.9	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-3	33.58	n/a	10/26/2022	55.3	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-4	33.58	n/a	10/26/2022	33.6	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-5	33.58	n/a	10/26/2022	39.6	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-8	33.58	n/a	10/26/2022	63.7	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-9	33.58	n/a	10/26/2022	47.7	Yes	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-1	4.048	n/a	10/26/2022	6.02	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-10	4.048	n/a	10/26/2022	5.87	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-11	4.048	n/a	10/26/2022	4.98	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-12	4.048	n/a	10/26/2022	5.76	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-3	4.048	n/a	10/26/2022	4.38	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-4	4.048	n/a	10/26/2022	7.88	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-5	4.048	n/a	10/26/2022	6.4	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-6	4.048	n/a	10/26/2022	9.4	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-7	4.048	n/a	10/26/2022	7.09	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-8	4.048	n/a	10/26/2022	5.72	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-9	4.048	n/a	10/26/2022	6.99	Yes	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	GSD-AP-MW-1	207	n/a	10/26/2022	512	Yes	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-11	207	n/a	10/26/2022	278	Yes	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-12	207	n/a	10/26/2022	230	Yes	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	276.7	n/a	10/26/2022	840	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	276.7	n/a	10/26/2022	545	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	276.7	n/a	10/26/2022	402	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	276.7	n/a	10/25/2022	337	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	276.7	n/a	10/26/2022	328	Yes	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:49 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**0.1015**	**n/a**	**10/26/2022**	**0.977**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-10	0.1015	n/a	10/26/2022	0.0868J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-11**	**0.1015**	**n/a**	**10/26/2022**	**0.306**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-12	0.1015	n/a	10/26/2022	0.0995J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-2**	**0.1015**	**n/a**	**10/25/2022**	**0.5**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-3**	**0.1015**	**n/a**	**10/26/2022**	**0.85**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-4**	**0.1015**	**n/a**	**10/26/2022**	**0.371**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-5**	**0.1015**	**n/a**	**10/26/2022**	**0.23**	**Yes**	**49**	**n/a**	**n/a**	**55.1**	**n/a**	**n/a**	**0.0007557**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-6	0.1015	n/a	10/26/2022	0.0788J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-7	0.1015	n/a	10/26/2022	0.0839J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-8	0.1015	n/a	10/26/2022	0.0526J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-9	0.1015	n/a	10/26/2022	0.0595J	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-1	0.1015	n/a	10/26/2022	0.1015ND	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-5	0.1015	n/a	10/26/2022	0.1015ND	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-6	0.1015	n/a	10/26/2022	0.1015ND	No	49	n/a	n/a	55.1	n/a	n/a	0.0007557	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GSD-AP-MW-1**	**33.58**	**n/a**	**10/26/2022**	**200**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-10**	**33.58**	**n/a**	**10/26/2022**	**39.5**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-11**	**33.58**	**n/a**	**10/26/2022**	**129**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-12**	**33.58**	**n/a**	**10/26/2022**	**60.2**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-2**	**33.58**	**n/a**	**10/25/2022**	**86.9**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-3**	**33.58**	**n/a**	**10/26/2022**	**55.3**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-4**	**33.58**	**n/a**	**10/26/2022**	**33.6**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-5**	**33.58**	**n/a**	**10/26/2022**	**39.6**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-6	33.58	n/a	10/26/2022	12.2	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-7	33.58	n/a	10/26/2022	21.4	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-8**	**33.58**	**n/a**	**10/26/2022**	**63.7**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-9**	**33.58**	**n/a**	**10/26/2022**	**47.7**	**Yes**	**49**	**4.222**	**0.7344**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-PZ-1	33.58	n/a	10/26/2022	23.1	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-5	33.58	n/a	10/26/2022	3.09	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-6	33.58	n/a	10/26/2022	3.42	No	49	4.222	0.7344	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-1**	**4.048**	**n/a**	**10/26/2022**	**6.02**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-10**	**4.048**	**n/a**	**10/26/2022**	**5.87**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-11**	**4.048**	**n/a**	**10/26/2022**	**4.98**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-12**	**4.048**	**n/a**	**10/26/2022**	**5.76**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-2	4.048	n/a	10/25/2022	2.45	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-3**	**4.048**	**n/a**	**10/26/2022**	**4.38**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-4**	**4.048**	**n/a**	**10/26/2022**	**7.88**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-5**	**4.048**	**n/a**	**10/26/2022**	**6.4**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-6**	**4.048**	**n/a**	**10/26/2022**	**9.4**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-7**	**4.048**	**n/a**	**10/26/2022**	**7.09**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-8**	**4.048**	**n/a**	**10/26/2022**	**5.72**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-9**	**4.048**	**n/a**	**10/26/2022**	**6.99**	**Yes**	**49**	**3.229**	**0.382**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-1	4.048	n/a	10/26/2022	3.39	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-5	4.048	n/a	10/26/2022	4.03	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-6	4.048	n/a	10/26/2022	3.5	No	49	3.229	0.382	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-1**	**207**	**n/a**	**10/26/2022**	**512**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0007557**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-10	207	n/a	10/26/2022	4.42	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-11**	**207**	**n/a**	**10/26/2022**	**278**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0007557**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GSD-AP-MW-12**	**207**	**n/a**	**10/26/2022**	**230**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0007557**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-2	207	n/a	10/25/2022	111	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:49 PM

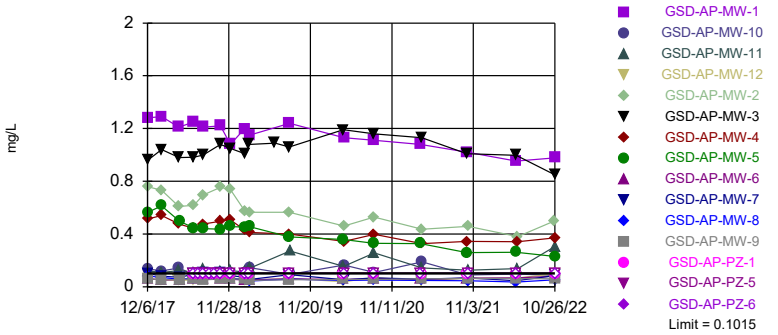
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	GSD-AP-MW-3	207	n/a	10/26/2022	206	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-4	207	n/a	10/26/2022	61.8	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-5	207	n/a	10/26/2022	16.1	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-6	207	n/a	10/26/2022	12.2	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-7	207	n/a	10/26/2022	11.4	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-8	207	n/a	10/26/2022	10.1	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-9	207	n/a	10/26/2022	13.8	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-1	207	n/a	10/26/2022	3.43	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-5	207	n/a	10/26/2022	0.992J	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-6	207	n/a	10/26/2022	1.7J	No	49	n/a	n/a	0	n/a	n/a	0.0007557	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**276.7**	**n/a**	**10/26/2022**	**840**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-10	276.7	n/a	10/26/2022	202	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**276.7**	**n/a**	**10/26/2022**	**545**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-12**	**276.7**	**n/a**	**10/26/2022**	**402**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**276.7**	**n/a**	**10/25/2022**	**337**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**276.7**	**n/a**	**10/26/2022**	**328**	**Yes**	**49**	**167.4**	**51.01**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-4	276.7	n/a	10/26/2022	247	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-5	276.7	n/a	10/26/2022	178	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-6	276.7	n/a	10/26/2022	91.3	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-7	276.7	n/a	10/26/2022	121	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-8	276.7	n/a	10/26/2022	226	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-9	276.7	n/a	10/26/2022	194	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-1	276.7	n/a	10/26/2022	96	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-5	276.7	n/a	10/26/2022	45.3	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-6	276.7	n/a	10/26/2022	38	No	49	167.4	51.01	0	None	No	0.0005016	Param Inter 1 of 2

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 49 background values. 55.1% NDs. Annual per-constituent alpha = 0.02243. Individual comparison alpha = 0.0007557 (1 of 2). Comparing 15 points to limit.

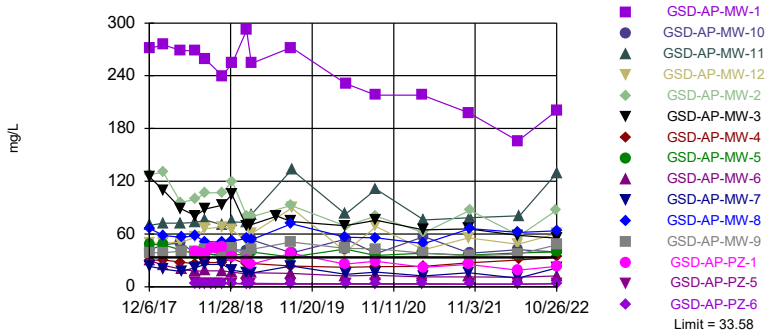
Constituent: Boron Analysis Run 12/27/2022 6:47 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4...

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=4.222, Std. Dev.=0.7344, n=49. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9421, critical = 0.929. Kappa = 2.142 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 15 points to limit.

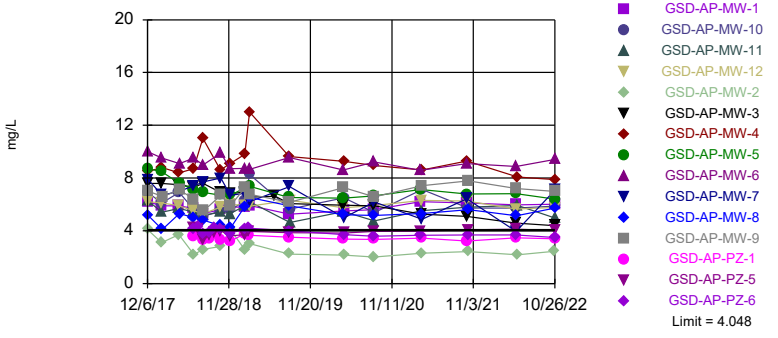
Constituent: Calcium Analysis Run 12/27/2022 6:47 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5...

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.229, Std. Dev.=0.382, n=49. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9824, critical = 0.929. Kappa = 2.142 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 15 points to limit.

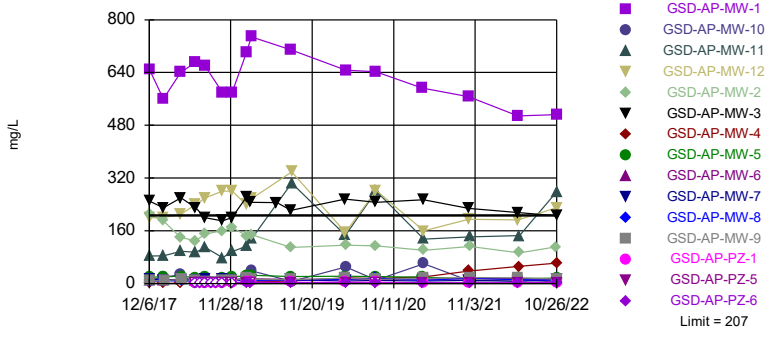
Constituent: Chloride Analysis Run 12/27/2022 6:47 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-12

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 49 background values. Annual per-constituent alpha = 0.02243. Individual comparison alpha = 0.0007557 (1 of 2). Comparing 15 points to limit.

Constituent: Sulfate Analysis Run 12/27/2022 6:47 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
12/6/2017	1.28	0.758	0.0605 (J)	0.12	0.135	0.959			
12/7/2017							0.0828 (J)	0.102	0.515
2/6/2018	1.29	0.733				1.04			0.541
2/7/2018				0.109	0.12				
2/8/2018			0.0527 (J)				0.0691 (J)	0.0787 (J)	
4/23/2018	1.21	0.608							
4/24/2018			0.0476 (J)	0.124	0.144	0.979			0.475
4/25/2018							0.0571 (J)	0.0734 (J)	
6/26/2018	1.25						0.0634 (J)	0.094 (J)	0.444
6/27/2018		0.619	0.0539 (J)	0.111	0.0903 (J)	0.982			
7/18/2018									
8/6/2018									0.474
8/7/2018	1.21	0.697			0.106	1			
8/8/2018			0.0637 (J)	0.135			0.0659 (J)	0.103	
9/5/2018									
9/24/2018									
10/22/2018	1.22	0.754			0.107	1.08			0.496
10/23/2018			0.0696 (J)	0.114			0.0666 (J)	0.106	
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018						1.05			0.51
12/4/2018	1.08	0.737		0.124	0.103		0.0617 (J)	0.085 (J)	
12/5/2018			0.0652 (J)						
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	1.2	0.575				1.01			0.43
2/6/2019			0.0511 (J)	0.112	0.105		0.0586 (J)	0.0733 (J)	
2/7/2019									
2/25/2019						1.08			
2/26/2019	1.15	0.566			0.146				0.411
2/27/2019			0.0494 (J)	0.14			0.0428 (J)	0.0548 (J)	
2/28/2019									
6/18/2019						1.09			
6/24/2019									
8/19/2019									
8/20/2019		0.566				1.06			0.399
8/21/2019	1.24						0.0569 (J)	0.091 (J)	
8/22/2019			0.0625 (J)	0.272	0.0951 (J)				
4/13/2020						1.19			
4/14/2020			0.0377 (J)	0.154			0.0474 (J)		
4/15/2020	1.13	0.461			0.164			0.0534 (J)	0.344
4/16/2020									
8/24/2020									
8/25/2020	1.11	0.528							
8/26/2020			0.0698 (J)	0.257	0.108	1.16	0.0501 (J)	0.0665 (J)	0.398
3/16/2021	1.08								
3/17/2021									
3/22/2021						1.13			
3/23/2021			0.0452 (J)	0.142	0.188		0.0476 (J)	0.0587 (J)	
3/24/2021		0.437							0.326

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
10/5/2021	1.02		0.0661 (J)			1.01		0.0673 (J)	0.344
10/6/2021									
10/11/2021		0.459			0.09 (J)				
10/12/2021				0.125			0.0462 (J)		
5/9/2022									
5/10/2022	0.954		0.066 (J)		0.097 (J)	0.998		0.0465 (J)	
5/11/2022							0.037 (J)		
5/16/2022		0.381							0.342
5/17/2022				0.139					
10/25/2022		0.5							
10/26/2022	0.977		0.0995 (J)	0.306	0.0868 (J)	0.85	0.0526 (J)	0.0839 (J)	0.371

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	0.566	0.0614 (J)	0.063 (J)						
2/6/2018	0.614								
2/7/2018									
2/8/2018		0.0531 (J)	0.0508 (J)						
4/23/2018									
4/24/2018									
4/25/2018	0.498	0.0551 (J)	0.0548 (J)						
6/26/2018		0.0568 (J)	0.0571 (J)						
6/27/2018	0.446			<0.1015	<0.1015	<0.1015	<0.1015		
7/18/2018				<0.1015	<0.1015	<0.1015	<0.1015		
8/6/2018						<0.1015			
8/7/2018	0.442		0.0571 (J)	<0.1015					
8/8/2018		0.0524 (J)			<0.1015		<0.1015		
9/5/2018				<0.1015	<0.1015	<0.1015	<0.1015		
9/24/2018				<0.1015	<0.1015	<0.1015	<0.1015		
10/22/2018				<0.1015					
10/23/2018	0.436	0.0576 (J)	0.0636 (J)		<0.1015		<0.1015		
10/24/2018						<0.1015		0.0357 (J)	0.0261 (J)
11/14/2018								0.0348 (J)	0.0209 (J)
11/28/2018								0.0313 (J)	0.0239 (J)
12/3/2018			0.0568 (J)	<0.1015	<0.1015		<0.1015		
12/4/2018									
12/5/2018	0.456	0.0561 (J)				<0.1015		0.0363 (J)	<0.1015
12/18/2018								0.033 (J)	<0.1015
1/3/2019								0.036 (J)	0.0209 (J)
1/24/2019								0.0307 (J)	0.0271 (J)
2/5/2019	0.453		0.0509 (J)	<0.1015		<0.1015		0.0306 (J)	0.0245 (J)
2/6/2019		0.0627 (J)							
2/7/2019					<0.1015		<0.1015		
2/25/2019				<0.1015	<0.1015		<0.1015		
2/26/2019			0.0527 (J)						
2/27/2019	0.457	0.0474 (J)							
2/28/2019						<0.1015		0.0206 (J)	<0.1015
6/18/2019									
6/24/2019									<0.1015
8/19/2019								0.0341 (J)	<0.1015
8/20/2019	0.378		0.0608 (J)	<0.1015		<0.1015			
8/21/2019		0.0524 (J)			<0.1015		<0.1015		
8/22/2019									
4/13/2020	0.359		0.0561 (J)	<0.1015					
4/14/2020		0.0562 (J)							
4/15/2020					<0.1015		<0.1015		<0.1015
4/16/2020						<0.1015		0.0331 (J)	
8/24/2020	0.329			<0.1015	<0.1015		<0.1015	0.0303 (J)	
8/25/2020						<0.1015			<0.1015
8/26/2020		0.0565 (J)	0.0633 (J)						
3/16/2021	0.328				<0.1015		<0.1015		
3/17/2021			0.0563 (J)						
3/22/2021						<0.1015		0.0333 (J)	<0.1015
3/23/2021		0.0609 (J)							
3/24/2021				<0.1015					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
10/5/2021	0.26		0.0649 (J)	<0.1015					
10/6/2021								0.0305 (J)	<0.1015
10/11/2021									
10/12/2021		0.0632 (J)			<0.1015	<0.1015	<0.1015		
5/9/2022	0.261			<0.1015		<0.1015		0.0347 (J)	
5/10/2022			0.0681 (J)		<0.1015		<0.1015		
5/11/2022		0.0636 (J)							
5/16/2022									
5/17/2022									<0.1015
10/25/2022								0.0308 (J)	<0.1015
10/26/2022	0.23	0.0595 (J)	0.0788 (J)	<0.1015	<0.1015	<0.1015	<0.1015		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
12/6/2017	271	128	49	70	42	125			
12/7/2017							66.1	23.4	30.1
2/6/2018	275	130				110			30.6
2/7/2018				72.4	47.6				
2/8/2018			50				58	20.1	
4/23/2018	269	95.9							
4/24/2018			50.5	72.3	50.1	88.8			27.8
4/25/2018							56.3	17.4	
6/26/2018	268						57.7	21.8	26.2
6/27/2018		99.4	56.3	73.1	37.1	80.8			
7/18/2018									
8/6/2018									27.5
8/7/2018	259	107			37.4	88.5			
8/8/2018			65.7	76			51.2	25.4	
9/5/2018									
9/24/2018									
10/22/2018	240	107			36.3	92.7			27.7
10/23/2018			68.3	70.2			50.9	25.6	
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018						105			32.3
12/4/2018	254	120		74	42.1		51.9	19	
12/5/2018			64.3						
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	292	80.6				68.6			25.5
2/6/2019			52.2	73.1	41.3		55	16.4	
2/7/2019									
2/25/2019						70.6			
2/26/2019	254	79.6			53.3				26.4
2/27/2019			60.2	82.2			53.4	15.6	
2/28/2019									
6/18/2019						80.5			
6/24/2019									
8/19/2019									
8/20/2019		92.3				74.1			23.5
8/21/2019	272						71.5	23.5	
8/22/2019			89.4	133	38.5				
4/13/2020						69.5			
4/14/2020			40	82.4			56.2		
4/15/2020	231	69.2			54.1			14	22
4/16/2020									
8/24/2020									
8/25/2020	218	80.5							
8/26/2020			68.4	111	37.8	75.7	55.5	16.7	22.8
3/16/2021	218								
3/17/2021									
3/22/2021						64.9			
3/23/2021			42	75.9	57		48.9	12.5	
3/24/2021		61.5							23.1

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
10/5/2021	198		55.8			65.9		15.9	27.4
10/6/2021									
10/11/2021		87.1			38.2				
10/12/2021				78.6			66.3		
5/9/2022									
5/10/2022	166		48.2		42.2	58.5		9.95	
5/11/2022							61.9		
5/16/2022		58.2							30.7
5/17/2022				80.6					
10/25/2022		86.900002							
10/26/2022	200		60.200001	129	39.5	55.299999	63.700001	21.4	33.599998

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	48.2	38.7	29.8						
2/6/2018	47.8								
2/7/2018									
2/8/2018		38.8	24.3						
4/23/2018									
4/24/2018									
4/25/2018	41.8	40.3	19.8						
6/26/2018		39.9	17.8						
6/27/2018	36.9			39.4	3.89	16.6	4.56		
7/18/2018				38.4	3.8	15.3	3.92		
8/6/2018						13.8			
8/7/2018	37.6		18.3	36.7					
8/8/2018		42.3			3.89		3.74		
9/5/2018				43.6	3.78	12.1	3.38		
9/24/2018				44.5	3.73	11.8	3.25		
10/22/2018				45					
10/23/2018	35.3	39.8	18.1		3.79		3.37		
10/24/2018						10.2		28.3	18
11/14/2018								27.5	14.9
11/28/2018								20.7	14.8
12/3/2018			16.6	33.7	3.79		3.67		
12/4/2018									
12/5/2018	36.3	43.8				9.14		25.3	14.8
12/18/2018								20.9	16.4
1/3/2019								18.5	19.7
1/24/2019								17	19.6
2/5/2019	36.6		14.5	30.1		15.1		17.1	20.8
2/6/2019		34.9							
2/7/2019					3.75		2.89		
2/25/2019				25.6	3.81		2.95		
2/26/2019			16						
2/27/2019	39.6	42.5							
2/28/2019						21.4		18.6	21.5
6/18/2019									
6/24/2019									18.4
8/19/2019								25.3	12.8
8/20/2019	33.7		15.1	38.3		14.4			
8/21/2019		50.9			3.71		3.04		
8/22/2019									
4/13/2020	43		12.5	25.9					
4/14/2020		43.6							
4/15/2020					3.56		2.93		13.1
4/16/2020						20.1		30.7	
8/24/2020	35.5			29	3.45		2.94	30.8	
8/25/2020						13.1			12.2
8/26/2020		43.2	12.9						
3/16/2021	38.1				3.44		2.9		
3/17/2021			11.3						
3/22/2021						12.2		31	18.4
3/23/2021		38.1							
3/24/2021				22.2					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
10/5/2021	36		11.4	25.4					
10/6/2021								31	13.4
10/11/2021									
10/12/2021		35.4			3.29	11.8	2.94		
5/9/2022	38.4			18.9		14.5		28.4	
5/10/2022			10.8		3.24		2.87		
5/11/2022		36.9							
5/16/2022									
5/17/2022									19.7
10/25/2022								30.700001	8.46
10/26/2022	39.599998	47.700001	12.2	23.1	3.42	8.97	3.09		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
12/6/2017	6.2	4.1	6.2	6.3	6.9	7.6			
12/7/2017							5.2	7.9	8.5
2/6/2018	5.9	3.1				7.6			8.8
2/7/2018				5.4	6.1				
2/8/2018			6.1				4.1	6.7	
2/12/2018									
4/23/2018	5.9	3.7							
4/24/2018			5.9	5.7	6.9	7.5			8.4
4/25/2018							5.3	7	
6/26/2018	5.7						5	7.4	8.7
6/27/2018		2.2	5.5	5.4	5.6	7.3			
7/18/2018									
8/6/2018									11
8/7/2018	5.3	2.6			5.1	7.6			
8/8/2018			5.3	5.2			4.8	7.7	
9/5/2018									
9/24/2018									
10/22/2018	5.6	2.8			5.5	6.9			8.6
10/23/2018			5.8	5.4			4.4	8	
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018						6.8			9.1
12/4/2018	5.8	4.1		5.3	5.6		4.2	6.7	
12/5/2018			6						
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	5.8	2.56				6.95			9.81
2/6/2019			5.95	5.89	6.24		5.84	6.84	
2/7/2019									
2/25/2019						6.55			
2/26/2019	5.92	3.03			8.28				13
2/27/2019			5.88	6.2			6.52	6.21	
2/28/2019									
6/18/2019						6.62			
6/24/2019									
8/19/2019									
8/20/2019		2.24				6.07			9.62
8/21/2019	5.26						5.89	7.35	
8/22/2019			6.31	4.64	5.66				
4/13/2020						5.95			
4/14/2020			5.74	5.46			5.21		
4/15/2020	5.5	2.16			6.49			4.99	9.27
4/16/2020									
8/24/2020									
8/25/2020	5.59	2							
8/26/2020			5.91	4.74	5.39	5.89	5.16	6.19	8.96
3/16/2021	6.2								
3/17/2021									
3/22/2021						5.26			
3/23/2021			6.3	5.54	7.14		5.3	4.87	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
3/24/2021		2.29							8.61
10/5/2021	6.1		6.26			5.09		6.43	9.3
10/6/2021									
10/11/2021		2.43			5.72				
10/12/2021				5.8			5.6		
5/9/2022									
5/10/2022	5.97		5.64		5.72	4.59		3.96	
5/11/2022							5.13		
5/16/2022		2.18							8.07
5/17/2022				5.92					
10/25/2022		2.45							
10/26/2022	6.02		5.76	4.98	5.87	4.38	5.72	7.09	7.88

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	8.7	7	10						
2/6/2018	8.5								
2/7/2018									
2/8/2018			9.5						
2/12/2018		6.6							
4/23/2018									
4/24/2018									
4/25/2018	7.6	7.1	9.1						
6/26/2018		6.4	9.5						
6/27/2018	7.1			3.6	4.1	3.1	4.2		
7/18/2018				3.8	4.3	3.4	4.1		
8/6/2018						2.8			
8/7/2018	6.9		9	3.3					
8/8/2018		5.5			3.8		3.3		
9/5/2018				3.4	3.9	2.8	3.7		
9/24/2018				3.8	4.2	3.1	3.9		
10/22/2018				3.3					
10/23/2018	6.7	6.7	9.9		4.1		4		
10/24/2018						2.8		4	3.3
11/14/2018								3.6	3.6
11/28/2018								3.5	3.5
12/3/2018			8.7	3.2	3.8		3.6		
12/4/2018									
12/5/2018	6.7	5.9				2.2		3.2	3.3
12/18/2018								3.4	3.6
1/3/2019								3.2	3.4
1/24/2019								3.15	3.91
2/5/2019	7.24		8.73	3.78		3.12		2.98	3.94
2/6/2019		7.26							
2/7/2019					4.15		3.72		
2/25/2019				3.66	4.2		3.95		
2/26/2019			8.66						
2/27/2019	7.38	6.77							
2/28/2019						3.45		3.05	4.15
6/18/2019									
6/24/2019									3.36 (D)
8/19/2019								2.8	3.42
8/20/2019	6.53		9.55	3.52		3.27			
8/21/2019		6.16			4		3.85		
8/22/2019									
4/13/2020	6.48		8.6	3.36					
4/14/2020		7.27							
4/15/2020					3.71		3.83		3.39
4/16/2020						3.74		2.93	
8/24/2020	6.64			3.35	3.59		3.96	2.82	
8/25/2020						3.03			2.94
8/26/2020		6.57	9.21						
3/16/2021	7.14				3.66		3.98		
3/17/2021			8.59						
3/22/2021						3.15		2.94	3.61
3/23/2021		7.42							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
3/24/2021				3.45					
10/5/2021	6.78		9.09	3.23					
10/6/2021								2.98	3.17
10/11/2021									
10/12/2021		7.78			3.68	2.87	4.07		
5/9/2022	6.81			3.46		3		3.01	
5/10/2022			8.87		3.68		4.12		
5/11/2022		7.2							
5/16/2022									
5/17/2022									3.58
10/25/2022								2.88	3.24
10/26/2022	6.4	6.99	9.4	3.39	3.5	2.56	4.03		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
12/6/2017	650	210	200	83	11	250			
12/7/2017							6.5	14	<1
2/6/2018	560	190				230			<1
2/7/2018				84	19				
2/8/2018			200				8.9	10	
2/12/2018									
4/23/2018	640	140							
4/24/2018			210	98	27	260			<1
4/25/2018							7.9	11	
6/26/2018	670						7.5	11	<1
6/27/2018		130	240	95	<1	230			
7/18/2018									
8/6/2018									<1
8/7/2018	660	150			<1	200			
8/8/2018			260	110			7.3	13	
9/5/2018									
9/24/2018									
10/22/2018	580	160			<1	190			<1
10/23/2018			280	78			7.8	13	
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018						200			<1
12/4/2018	580	170		97	11		8.2	9.8	
12/5/2018			280						
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	702	145				263			5.38
2/6/2019			239	113	16.8		9.53	10.8	
2/7/2019									
2/25/2019						246			
2/26/2019	748	148			38.4				5.1
2/27/2019			257	135			8.25	8.98	
2/28/2019									
6/18/2019						245			
6/24/2019									
8/19/2019									
8/20/2019		110				222			7.34
8/21/2019	708						10.8	11.8	
8/22/2019			339	305	6.74				
4/13/2020						256			
4/14/2020			155	146			12.5		
4/15/2020	647	116			50.7			7.95	17.2
4/16/2020									
8/24/2020									
8/25/2020	642	114							
8/26/2020			282	280	10.5	246	16.1	9.19	15.5
3/16/2021	593								
3/17/2021									
3/22/2021						254			
3/23/2021			160	135	60.1		9.21	8.08	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
3/24/2021		101							19.9
10/5/2021	567		195			228		9.19	37.8
10/6/2021									
10/11/2021		112			7.75				
10/12/2021				142			16		
5/9/2022									
5/10/2022	508		193		11.6	215		7.13	
5/11/2022							11.8		
5/16/2022		93.1							51.8
5/17/2022				145					
10/25/2022		111							
10/26/2022	512		230	278	4.42	206	10.1	11.4	61.799999

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	19	9	10						
2/6/2018	20								
2/7/2018									
2/8/2018			11						
2/12/2018		8.3							
4/23/2018									
4/24/2018									
4/25/2018	22	12	13						
6/26/2018		8.5	11						
6/27/2018	18			2.2 (J)	<1	120	<1		
7/18/2018				2.5 (J)	<1	120	<1		
8/6/2018						110			
8/7/2018	20		12	<1					
8/8/2018		6.7			<1		<1		
9/5/2018				1.4 (J)	<1	86	<1		
9/24/2018				<1	<1	80	<1		
10/22/2018				1.7 (J)					
10/23/2018	18	9.4	11		<1		<1		
10/24/2018						68		16	44
11/14/2018								13	44
11/28/2018								11	46
12/3/2018			12	2.1 (J)	<1		<1		
12/4/2018									
12/5/2018	20	7.8				54		12	51
12/18/2018								11	76
1/3/2019								10	94
1/24/2019								10.2	135
2/5/2019	24.3		13.9	3.99		126		10.4	183
2/6/2019		17							
2/7/2019					1.69		0.639 (J)		
2/25/2019				4.01	1.53		<1		
2/26/2019			14.1						
2/27/2019	24.7	12.4							
2/28/2019						207		9.86	192
6/18/2019									
6/24/2019									129 (D)
8/19/2019								8.74	66.6
8/20/2019	21.3		12.3	3.73		106			
8/21/2019		11.3			1.62		1.21		
8/22/2019									
4/13/2020	21.9		13.9	3.83					
4/14/2020		15.9							
4/15/2020					1.68		0.554 (J)		92.8
4/16/2020						191		11.5	
8/24/2020	21.2			4.16	1.31		<1	10	
8/25/2020						98.4			74.1
8/26/2020		12.9	13.1						
3/16/2021	18.8				1.7		1.02		
3/17/2021			13.7						
3/22/2021						83.8		10.6	128
3/23/2021		15.7							

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

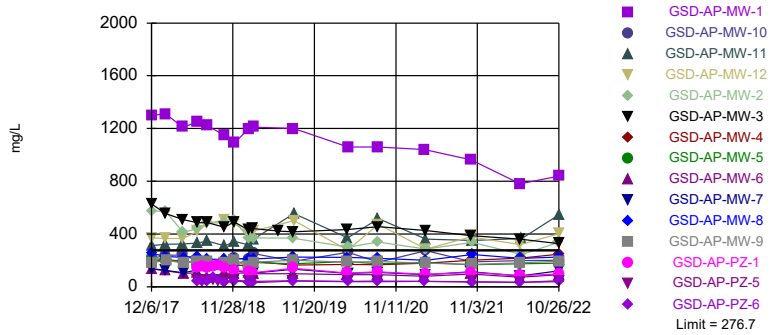
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
3/24/2021				2.88					
10/5/2021	14.4		14.2	2.17					
10/6/2021								10.2	93.5
10/11/2021									
10/12/2021		18			1.34	95.7	0.895 (J)		
5/9/2022	15.5			2.51		125		10	
5/10/2022			14.8		1.28 (J)		1.02 (J)		
5/11/2022		17.7							
5/16/2022									
5/17/2022									139
10/25/2022								9.25	37.099998
10/26/2022	16.1	13.8	12.2	3.43	1.7 (J)	50.700001	0.992 (J)		

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=167.4, Std. Dev.=51.01, n=49. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9519, critical = 0.929. Kappa = 2.142 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 15 points to limit.

Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:47 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
12/6/2017	1300	574	371	312	215	628			
12/7/2017							253	137	189
2/6/2018	1310	572				556			206
2/7/2018				323	237				
2/8/2018			367				229	124	
2/12/2018									
4/23/2018	1210	414							
4/24/2018			365	324	242	510			193
4/25/2018							223	106	
6/26/2018	1250						232	129	180
6/27/2018		440	421	333	194	486			
7/18/2018									
8/6/2018									182
8/7/2018	1220	485			195	487			
8/8/2018			479	346			208	142	
9/5/2018									
9/24/2018									
10/22/2018	1150	484			184	450			204
10/23/2018			507	311			209	142	
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018						492			168
12/4/2018	1090	504		343	215		213	121	
12/5/2018			479						
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	1200	366				428			158
2/6/2019			399	317	208		212	108	
2/7/2019									
2/25/2019						441			
2/26/2019	1210	372			252				191
2/27/2019			422	360			211	103	
2/28/2019									
6/18/2019						422			
6/24/2019									
8/19/2019									
8/20/2019		369				416			164
8/21/2019	1200						226	133	
8/22/2019			501	555	194				
4/13/2020						433			
4/14/2020			278	372			222		
4/15/2020	1060	300			262			102	170
4/16/2020									
8/24/2020									
8/25/2020	1060	339							
8/26/2020			472	517	186	455	215	109	168
3/16/2021	1040								
3/17/2021									
3/22/2021						427			
3/23/2021			286	361	273		200	92.7	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-12	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-4
3/24/2021		287							180
10/5/2021	964		378			389		113	200
10/6/2021									
10/11/2021		337			190				
10/12/2021				352			245		
5/9/2022									
5/10/2022	780		319		199	362		82.7	
5/11/2022							216		
5/16/2022		244							218
5/17/2022				367					
10/25/2022		337							
10/26/2022	840		402	545	202	328	226	121	247

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	215	183	136						
2/6/2018	204								
2/7/2018									
2/8/2018			122						
2/12/2018		201							
4/23/2018									
4/24/2018									
4/25/2018	192	180	102						
6/26/2018		191	106						
6/27/2018	180			144	44	219	48.7		
7/18/2018				156	42.7	195	46		
8/6/2018						175			
8/7/2018	183		71.3	140					
8/8/2018		192			46		48		
9/5/2018				154	67.3	153	47.3		
9/24/2018				165	49.3	127	44.7		
10/22/2018				148					
10/23/2018	169	185	105		31.3		35.3		
10/24/2018						125		184	107
11/14/2018								170	96.7
11/28/2018								167	102
12/3/2018			102	127	46		48.7		
12/4/2018									
12/5/2018	177	200				101		185	103
12/18/2018								164	126
1/3/2019								167	191
1/24/2019								137	212
2/5/2019	198		107	113		180		138	269
2/6/2019		151							
2/7/2019					32.7		42.7		
2/25/2019				106	31.3		40.7		
2/26/2019			99.3						
2/27/2019	185	186							
2/28/2019						287		140	261
6/18/2019									
6/24/2019									203.5 (D)
8/19/2019								240	121
8/20/2019	174		98.7	141		265			
8/21/2019		200			42.7		46		
8/22/2019									
4/13/2020	192		90.7	104					
4/14/2020		187							
4/15/2020					37.3		41.3		155
4/16/2020						280		166	
8/24/2020	175			114	37.3		42.7	162	
8/25/2020						160			131
8/26/2020		192	91.3						
3/16/2021	184				41.3		42		
3/17/2021			80						
3/22/2021						126		157	204
3/23/2021		178							

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 12/27/2022 6:49 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-9	GSD-AP-MW-6	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-MW-14 ...	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
3/24/2021				94					
10/5/2021	168		96.7	108					
10/6/2021								182	136
10/11/2021									
10/12/2021		169			35.3	142	38.7		
5/9/2022	174			85.3		185		152	
5/10/2022			73.3		33.3		33.3		
5/11/2022		181							
5/16/2022									
5/17/2022									226
10/25/2022								159	72.699997
10/26/2022	178	194	91.300003	96	38	98	45.299999		

FIGURE F.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:58 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	-0.06272	-88	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-11	0.0113	63	58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-2	-0.06977	-85	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-4	-0.043	-87	-58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-5	-0.05974	-94	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-1	-19.11	-80	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-11	4.053	71	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-2	-11.63	-69	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-3	-9.136	-98	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-17 (bg)	-0.2175	-80	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-3	-0.697	-123	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.2449	-61	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-11	-0.08419	-72	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-16 (bg)	-0.2316	-69	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-11	23.94	77	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-0.792	-63	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	-89.27	-95	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	22.05	70	58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	-55.25	-85	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	-41.2	-104	-63	Yes	17	0	n/a	n/a	0.01	NP

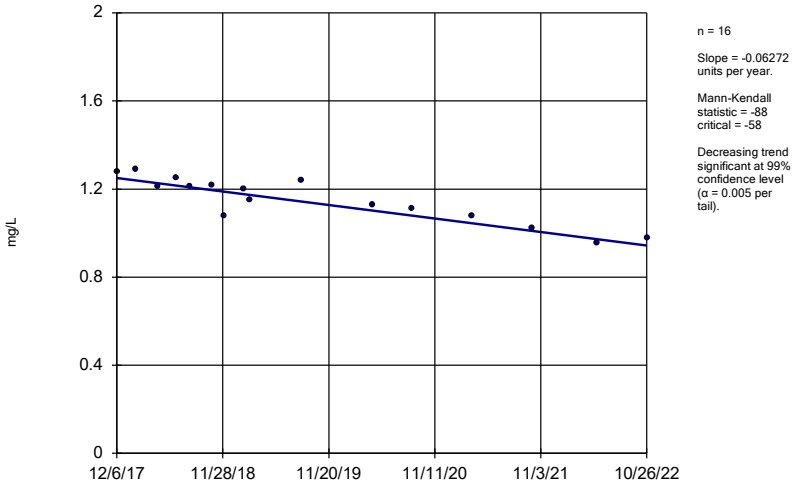
Trend Tests - Prediction Limit Exceedances - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/27/2022, 6:58 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06272**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-11**	**0.0113**	**63**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.001587	56	63	No	17	64.71	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.0009573	-34	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.06977**	**-85**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-3	0.02648	34	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-4**	**-0.043**	**-87**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.05974**	**-94**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.11**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	0.2953	12	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**4.053**	**71**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	1.444	9	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-0.7905	-27	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.8295	-19	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.555	39	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-11.63**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-9.136**	**-98**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-4	-1.089	-20	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-5	-0.7867	-23	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	0.9641	6	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.873	14	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	0.02129	11	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	0.01104	3	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	-0.05352	-7	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	-0.01676	-4	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	-0.008802	-4	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.03896	-16	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.2175**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.697**	**-123**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	-0.08104	-6	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-5**	**-0.2449**	**-61**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-6	-0.1248	-39	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-7	-0.4945	-53	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.144	31	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.1519	34	58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-14 (bg)	-0.01829	-57	-58	No	16	56.25	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-16 (bg)	0	21	63	No	17	58.82	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-17 (bg)	-0.008461	-50	-58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-7	0.002021	18	58	No	16	18.75	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-11**	**-0.08419**	**-72**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-14 (bg)	-0.01296	-22	-58	No	16	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.2316**	**-69**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.2293	-29	-58	No	16	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-5	-0.01447	-11	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-1	-17.42	-29	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GSD-AP-MW-11**	**23.94**	**77**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GSD-AP-MW-12	-0.6523	-2	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-5.22	-17	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	17.25	37	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.792**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-89.27**	**-95**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**22.05**	**70**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	-6.344	-9	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-11.74	-22	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	16.45	32	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-3.317	-31	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**-55.25**	**-85**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-41.2**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sen's Slope Estimator

GSD-AP-MW-1



n = 16

Slope = -0.06272 units per year.

Mann-Kendall statistic = -88
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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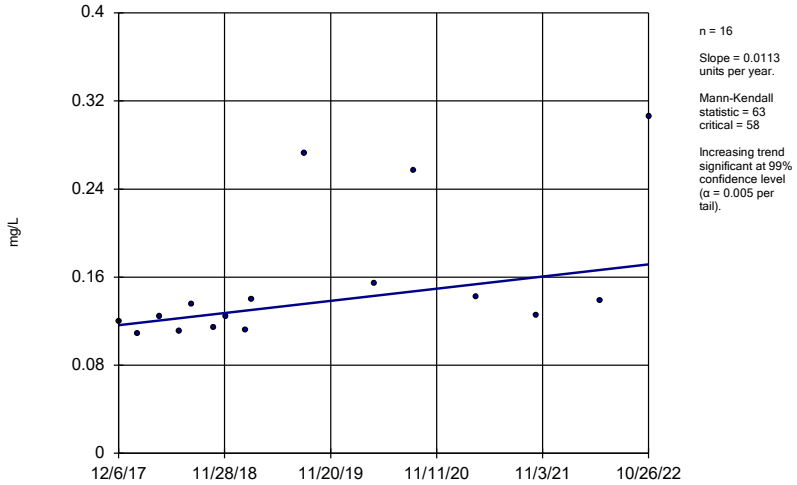
Sen's Slope Estimator

GSD-AP-MW-11



n = 16

Slope = 0.0113 units per year.

Mann-Kendall statistic = 63
critical = 58

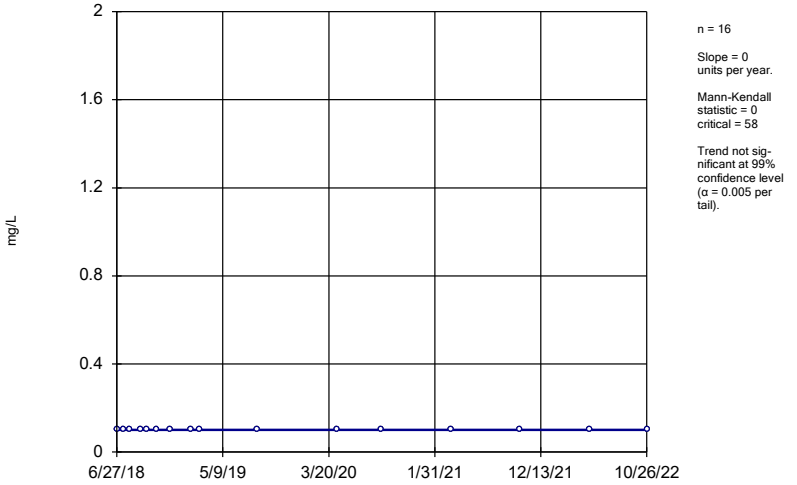
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 58

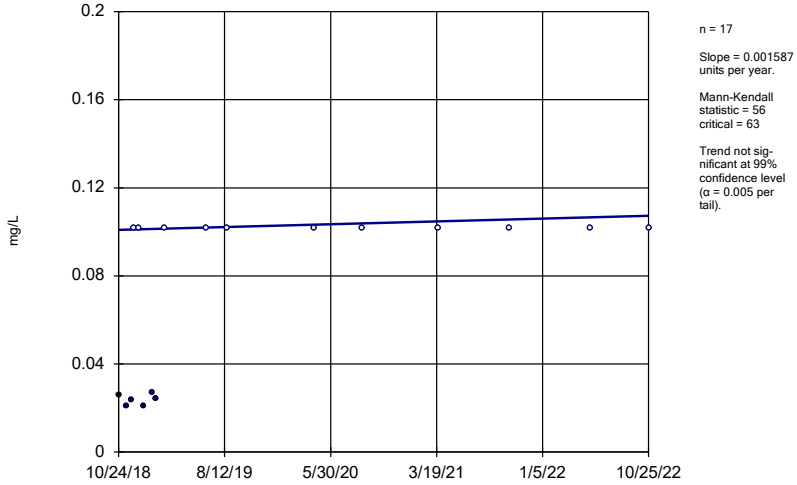
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 17

Slope = 0.001587 units per year.

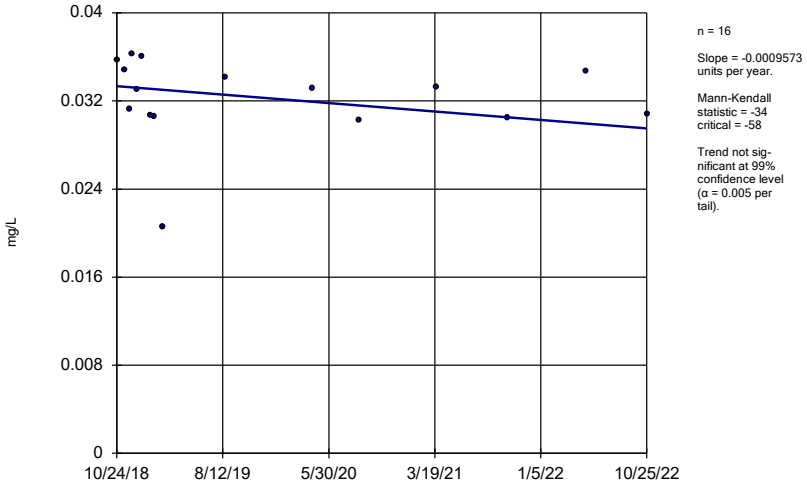
Mann-Kendall statistic = 56
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 16

Slope = -0.0009573 units per year.

Mann-Kendall statistic = -34
critical = -58

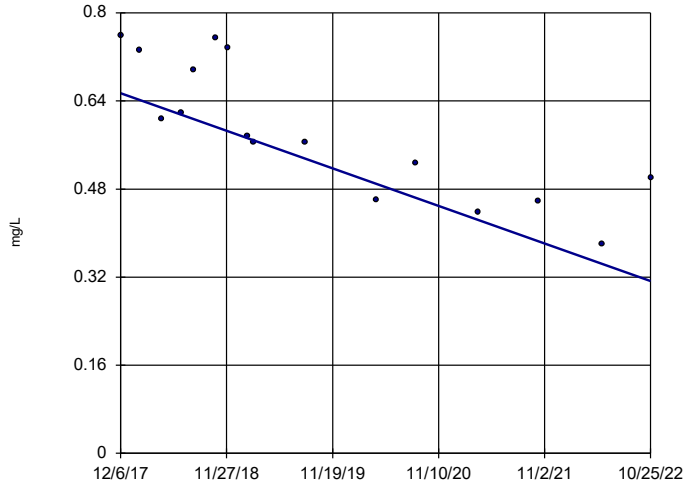
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-2



n = 16

Slope = -0.06977 units per year.

Mann-Kendall statistic = -85
critical = -58

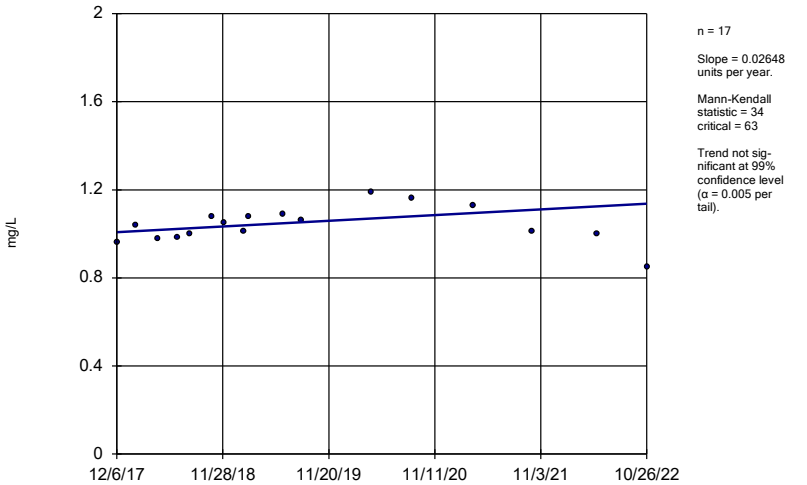
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 17

Slope = 0.02648 units per year.

Mann-Kendall statistic = 34
critical = 63

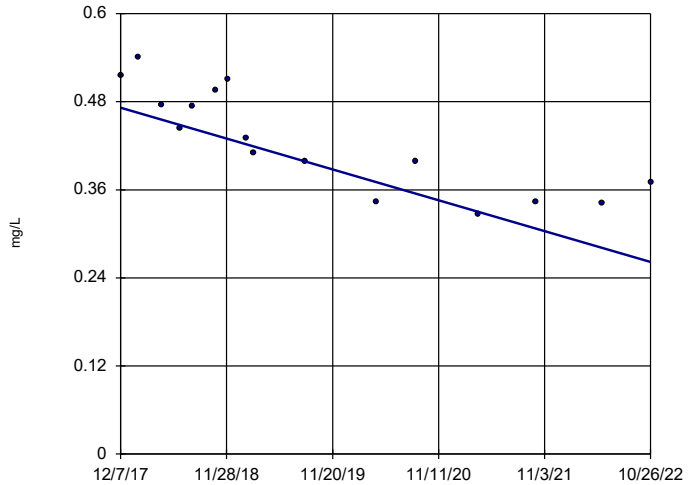
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 16

Slope = -0.043 units per year.

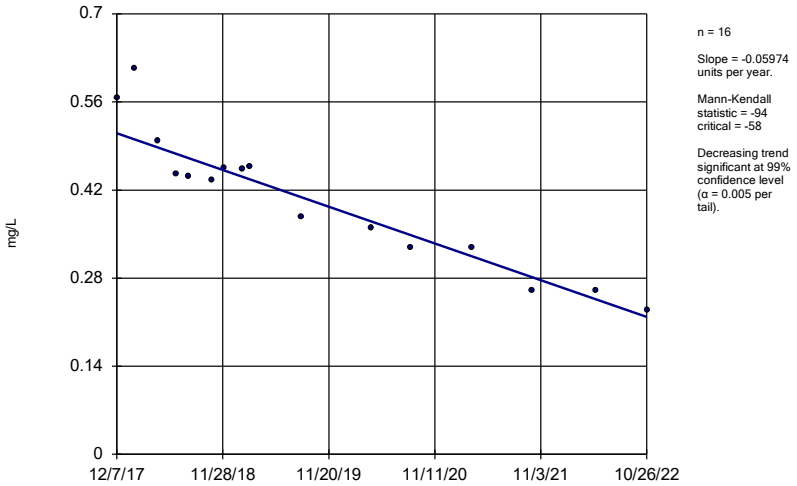
Mann-Kendall statistic = -87
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-5



n = 16

Slope = -0.05974 units per year.

Mann-Kendall statistic = -94 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

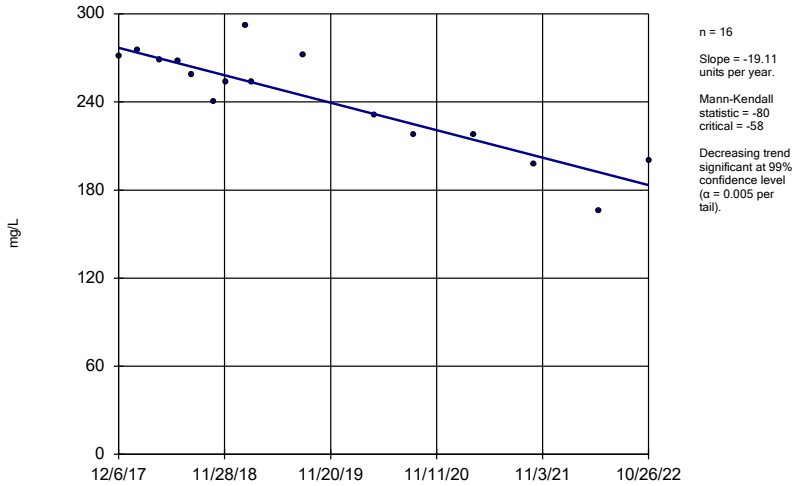
Constituent: Boron Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 16

Slope = -19.11 units per year.

Mann-Kendall statistic = -80 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

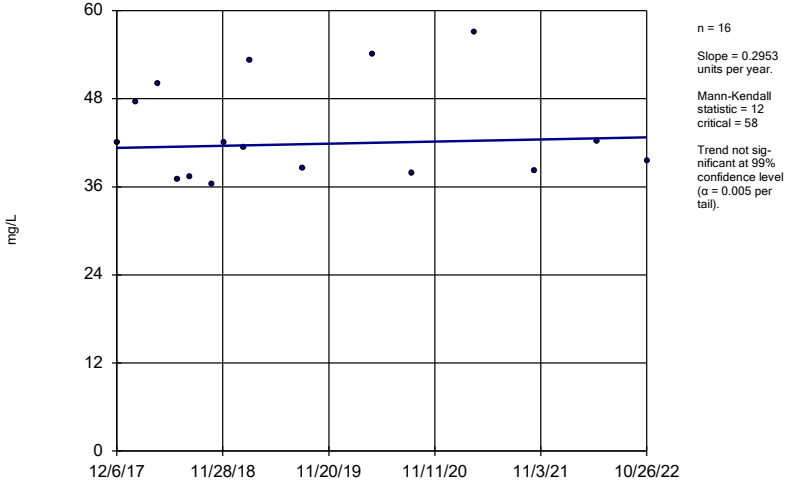
Constituent: Calcium Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 16

Slope = 0.2953 units per year.

Mann-Kendall statistic = 12 critical = 58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

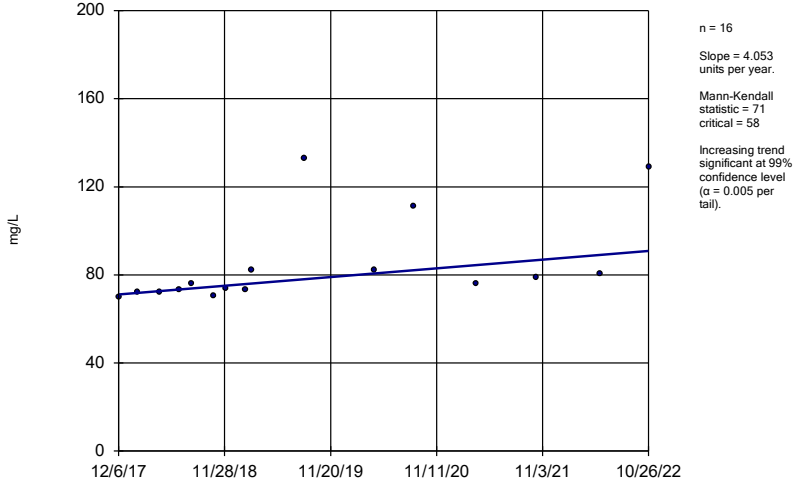
Constituent: Calcium Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 16

Slope = 4.053 units per year.

Mann-Kendall statistic = 71 critical = 58

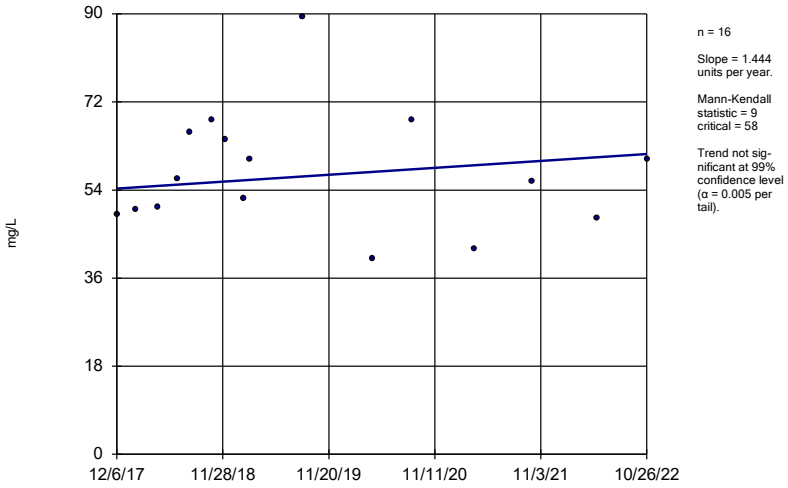
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-12



n = 16

Slope = 1.444 units per year.

Mann-Kendall statistic = 9 critical = 58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

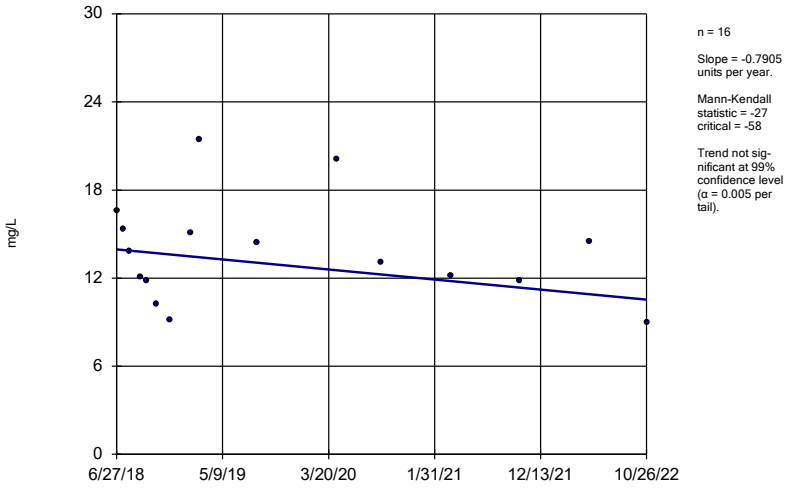
Constituent: Calcium Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 16

Slope = -0.7905 units per year.

Mann-Kendall statistic = -27 critical = -58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

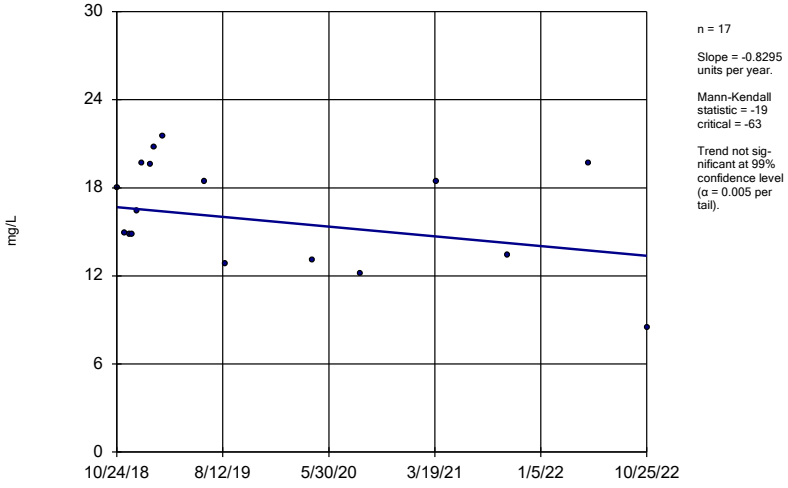
Constituent: Calcium Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 17

Slope = -0.8295 units per year.

Mann-Kendall statistic = -19 critical = -63

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

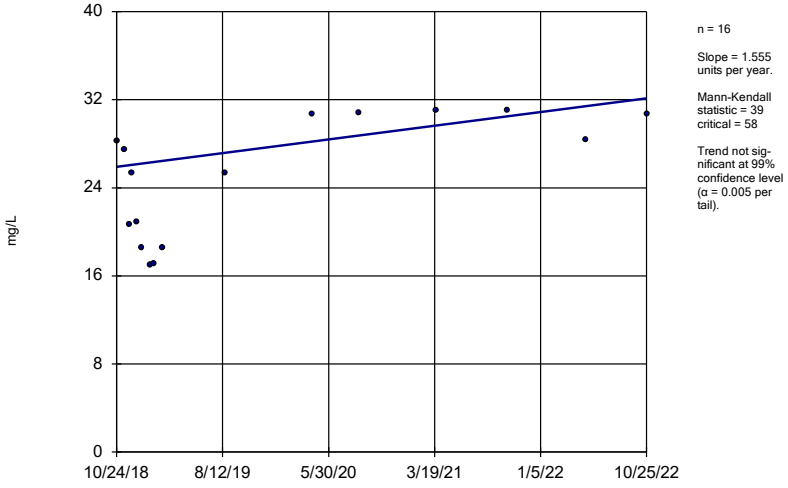
Constituent: Calcium Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 16

Slope = 1.555 units per year.

Mann-Kendall statistic = 39 critical = 58

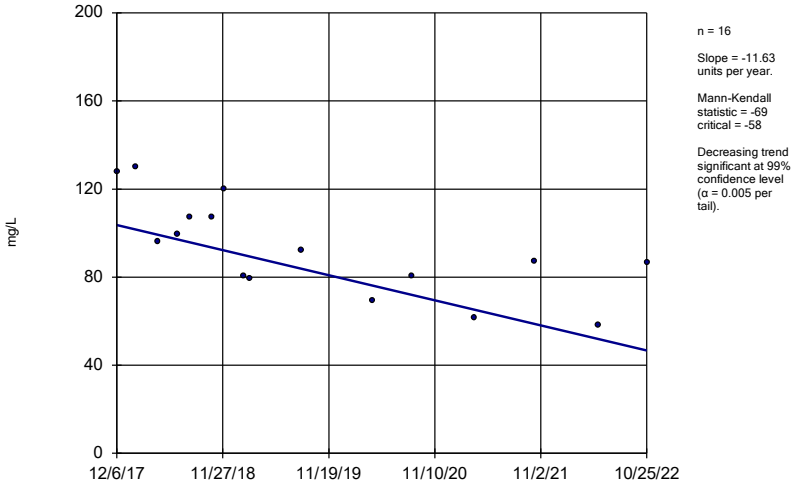
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/27/2022 6:54 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-2



n = 16

Slope = -11.63 units per year.

Mann-Kendall statistic = -69 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

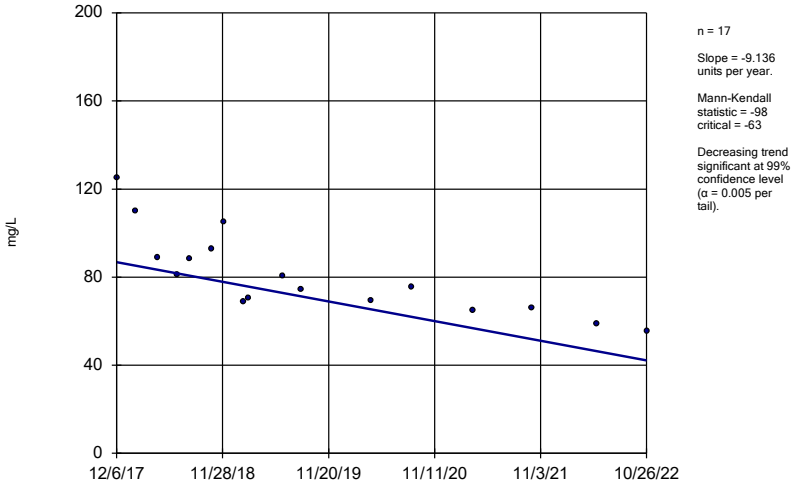
Constituent: Calcium Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 17

Slope = -9.136 units per year.

Mann-Kendall statistic = -98 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

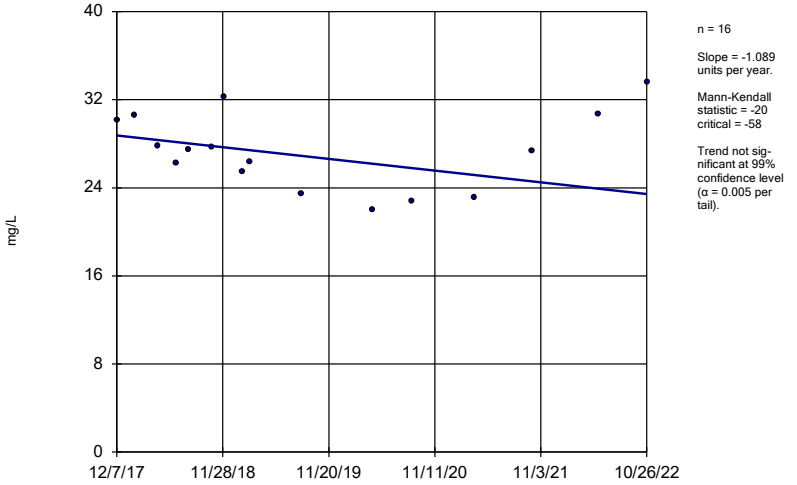
Constituent: Calcium Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 16

Slope = -1.089 units per year.

Mann-Kendall statistic = -20 critical = -58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

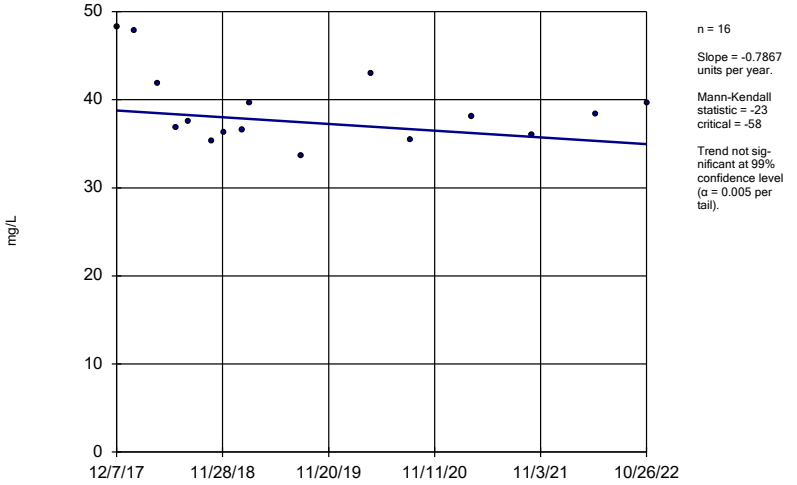
Constituent: Calcium Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 16

Slope = -0.7867 units per year.

Mann-Kendall statistic = -23 critical = -58

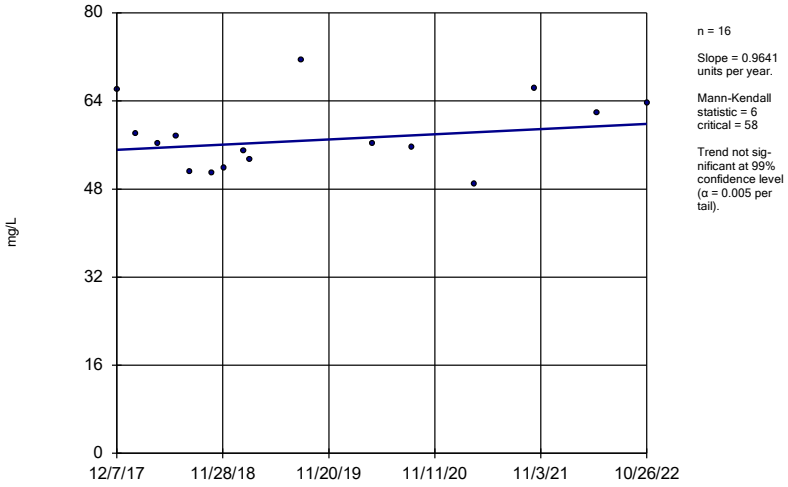
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-8



n = 16

Slope = 0.9641 units per year.

Mann-Kendall statistic = 6 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

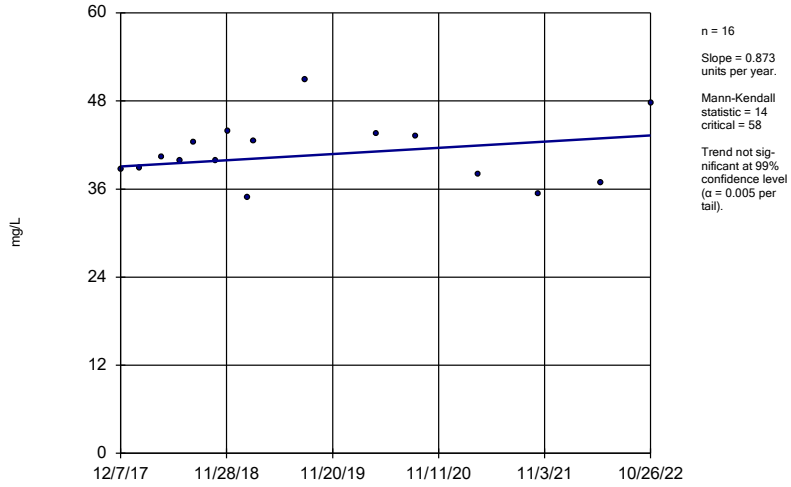
Constituent: Calcium Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 16

Slope = 0.873 units per year.

Mann-Kendall statistic = 14 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

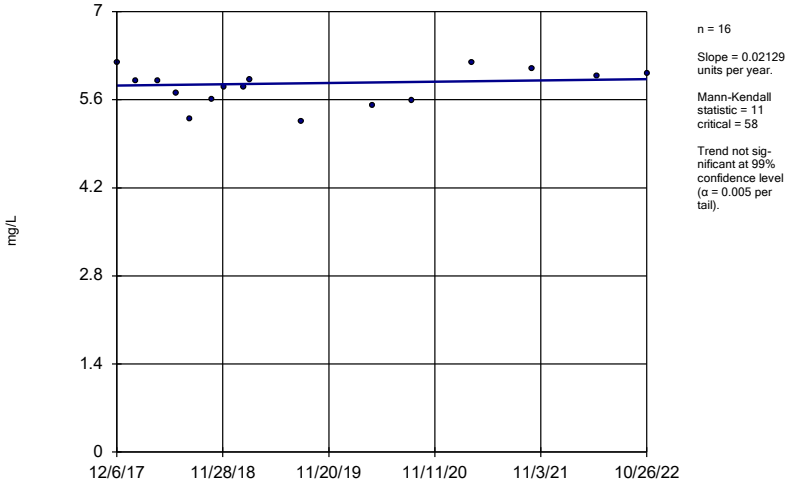
Constituent: Calcium Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 16

Slope = 0.02129 units per year.

Mann-Kendall statistic = 11 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

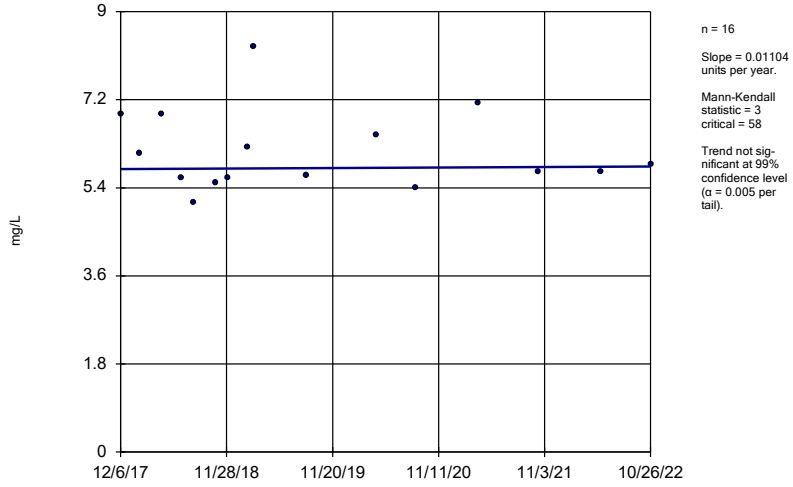
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 16

Slope = 0.01104 units per year.

Mann-Kendall statistic = 3 critical = 58

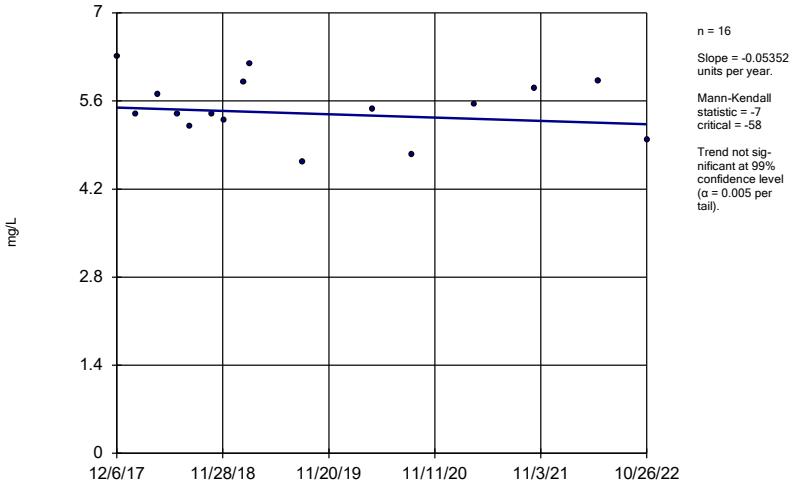
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-11



n = 16

Slope = -0.05352 units per year.

Mann-Kendall statistic = -7
critical = -58

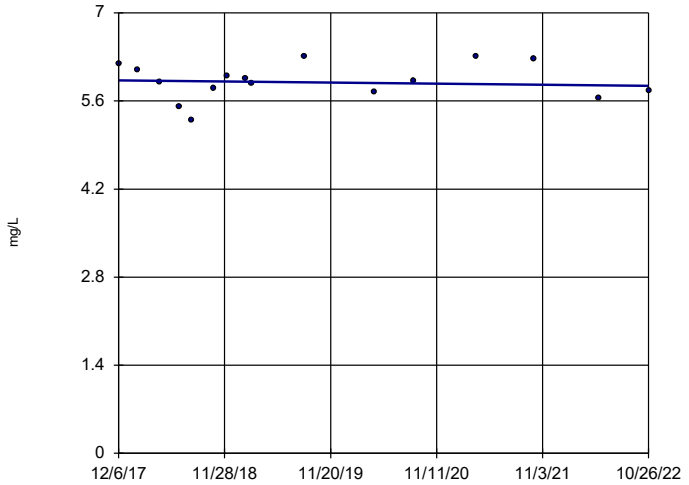
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 16

Slope = -0.01676 units per year.

Mann-Kendall statistic = -4
critical = -58

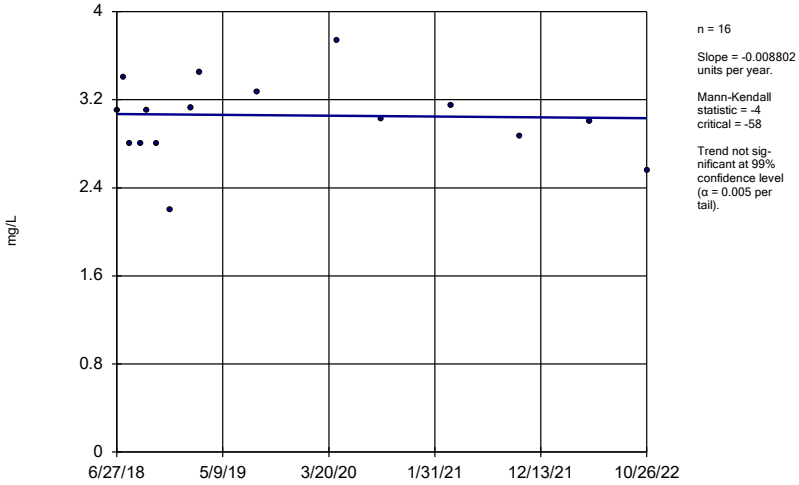
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 16

Slope = -0.008802 units per year.

Mann-Kendall statistic = -4
critical = -58

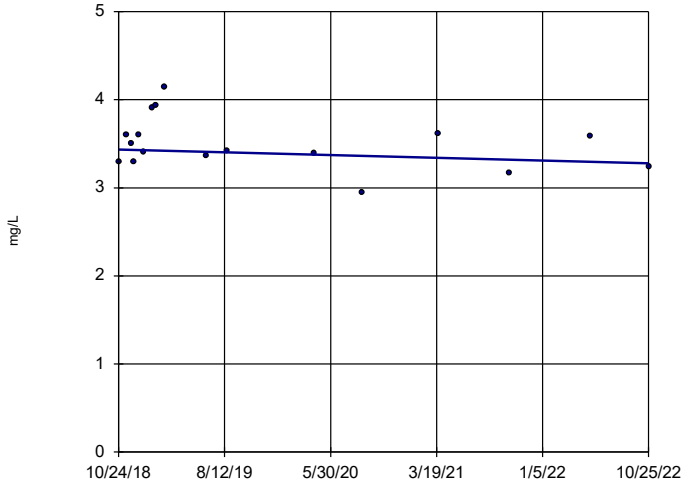
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 17

Slope = -0.03896 units per year.

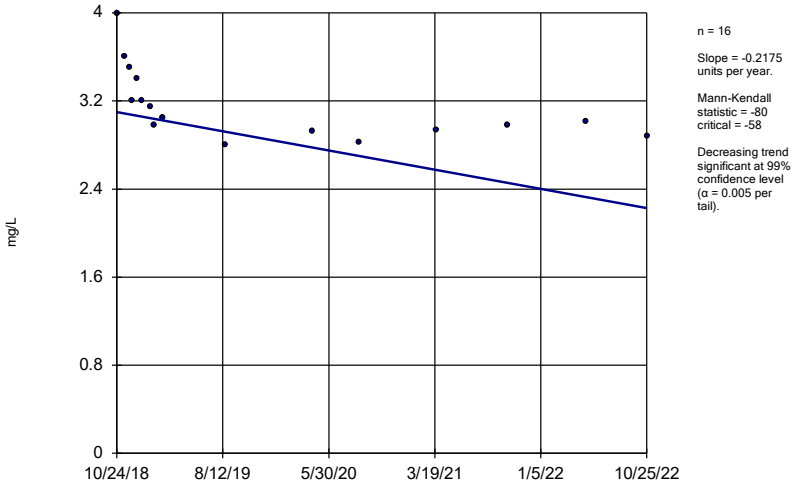
Mann-Kendall statistic = -16
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 16

Slope = -0.2175 units per year.

Mann-Kendall statistic = -80 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

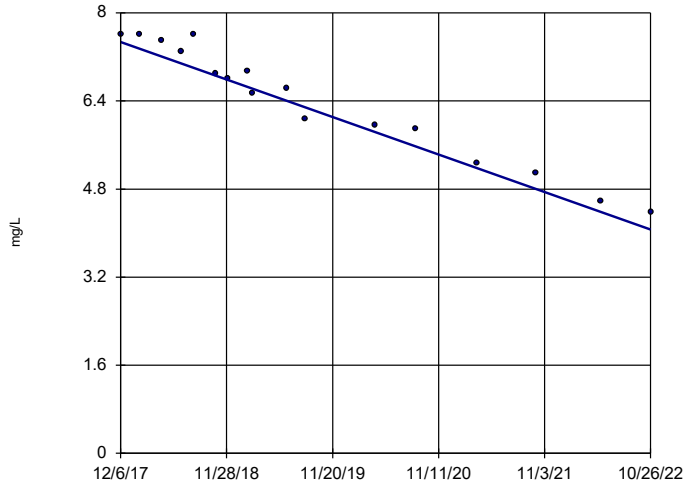
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 17

Slope = -0.697 units per year.

Mann-Kendall statistic = -123 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

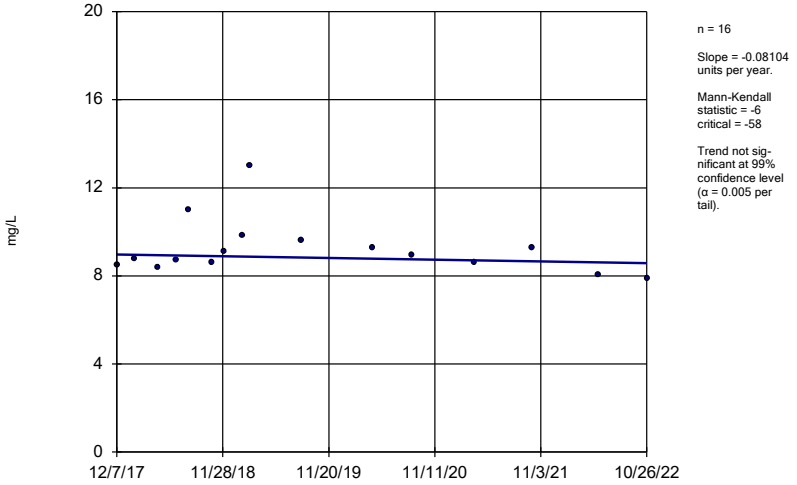
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 16

Slope = -0.08104 units per year.

Mann-Kendall statistic = -6 critical = -58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

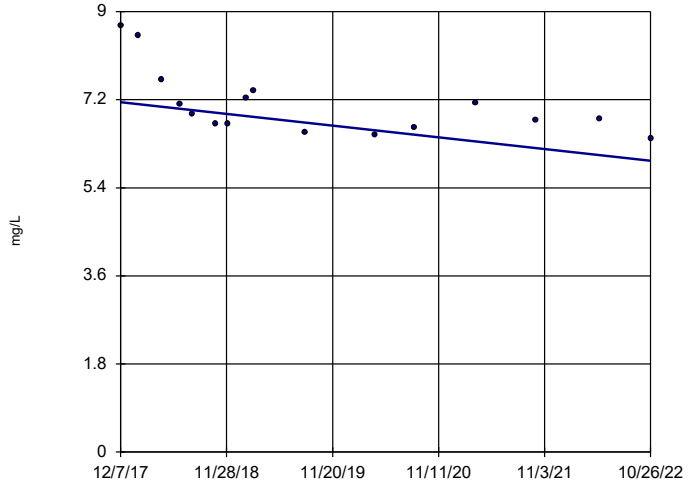
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 16

Slope = -0.2449 units per year.

Mann-Kendall statistic = -61 critical = -58

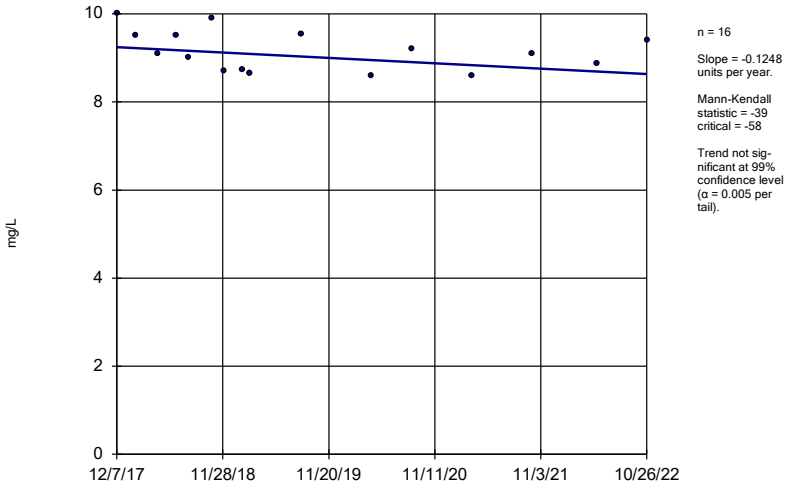
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-6



n = 16

Slope = -0.1248 units per year.

Mann-Kendall statistic = -39 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

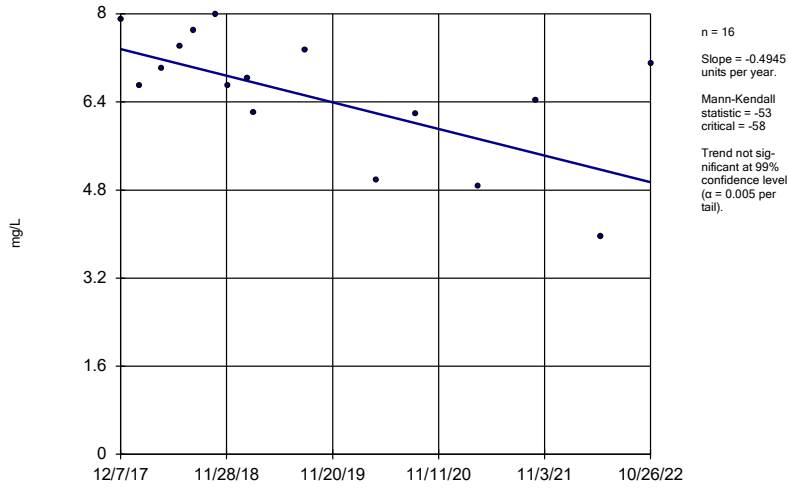
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-7



n = 16

Slope = -0.4945 units per year.

Mann-Kendall statistic = -53 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

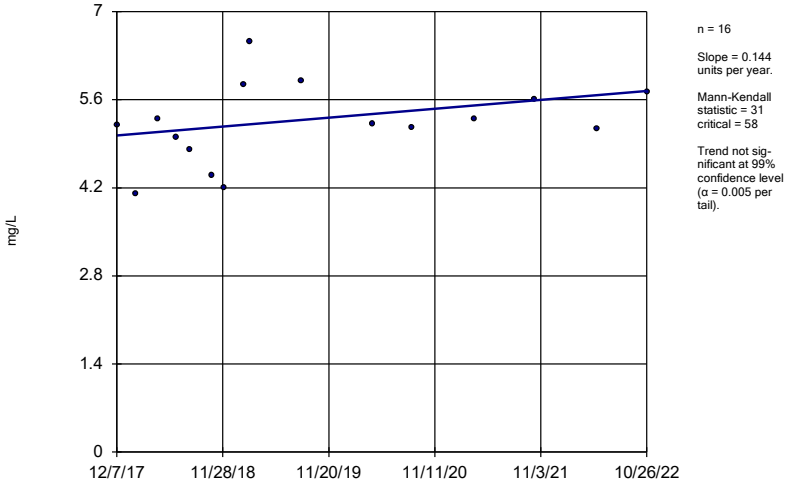
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-8



n = 16

Slope = 0.144 units per year.

Mann-Kendall statistic = 31 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

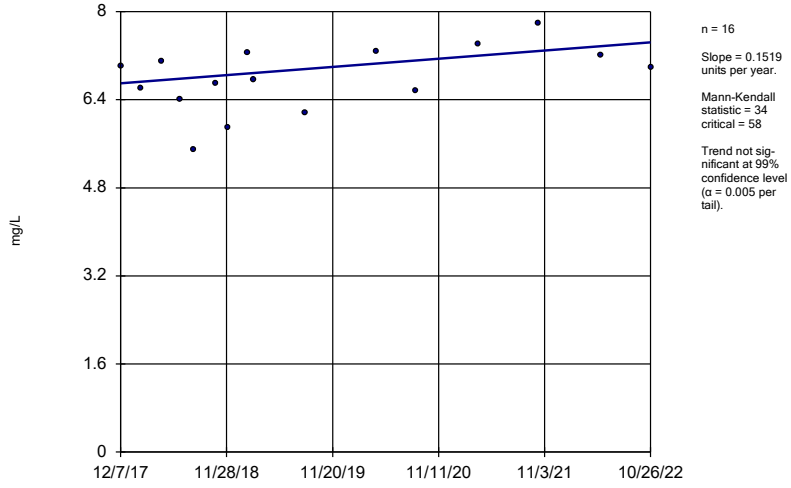
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 16

Slope = 0.1519 units per year.

Mann-Kendall statistic = 34 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

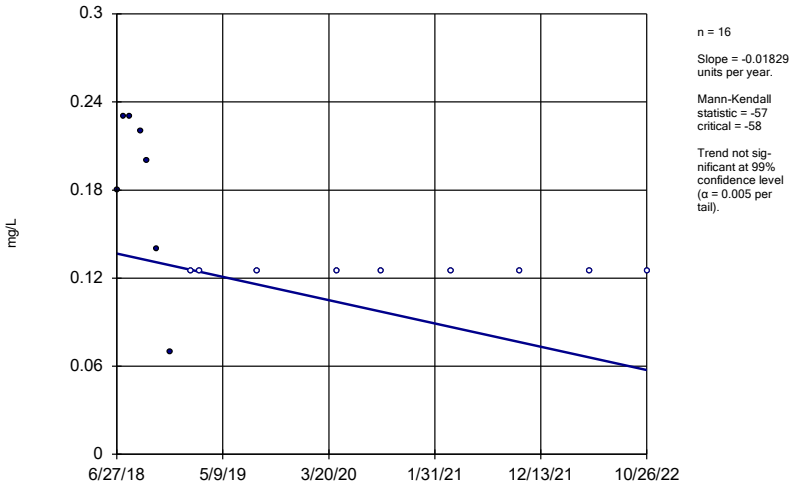
Constituent: Chloride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 16

Slope = -0.01829 units per year.

Mann-Kendall statistic = -57
critical = -58

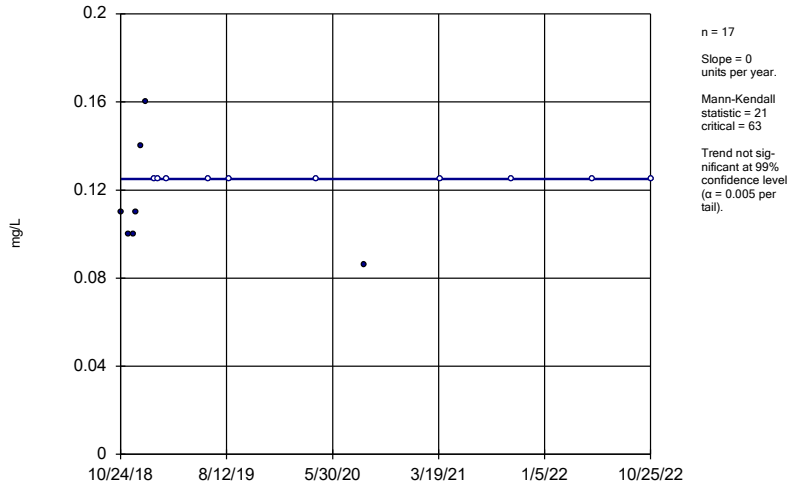
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 21
critical = 63

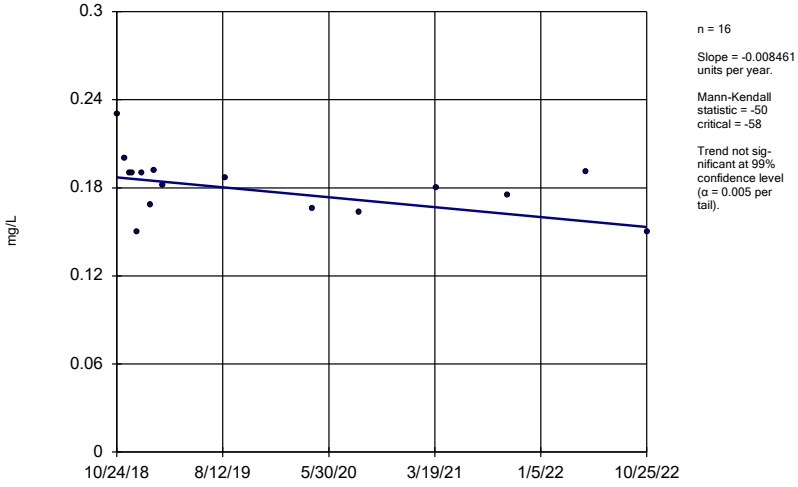
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 16

Slope = -0.008461 units per year.

Mann-Kendall statistic = -50
critical = -58

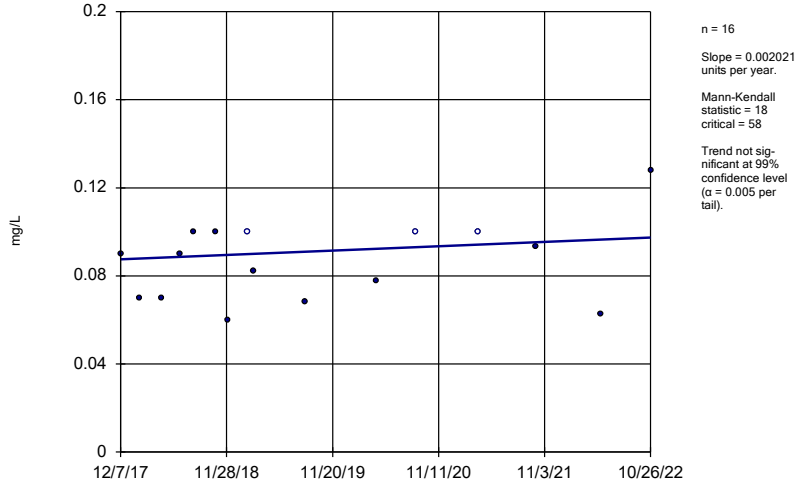
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-7



n = 16

Slope = 0.002021 units per year.

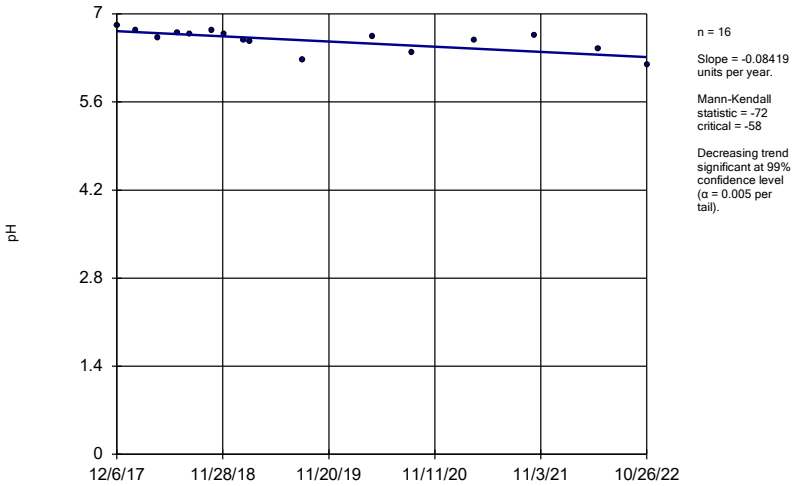
Mann-Kendall statistic = 18
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-11



n = 16

Slope = -0.08419 units per year.

Mann-Kendall statistic = -72
critical = -58

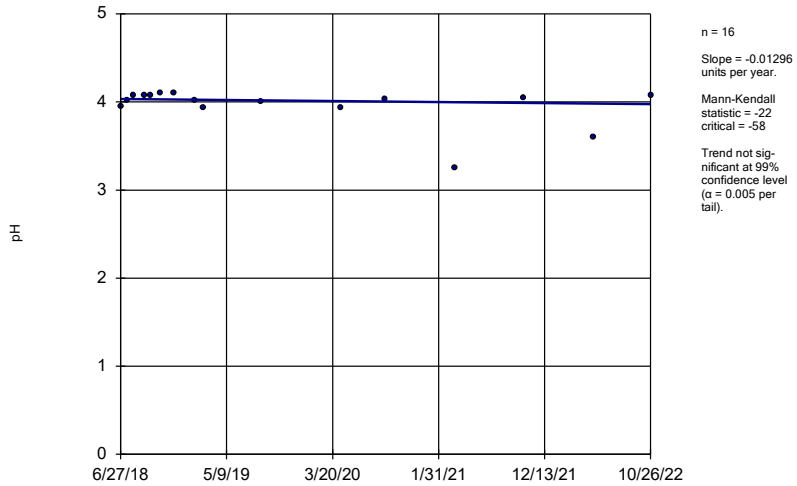
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 16

Slope = -0.01296 units per year.

Mann-Kendall statistic = -22
critical = -58

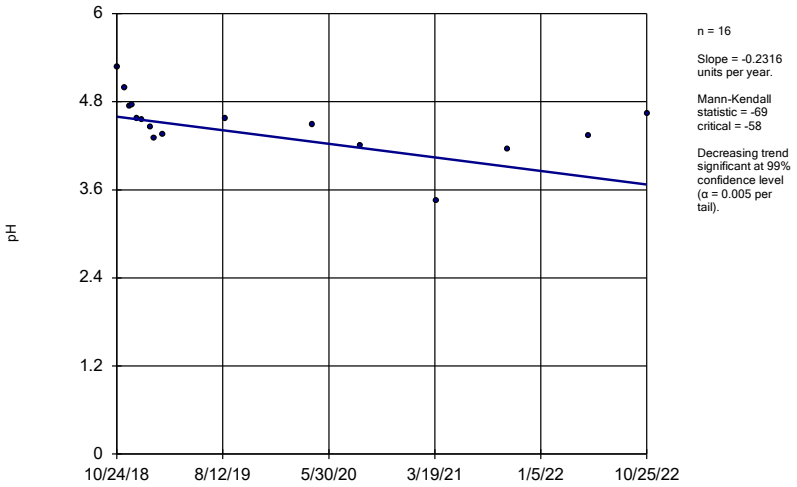
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 16

Slope = -0.2316 units per year.

Mann-Kendall statistic = -69
critical = -58

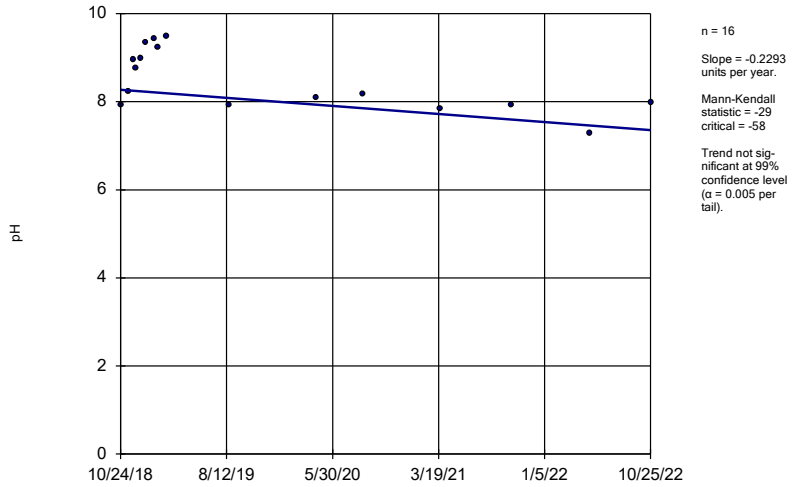
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 16

Slope = -0.2293 units per year.

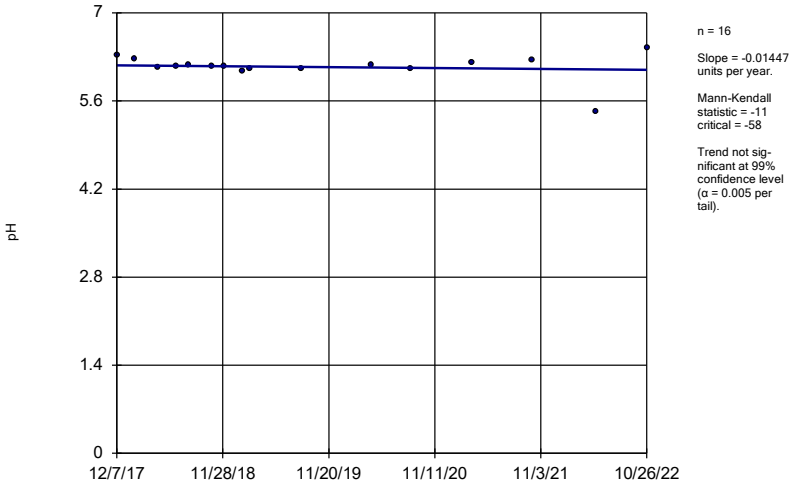
Mann-Kendall statistic = -29
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-5



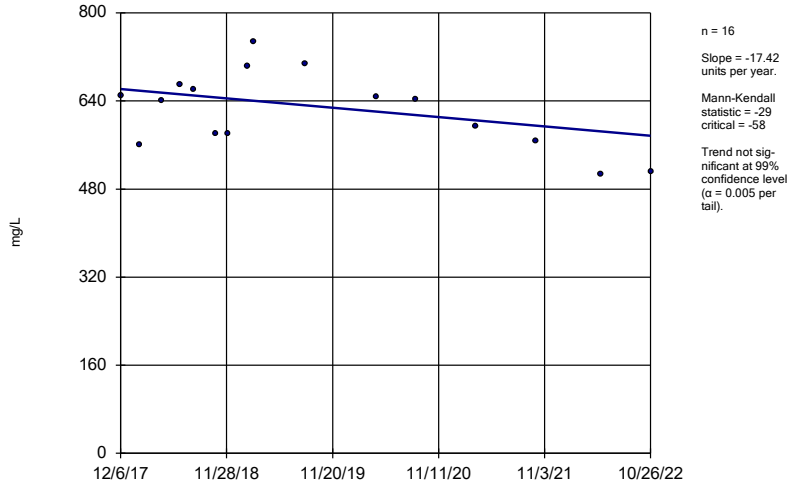
Constituent: pH Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



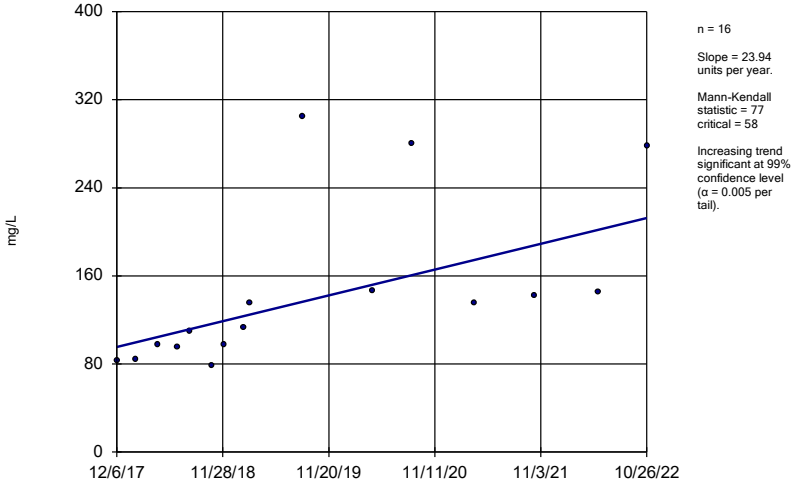
Constituent: Sulfate Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-11



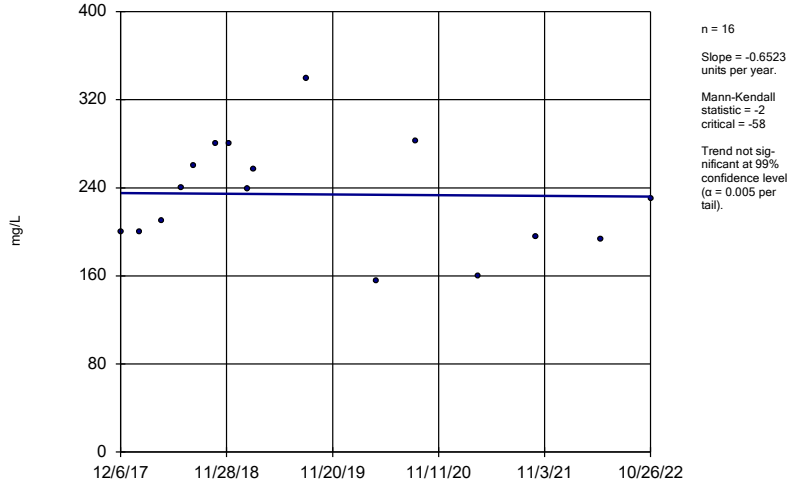
Constituent: Sulfate Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-12

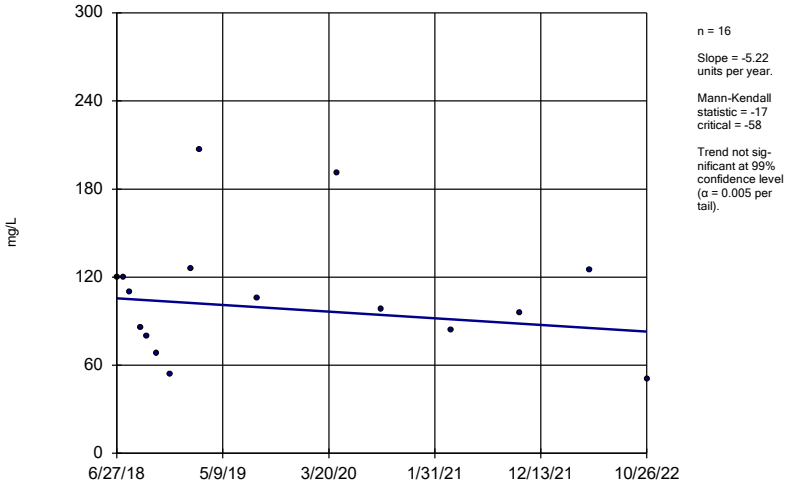


Constituent: Sulfate Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 16

Slope = -5.22 units per year.

Mann-Kendall statistic = -17 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

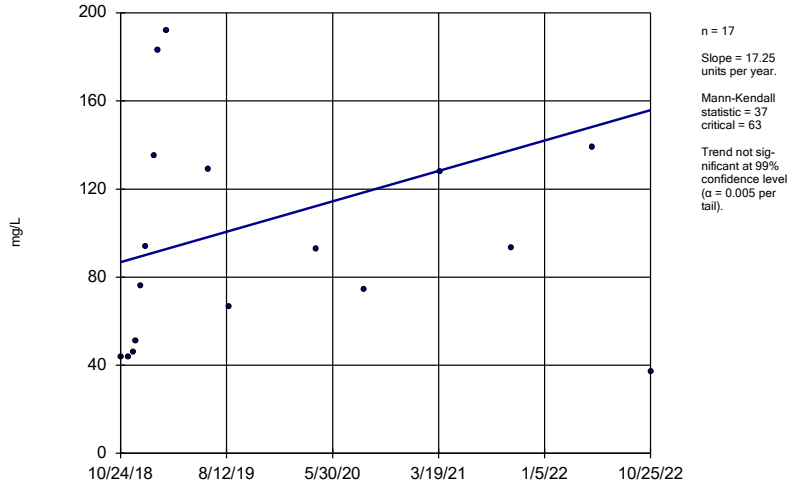
Constituent: Sulfate Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 17

Slope = 17.25 units per year.

Mann-Kendall statistic = 37 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

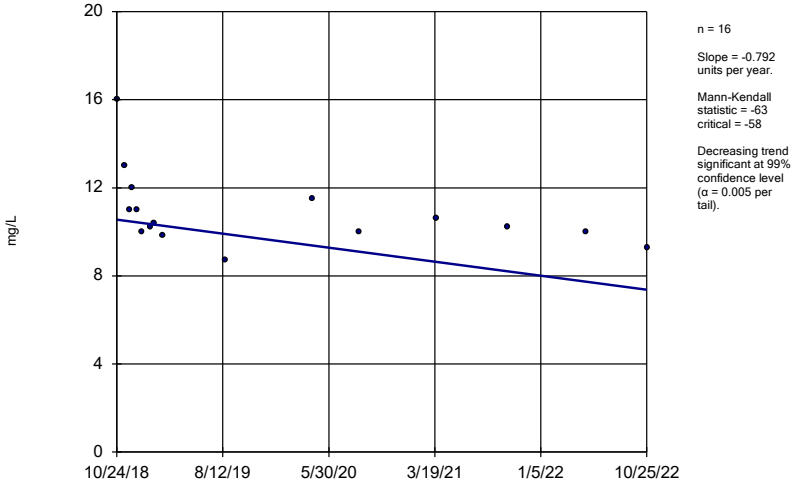
Constituent: Sulfate Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 16

Slope = -0.792 units per year.

Mann-Kendall statistic = -63 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

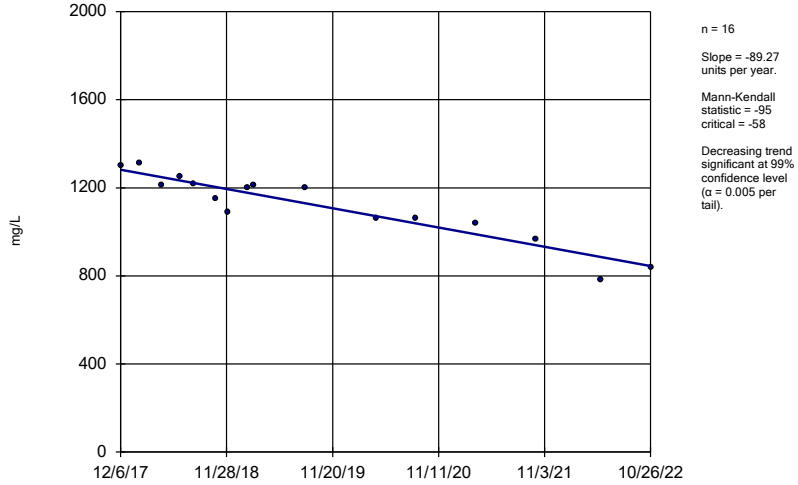
Constituent: Sulfate Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 16

Slope = -89.27 units per year.

Mann-Kendall statistic = -95 critical = -58

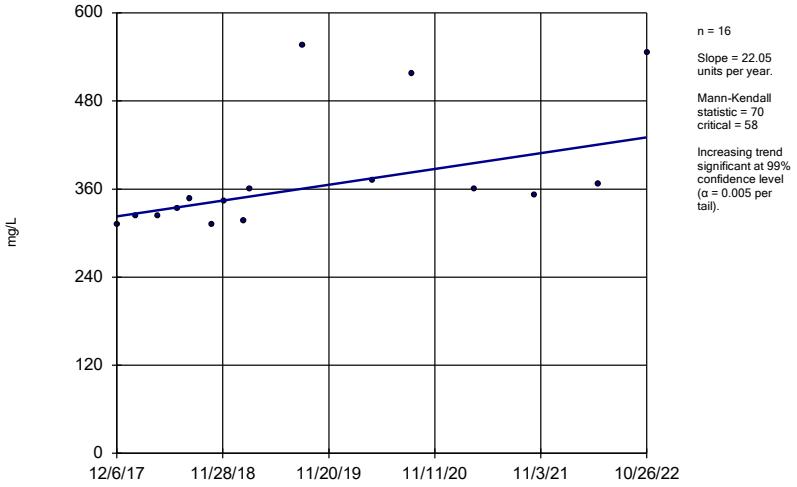
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-11



n = 16

Slope = 22.05 units per year.

Mann-Kendall statistic = 70
critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

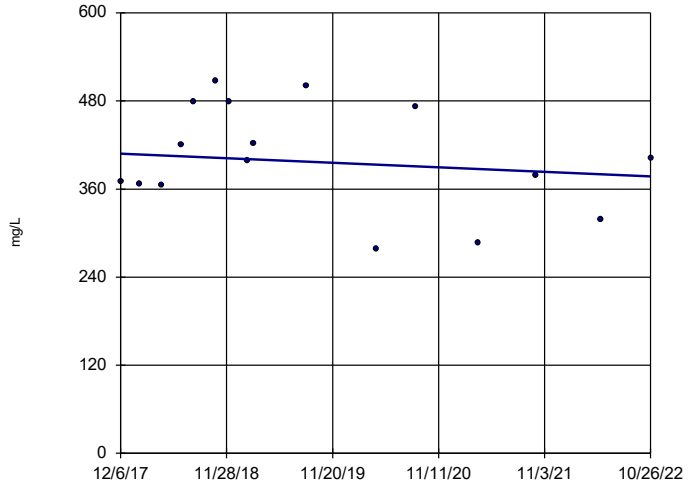
Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 16

Slope = -6.344 units per year.

Mann-Kendall statistic = -9
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

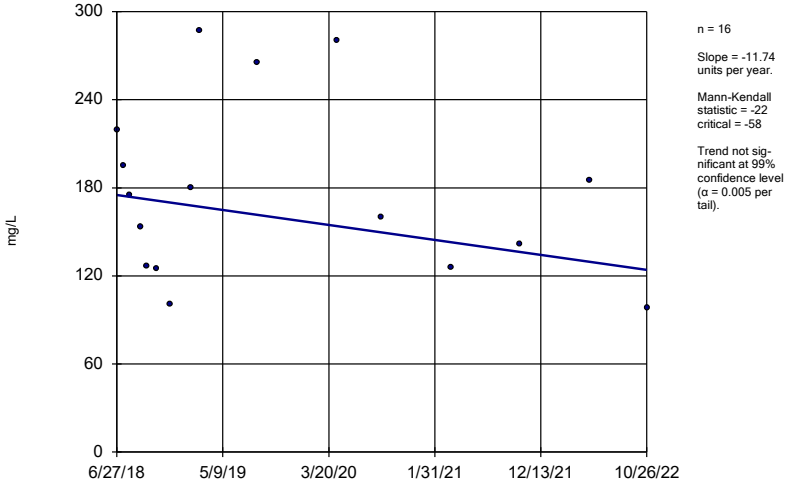
Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 16

Slope = -11.74 units per year.

Mann-Kendall statistic = -22
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

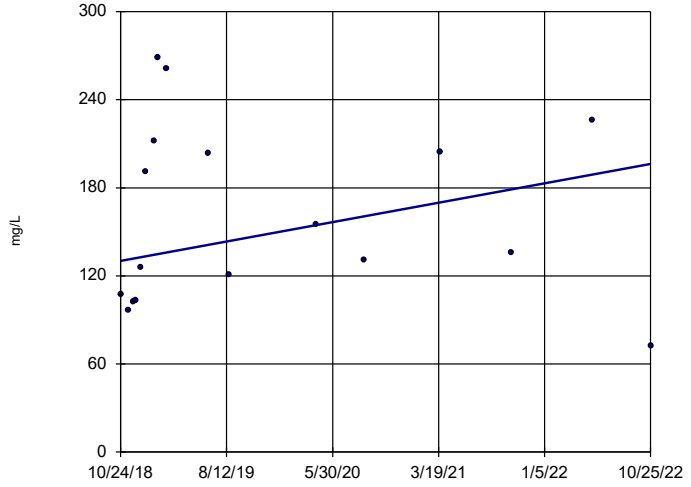
Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 17

Slope = 16.45 units per year.

Mann-Kendall statistic = 32
critical = 63

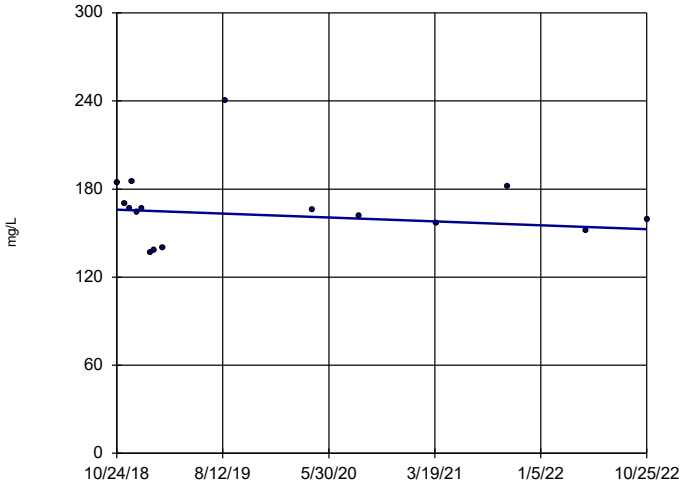
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 16

Slope = -3.317 units per year.

Mann-Kendall statistic = -31
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

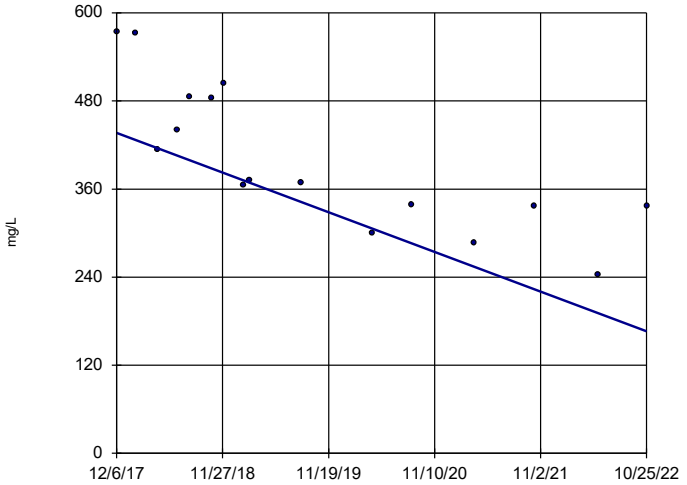
Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-2



n = 16

Slope = -55.25 units per year.

Mann-Kendall statistic = -85
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

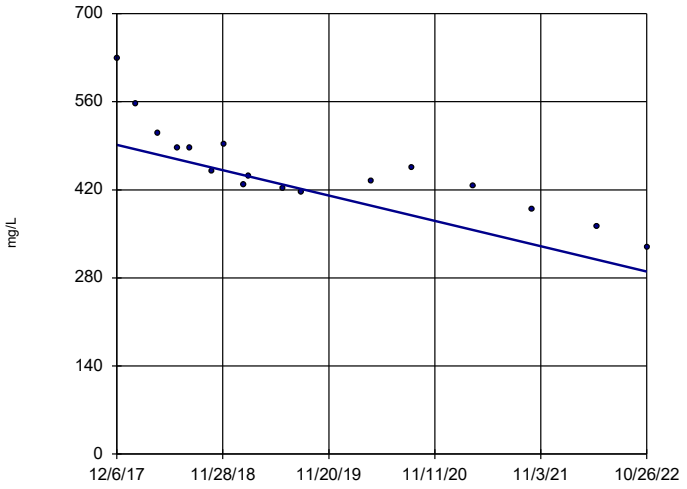
Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 17

Slope = -41.2 units per year.

Mann-Kendall statistic = -104
critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 12/27/2022 6:55 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE G.

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

FIGURE H.

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00101	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.056	0.056
Combined Radium-226/228	pCi/L	2.01	5
Fluoride	mg/L	0.23	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

FIGURE I.

Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/28/2022, 3:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7783**	**0.4812**	**0.01**	**Yes**	**8**	**0.6298**	**0.1401**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01458**	**0.01132**	**0.01**	**Yes**	**8**	**0.01295**	**0.001538**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/28/2022, 3:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-MW-2	0.00102	0.000538	0.006	No	8	0.0009597	0.0001704	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-5	0.00114	0.001015	0.006	No	8	0.001031	0.00004419	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-6	0.00181	0.001015	0.006	No	8	0.001114	0.0002811	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.004211	0.002396	0.01	No	8	0.003304	0.000856	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004336	0.002397	0.01	No	8	0.003366	0.0009146	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002873	0.002317	0.01	No	8	0.002595	0.0002621	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-12	0.0002	0.000102	0.01	No	8	0.0001877	0.00003465	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7783**	**0.4812**	**0.01**	**Yes**	**8**	**0.6298**	**0.1401**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.005	0.00016	0.01	No	8	0.00261	0.002555	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01458**	**0.01132**	**0.01**	**Yes**	**8**	**0.01295**	**0.001538**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.005	0.00008	0.01	No	8	0.002568	0.002601	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-MW-6	0.0002	0.000151	0.01	No	8	0.0001939	0.00001732	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.0002	0.00007	0.01	No	8	0.0001719	0.00005291	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003252	0.002868	0.01	No	8	0.00306	0.0001814	0	None	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.005	0.00055	0.01	No	8	0.002327	0.002222	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-1	0.0002	0.000164	0.01	No	8	0.0001955	0.00001273	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-2	0.005	0.0000826	0.01	No	6	0.001743	0.002523	33.33	None	No	0.0155	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.000203	0.0000808	0.01	No	8	0.0001877	0.0000432	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-PZ-6	0.0002	0.00015	0.01	No	8	0.0001937	0.00001768	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.03927	0.02788	2	No	8	0.03358	0.005372	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3596	0.2709	2	No	8	0.3153	0.04183	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.2376	0.1334	2	No	8	0.1855	0.04918	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-12	0.04621	0.03084	2	No	8	0.03853	0.007246	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.09189	0.05478	2	No	8	0.07334	0.0175	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.03861	0.03082	2	No	8	0.03471	0.003674	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-4	0.2233	0.1624	2	No	8	0.1929	0.02872	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2407	0.2186	2	No	8	0.2296	0.01042	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07733	0.06139	2	No	8	0.06936	0.007518	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08784	0.05781	2	No	8	0.07283	0.01417	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.281	0.1973	2	No	8	0.2391	0.0395	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1901	0.1392	2	No	8	0.1646	0.02401	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.08415	0.0508	2	No	8	0.06748	0.01573	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1474	0.04275	2	No	6	0.09508	0.03809	0	None	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.085	0.0474	2	No	8	0.05713	0.01203	0	None	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.03114	0.02849	2	No	8	0.02981	0.001251	0	None	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.001	0.0001	0.005	No	8	0.000569	0.0004622	50	None	No	0.004	NP (normality)
Cadmium (mg/L)	GSD-AP-MW-12	0.0006435	0.0003027	0.005	No	8	0.0004731	0.0001608	0	None	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.000203	0.0000688	0.005	No	8	0.0001862	0.00004745	87.5	None	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.0004302	0.0001866	0.005	No	8	0.0005669	0.0003706	37.5	Kaplan-Meier	sqrt(x)	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-7	0.000203	0.000097	0.005	No	8	0.0001898	0.00003748	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.000203	0.00007	0.005	No	8	0.0001714	0.00005862	75	Kaplan-Meier	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.000203	0.00008	0.005	No	8	0.0001876	0.00004349	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.01	0.00023	0.1	No	8	0.005147	0.005188	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-10	0.01	0.000207	0.1	No	8	0.005142	0.005193	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-11	0.01	0.00027	0.1	No	8	0.005185	0.005148	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-12	0.01	0.000276	0.1	No	8	0.005182	0.005151	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-2	0.01	0.00022	0.1	No	8	0.005189	0.005144	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-3	0.01	0.00023	0.1	No	8	0.004242	0.004847	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-MW-4	0.001015	0.00023	0.1	No	8	0.0008304	0.0003428	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.001015	0.00028	0.1	No	8	0.0007853	0.0003241	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-6	0.00102	0.000222	0.1	No	8	0.0007387	0.0003895	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-7	0.001015	0.00025	0.1	No	8	0.0007476	0.0003721	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-8	0.001015	0.00022	0.1	No	8	0.0008263	0.0003502	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.001015	0.00021	0.1	No	8	0.0007521	0.0003672	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-1	0.001015	0.00027	0.1	No	8	0.0007671	0.0003452	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-2	0.0008137	0.0003423	0.1	No	6	0.0007965	0.0002738	50	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.01	0.000251	0.1	No	8	0.005187	0.005146	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GSD-AP-PZ-6	0.01	0.000224	0.1	No	8	0.00518	0.005154	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-1	0.02357	0.01438	0.056	No	8	0.01898	0.004337	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.005	0.00037	0.056	No	8	0.002885	0.002268	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-11	0.006803	-0.000708	0.056	No	8	0.004206	0.003442	25	Kaplan-Meier	No	0.01	Param.

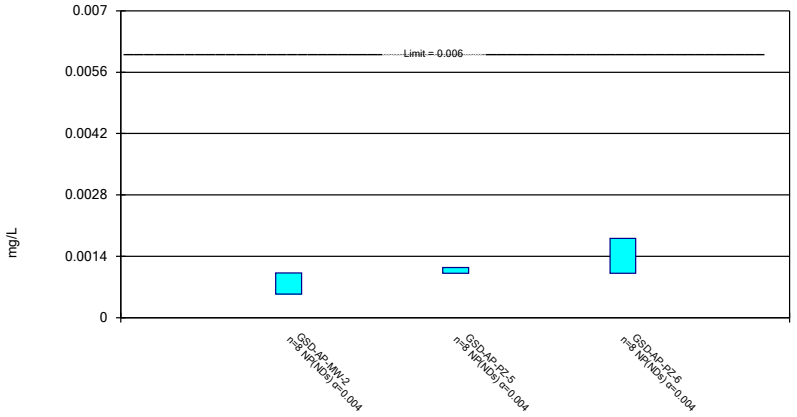
Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 12/28/2022, 3:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-MW-12	0.006068	0.00383	0.056	No	8	0.004949	0.001055	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-2	0.03678	0.02603	0.056	No	8	0.03124	0.00659	0	None	x^3	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02439	0.01416	0.056	No	8	0.01928	0.004823	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.02907	0.024	0.056	No	8	0.02654	0.002391	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.002362	0.001017	0.056	No	8	0.001689	0.0006344	12.5	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-6	0.005	0.00102	0.056	No	8	0.00305	0.002085	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-7	0.005	0.00016	0.056	No	8	0.00272	0.002452	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-8	0.004091	0.002491	0.056	No	8	0.003291	0.000755	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.005	0.000812	0.056	No	8	0.002985	0.002156	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.00014	0.056	No	8	0.0002225	0.00009036	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.007045	0.001389	0.056	No	6	0.004217	0.002059	0	None	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00225	0.00008	0.056	No	8	0.000458	0.0007291	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-PZ-6	0.005	0.000078	0.056	No	8	0.002556	0.002613	50	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	0.9381	0.4102	5	No	8	0.6741	0.249	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	2.772	0.00515	5	No	8	1.196	2.167	0	None	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.247	0.6148	5	No	8	0.931	0.2983	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.189	0.08541	5	No	8	0.637	0.5204	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.546	0.2948	5	No	8	0.8934	0.6732	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.369	0.1725	5	No	8	0.7925	1.014	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.258	0.1069	5	No	8	0.6822	0.5428	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.244	0.3515	5	No	8	0.7976	0.4209	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	1.36	-0.086	5	No	8	0.3806	0.4479	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	0.9371	0.1026	5	No	8	0.5199	0.3937	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.6291	0.3374	5	No	8	0.4833	0.1376	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.168	0.1459	5	No	8	0.6569	0.4821	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	2.07	-0.129	5	No	8	0.5806	0.6697	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	1.048	-0.01521	5	No	6	0.5163	0.3869	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.9116	0.1809	5	No	8	0.5463	0.3447	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.174	0.004111	5	No	8	0.4634	0.4946	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.125	0.0601	4	No	8	0.1169	0.02295	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.201	0.0813	4	No	8	0.108	0.03884	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-11	0.1109	0.07014	4	No	8	0.1058	0.02451	37.5	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-2	0.2816	0.2207	4	No	8	0.2514	0.03202	0	None	x^3	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.125	0.0592	4	No	8	0.1028	0.03088	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2652	0.1913	4	No	8	0.2283	0.03485	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.122	0.0567	4	No	8	0.07296	0.02167	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-6	0.125	0.0816	4	No	8	0.1196	0.01534	87.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-7	0.1041	0.06229	4	No	8	0.08899	0.02101	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-8	0.108	0.06561	4	No	8	0.08679	0.01998	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.1452	0.1084	4	No	8	0.1268	0.01737	0	None	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1078	0.07653	4	No	8	0.1045	0.02107	37.5	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GSD-AP-MW-2	0.000203	0.00009	0.015	No	8	0.0001889	0.00003995	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.000203	0.00012	0.015	No	6	0.0001833	0.00003238	50	None	No	0.0155	NP (normality)
Lead (mg/L)	GSD-AP-PZ-5	0.000203	0.00013	0.015	No	8	0.0001939	0.00002581	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.000203	0.0000835	0.015	No	8	0.0001673	0.00005053	62.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.05189	0.02466	0.04	No	8	0.03828	0.01284	0	None	No	0.01	Param.
Mercury (mg/L)	GSD-AP-PZ-6	0.00286	0.0005	0.002	No	8	0.000795	0.0008344	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-1	0.0002	0.000198	0.1	No	8	0.0001997	7.1e-7	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.01	0.000204	0.1	No	8	0.005195	0.005137	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-11	0.000203	0.00012	0.1	No	8	0.0001761	0.0000381	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.027	0.0164	0.1	No	8	0.02135	0.003692	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-4	0.01	0.00106	0.1	No	8	0.005571	0.004735	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-5	0.000371	0.00011	0.1	No	8	0.0002058	0.00007523	62.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.0002	0.0001	0.1	No	8	0.0001836	0.00003549	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.01	0.00032	0.1	No	8	0.005187	0.005145	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-MW-9	0.01	0.00018	0.1	No	8	0.005121	0.005216	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.000203	0.00007	0.1	No	8	0.0001734	0.00005544	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.00028	0.0002	0.1	No	6	0.0002167	0.00003204	66.67	None	No	0.0155	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.000203	0.000112	0.002	No	8	0.0001825	0.00003826	75	None	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.0003855	0.000283	0.002	No	8	0.0003343	0.00004839	0	None	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.001	0.00011	0.002	No	8	0.0005601	0.0004703	50	None	No	0.004	NP (normality)

Non-Parametric Confidence Interval

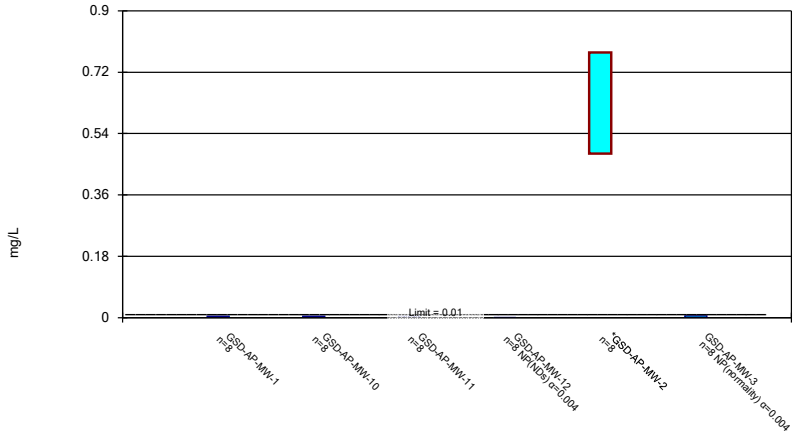
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

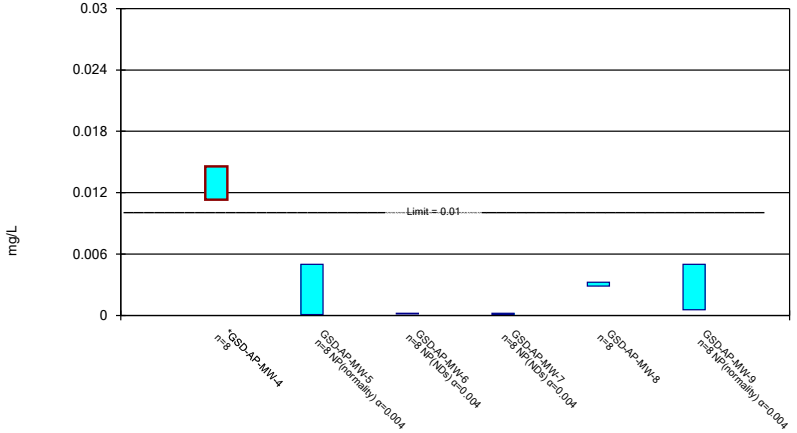
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on



Constituent: Arsenic Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on



Constituent: Arsenic Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Non-Parametric Confidence Interval

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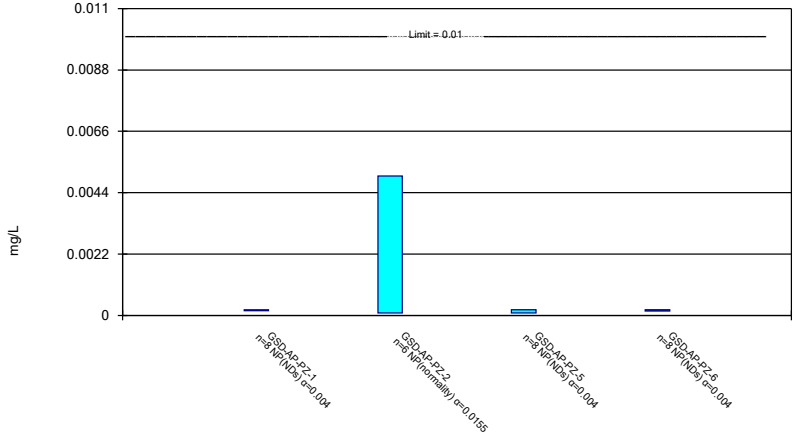
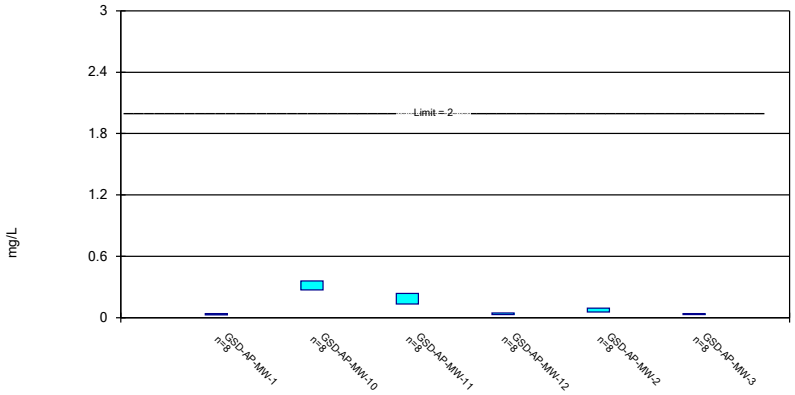


Constituent: Arsenic Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

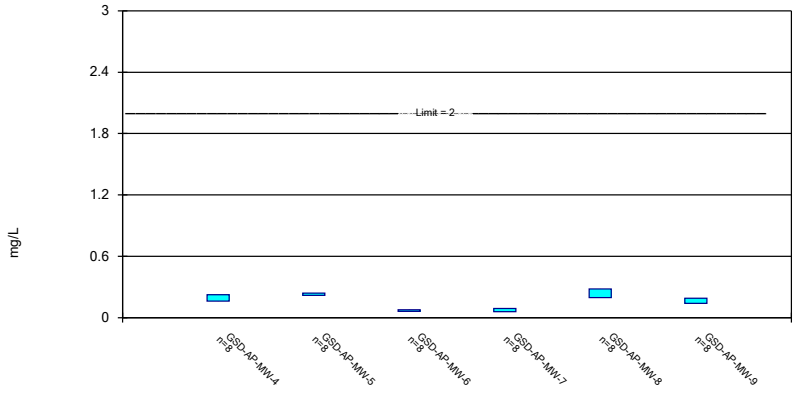


Constituent: Barium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

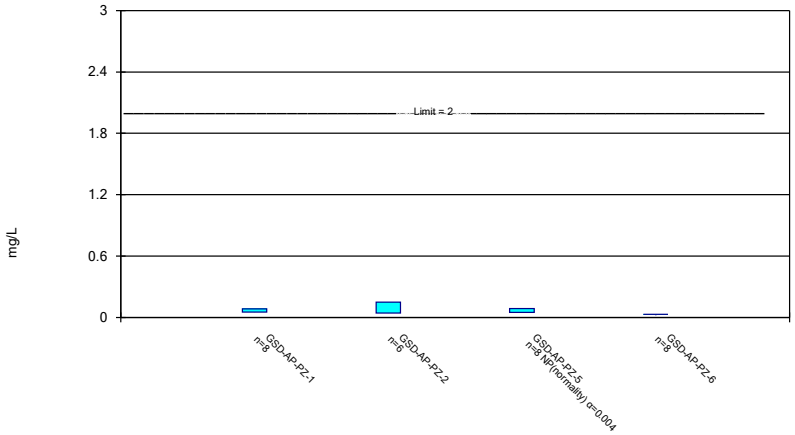


Constituent: Barium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

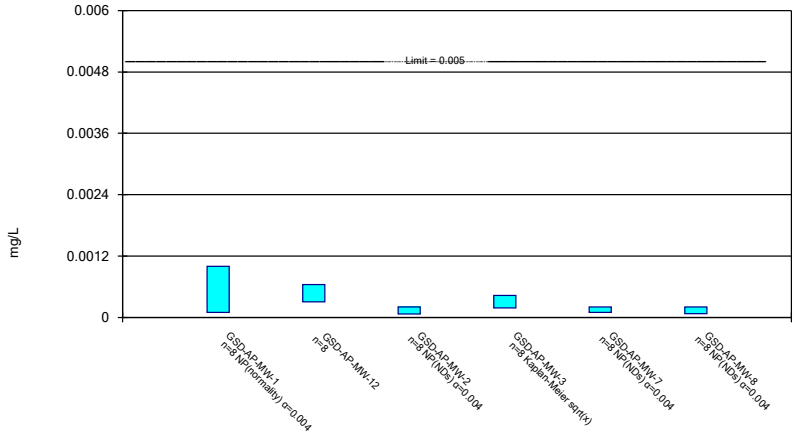


Constituent: Barium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

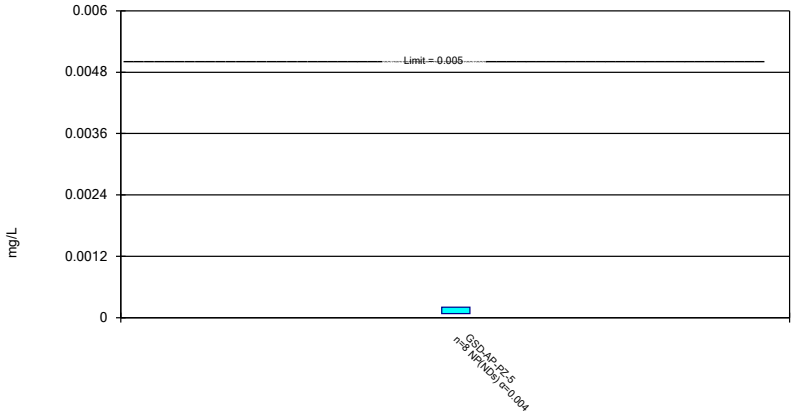
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



Constituent: Cadmium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

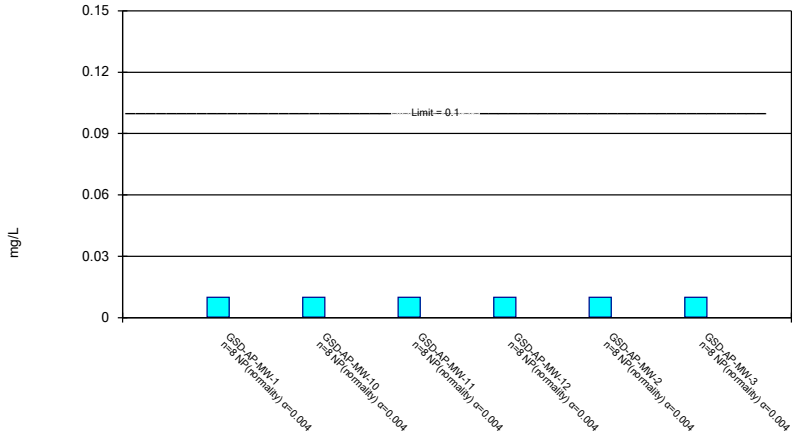


Constituent: Cadmium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

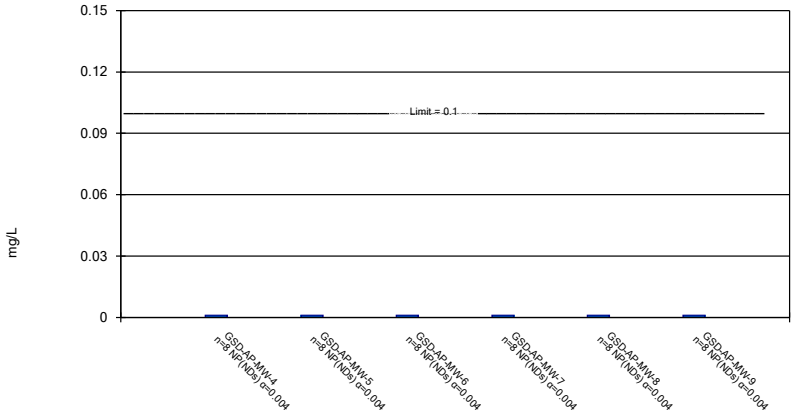


Constituent: Chromium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

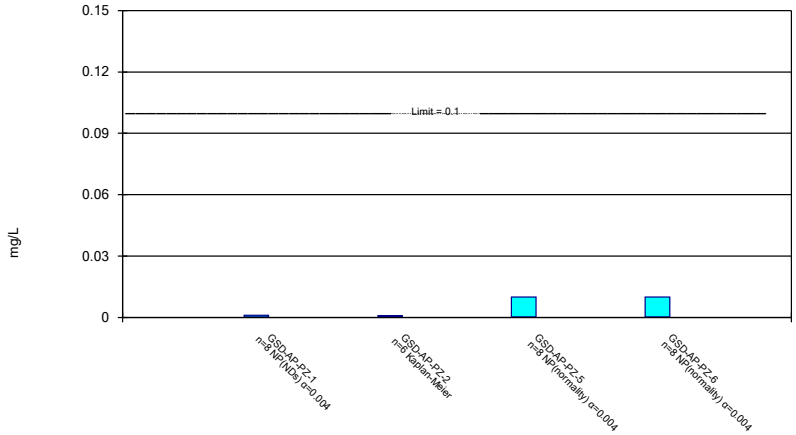


Constituent: Chromium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

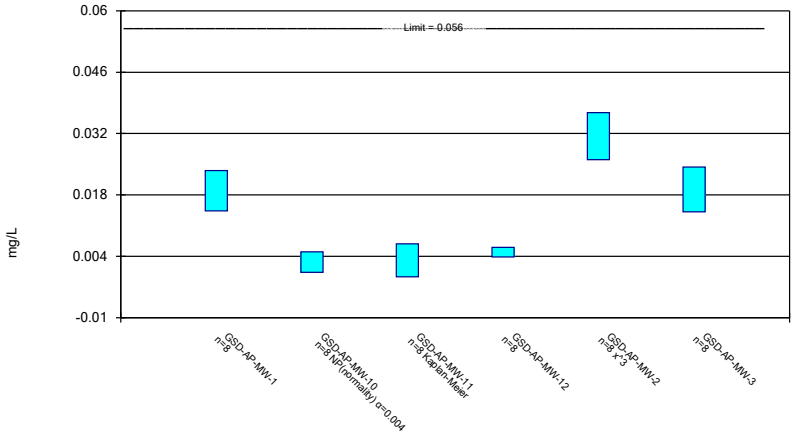
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



Constituent: Chromium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

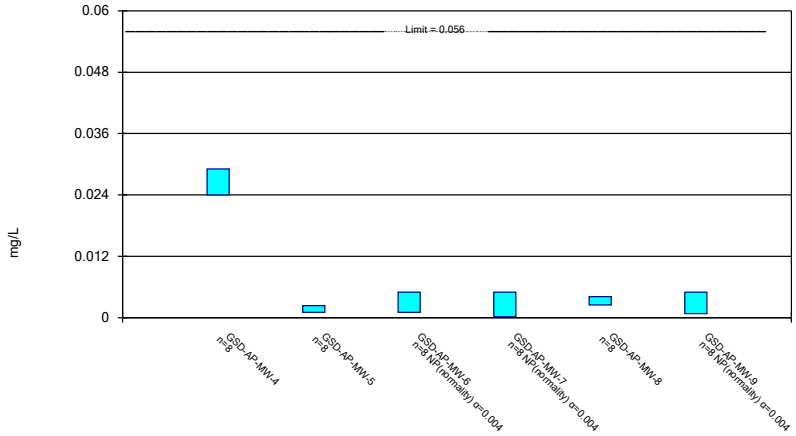


Constituent: Cobalt Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

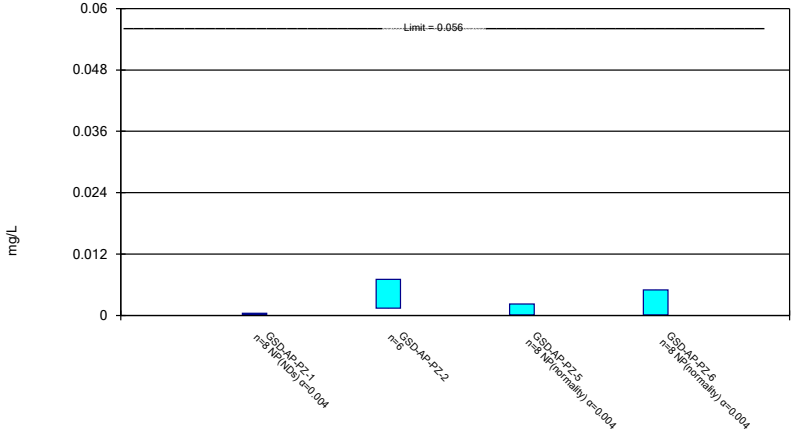


Constituent: Cobalt Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

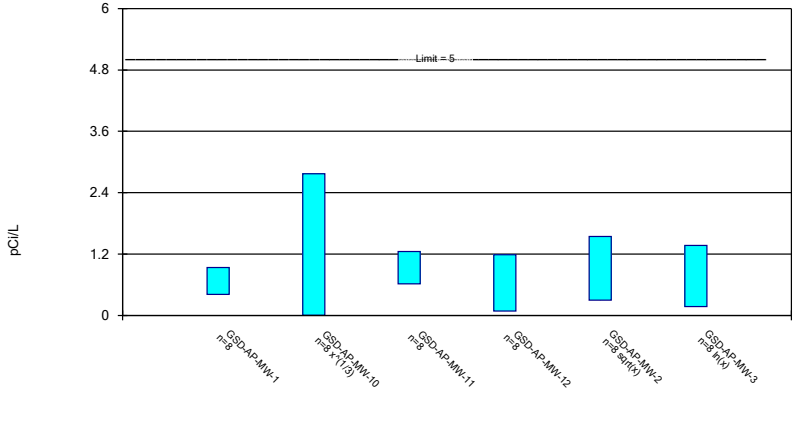


Constituent: Cobalt Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric Confidence Interval

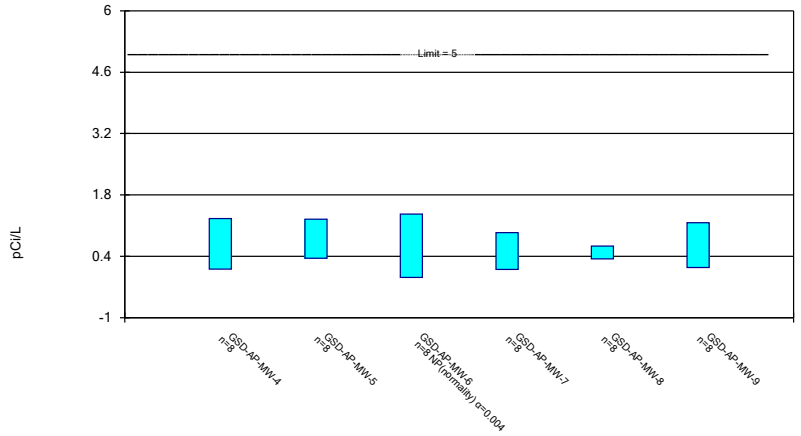
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



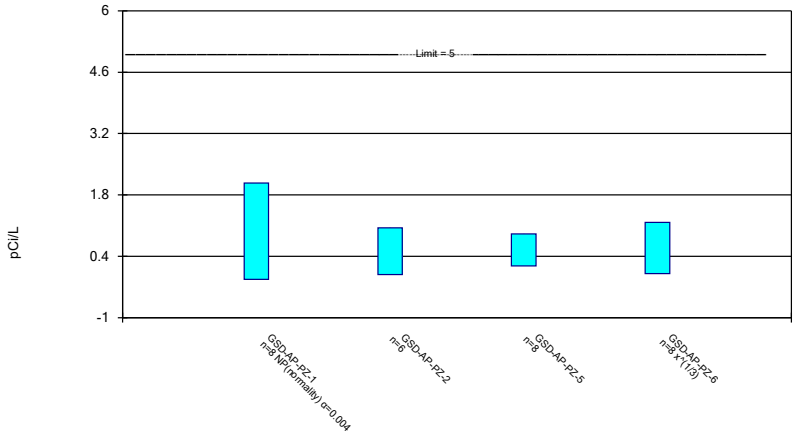
Constituent: Combined Radium 226 + 228 Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



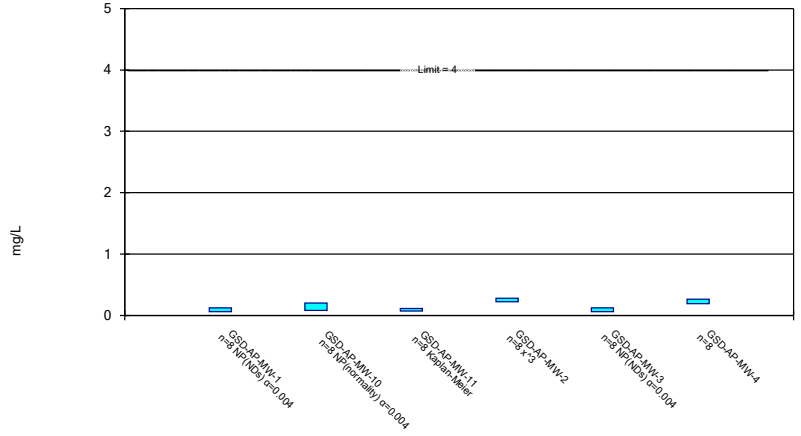
Constituent: Combined Radium 226 + 228 Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



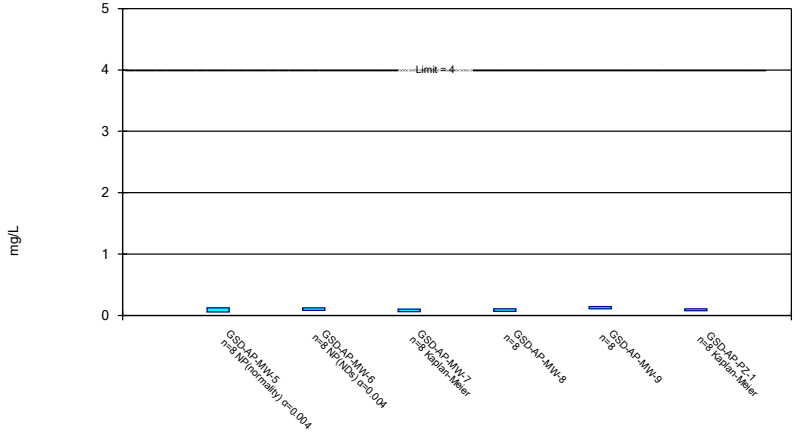
Constituent: Fluoride Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based

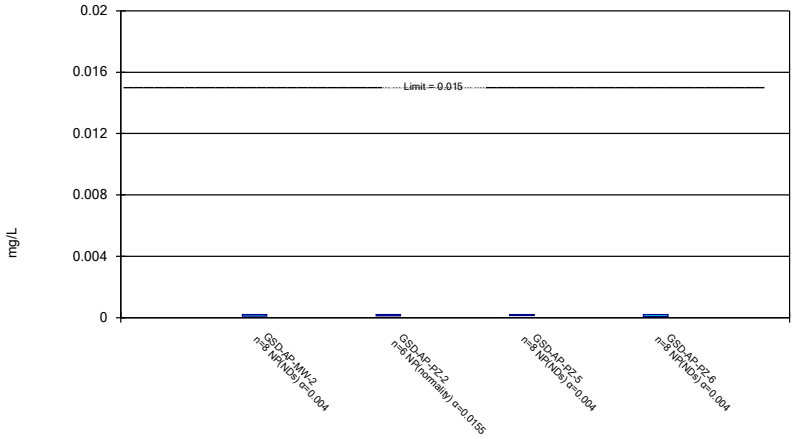


Constituent: Fluoride Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

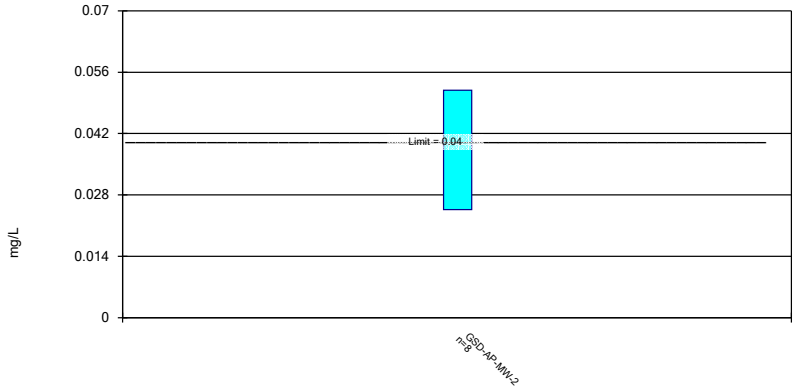


Constituent: Lead Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

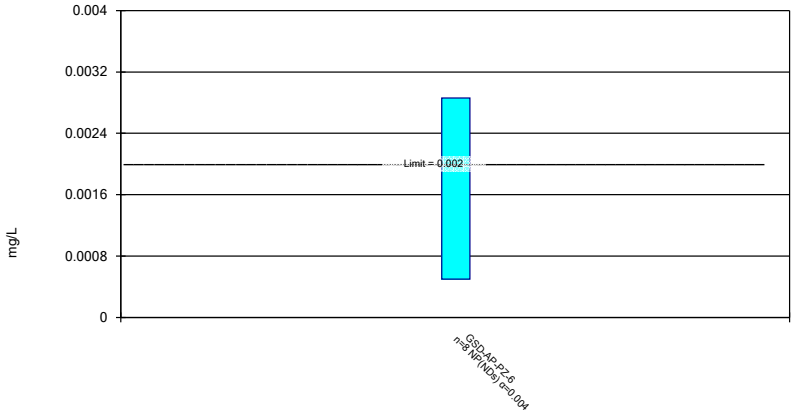


Constituent: Lithium Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

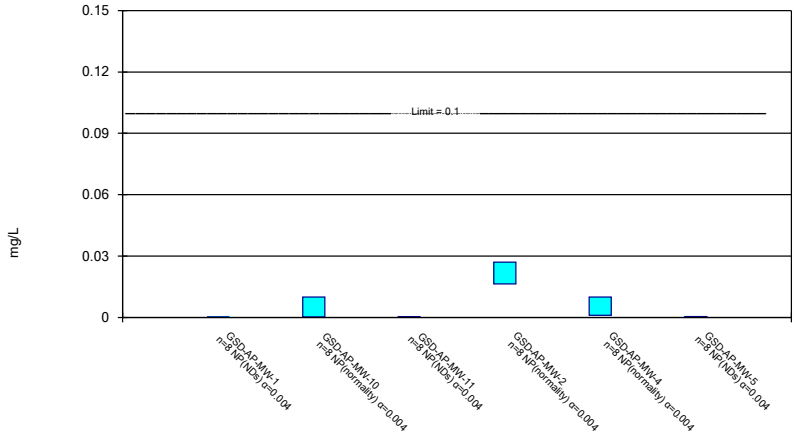


Constituent: Mercury Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

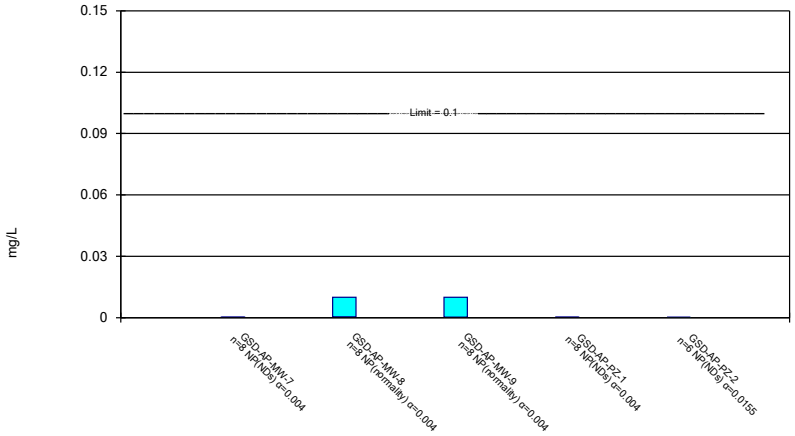
Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

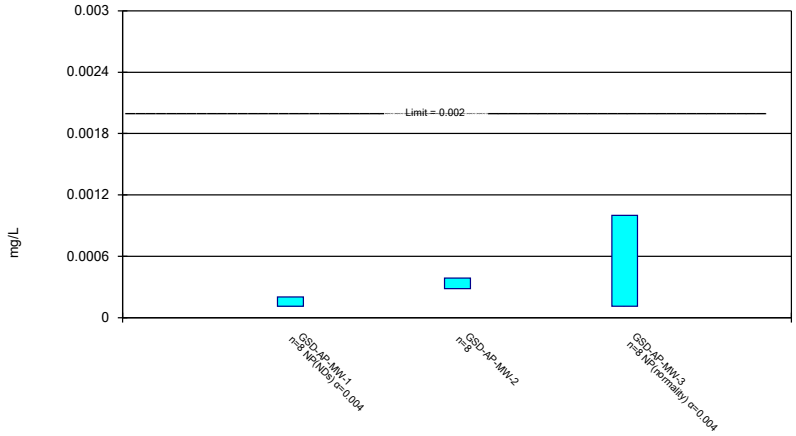


Constituent: Molybdenum Analysis Run 12/28/2022 3:17 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.36 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based



Constituent: Thallium Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	<0.00102		
2/7/2019		0.00114 (J)	0.00181 (J)
8/20/2019	<0.00102		
8/21/2019		<0.001015	<0.001015
4/15/2020	<0.00102	<0.001015	<0.001015
8/24/2020		<0.001015	<0.001015
8/25/2020	<0.00102		
3/16/2021		<0.001015	<0.001015
3/24/2021	<0.00102		
10/11/2021	<0.00102		
10/12/2021		<0.001015	<0.001015
5/10/2022		<0.001015	<0.001015
5/16/2022	<0.00102		
10/25/2022	0.000538 (J)		
10/26/2022		<0.001015	<0.001015
Mean	0.0009597	0.001031	0.001114
Std. Dev.	0.0001704	4.419E-05	0.0002811
Upper Lim.	0.00102	0.00114	0.00181
Lower Lim.	0.000538	0.001015	0.001015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3
2/5/2019	0.00365 (J)				0.74	
2/6/2019		0.00333 (J)	0.00272 (J)	<0.0002		
6/18/2019						<0.005
8/20/2019					0.825	<0.005
8/21/2019	0.00444 (J)					
8/22/2019		0.00394 (J)	0.00229 (J)	<0.0002		
4/13/2020						<0.005
4/14/2020			0.00286 (J)	<0.0002		
4/15/2020	0.00309 (J)	0.00236 (J)			0.709	
8/25/2020	0.00435 (J)				0.727	
8/26/2020		0.00422 (J)	0.00246 (J)	<0.0002		<0.005
3/16/2021	0.0029					
3/22/2021						0.0002 (J)
3/23/2021		0.00163	0.00275	<0.0002		
3/24/2021					0.489	
10/5/2021	0.00356			<0.0002		0.00021
10/11/2021		0.0037			0.424	
10/12/2021			0.00272			
5/10/2022	0.00221	0.00361		<0.0002		0.00016 (J)
5/16/2022					0.569	
5/17/2022			0.00281			
10/25/2022					0.555	
10/26/2022	0.00223	0.00414	0.00215	0.000102 (J)		0.000311
Mean	0.003304	0.003366	0.002595	0.0001877	0.6298	0.00261
Std. Dev.	0.000856	0.0009146	0.0002621	3.465E-05	0.1401	0.002555
Upper Lim.	0.004211	0.004336	0.002873	0.0002	0.7783	0.005
Lower Lim.	0.002396	0.002397	0.002317	0.000102	0.4812	0.00016

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
2/5/2019	0.0107	<0.005	<0.0002			
2/6/2019				<0.0002	0.00325 (J)	<0.005
8/20/2019	0.0141	<0.005	<0.0002			
8/21/2019				<0.0002	0.00302 (J)	<0.005
4/13/2020		<0.005	<0.0002			
4/14/2020					0.00295 (J)	0.00118 (J)
4/15/2020	0.0121			<0.0002		
8/24/2020		<0.005				
8/26/2020	0.0133		<0.0002	<0.0002	0.00304 (J)	<0.005
3/16/2021		8.17E-05 (J)				
3/17/2021			<0.0002			
3/23/2021				<0.0002	0.00282	0.00063
3/24/2021	0.011					
10/5/2021	0.0147	0.00013 (J)	<0.0002	7E-05 (J)		
10/12/2021					0.00287	0.00064
5/9/2022		8E-05 (J)				
5/10/2022			<0.0002	<0.0002		
5/11/2022					0.00323	0.00055
5/16/2022	0.0132					
10/26/2022	0.0145	0.00025	0.000151 (J)	0.000105 (J)	0.0033	0.000618
Mean	0.01295	0.002568	0.0001939	0.0001719	0.00306	0.002327
Std. Dev.	0.001538	0.002601	1.732E-05	5.291E-05	0.0001814	0.002222
Upper Lim.	0.01458	0.005	0.0002	0.0002	0.003252	0.005
Lower Lim.	0.01132	8E-05	0.000151	7E-05	0.002868	0.00055

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	<0.0002			
2/7/2019			<0.000203	<0.0002
8/20/2019	<0.0002			
8/21/2019			<0.000203	<0.0002
4/13/2020	<0.0002	<0.005		
4/15/2020			<0.000203	<0.0002
8/24/2020	<0.0002	<0.005	<0.000203	<0.0002
3/16/2021			8.08E-05 (J)	<0.0002
3/17/2021		8.26E-05 (J)		
3/24/2021	<0.0002			
10/5/2021	<0.0002	9E-05 (J)		
10/12/2021			<0.000203	<0.0002
5/9/2022	<0.0002	0.0001 (J)		
5/10/2022			<0.000203	<0.0002
10/26/2022	0.000164 (J)	0.000188 (J)	<0.000203	0.00015 (J)
Mean	0.0001955	0.001743	0.0001877	0.0001937
Std. Dev.	1.273E-05	0.002523	4.32E-05	1.768E-05
Upper Lim.	0.0002	0.005	0.000203	0.0002
Lower Lim.	0.000164	8.26E-05	8.08E-05	0.00015

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3
2/5/2019	0.0439				0.0418	
2/6/2019		0.265	0.286	0.036		
6/18/2019						0.0369
8/20/2019					0.0685	0.0405
8/21/2019	0.037					
8/22/2019		0.302	0.214	0.0455		
4/13/2020						0.0349
4/14/2020			0.168	0.0279		
4/15/2020	0.0329	0.35			0.0607	
8/25/2020	0.0358				0.0812	
8/26/2020		0.322	0.165	0.0503		0.0363
3/16/2021	0.0331					
3/22/2021						0.0354
3/23/2021		0.395	0.169	0.0315		
3/24/2021					0.0676	
10/5/2021	0.0304			0.0417		0.0344
10/11/2021		0.292			0.0807	
10/12/2021			0.17			
5/10/2022	0.0275	0.318		0.0377		0.0287
5/16/2022					0.0974	
5/17/2022			0.195			
10/25/2022					0.0888	
10/26/2022	0.028	0.278	0.117	0.0376		0.0306
Mean	0.03358	0.3153	0.1855	0.03853	0.07334	0.03471
Std. Dev.	0.005372	0.04183	0.04918	0.007246	0.0175	0.003674
Upper Lim.	0.03927	0.3596	0.2376	0.04621	0.09189	0.03861
Lower Lim.	0.02788	0.2709	0.1334	0.03084	0.05478	0.03082

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
2/5/2019	0.173	0.215	0.0551			
2/6/2019				0.0685	0.226	0.128
8/20/2019	0.188	0.238	0.0731			
8/21/2019				0.0946	0.194	0.183
4/13/2020		0.241	0.0635			
4/14/2020					0.262	0.186
4/15/2020	0.159			0.0653		
8/24/2020		0.238				
8/26/2020	0.181		0.0771	0.0845	0.235	0.202
3/16/2021		0.217				
3/17/2021			0.0656			
3/23/2021				0.0602	0.249	0.157
3/24/2021	0.171					
10/5/2021	0.202	0.221	0.0741	0.0716		
10/12/2021					0.203	0.147
5/9/2022		0.236				
5/10/2022			0.0762	0.0527		
5/11/2022					0.32	0.16
5/16/2022	0.23					
10/26/2022	0.239	0.231	0.0702	0.0852	0.224	0.154
Mean	0.1929	0.2296	0.06936	0.07283	0.2391	0.1646
Std. Dev.	0.02872	0.01042	0.007518	0.01417	0.0395	0.02401
Upper Lim.	0.2233	0.2407	0.07733	0.08784	0.281	0.1901
Lower Lim.	0.1624	0.2186	0.06139	0.05781	0.1973	0.1392

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	0.0578			
2/7/2019			0.0602	0.028
8/20/2019	0.097			
8/21/2019			0.085	0.0312
4/13/2020	0.0529	0.0832		
4/15/2020			0.0535	0.0296
8/24/2020	0.0733	0.132	0.0565	0.031
3/16/2021			0.0553	0.0293
3/17/2021		0.045		
3/24/2021	0.0525			
10/5/2021	0.0811	0.118		
10/12/2021			0.0494	0.0303
5/9/2022	0.057	0.0593		
5/10/2022			0.0497	0.0309
10/26/2022	0.0682	0.133	0.0474	0.0282
Mean	0.06748	0.09508	0.05713	0.02981
Std. Dev.	0.01573	0.03809	0.01203	0.001251
Upper Lim.	0.08415	0.1474	0.085	0.03114
Lower Lim.	0.0508	0.04275	0.0474	0.02849

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-7	GSD-AP-MW-8
2/5/2019	<0.001		<0.000203			
2/6/2019		0.000583 (J)			<0.000203	<0.000203
6/18/2019				<0.001		
8/20/2019			<0.000203	<0.001		
8/21/2019	<0.001				<0.000203	<0.000203
8/22/2019		0.000755 (J)				
4/13/2020				0.000438 (J)		
4/14/2020		0.000425 (J)				<0.000203
4/15/2020	<0.001		<0.000203		<0.000203	
8/25/2020	<0.001		<0.000203			
8/26/2020		0.000618 (J)		<0.001	<0.000203	<0.000203
3/16/2021	0.000102 (J)					
3/22/2021				0.00039		
3/23/2021		0.000405			9.7E-05 (J)	8.32E-05 (J)
3/24/2021			6.88E-05 (J)			
10/5/2021	0.0001 (J)	0.00037		0.00021	<0.000203	
10/11/2021			<0.000203			
10/12/2021						<0.000203
5/10/2022	0.00022	0.00033		0.00035	<0.000203	
5/11/2022						7E-05 (J)
5/16/2022			<0.000203			
10/25/2022			<0.000203			
10/26/2022	0.00013 (J)	0.000299		0.000147 (J)	<0.000203	<0.000203
Mean	0.000569	0.0004731	0.0001862	0.0005669	0.0001898	0.0001714
Std. Dev.	0.0004622	0.0001608	4.745E-05	0.0003706	3.748E-05	5.862E-05
Upper Lim.	0.001	0.0006435	0.000203	0.0004302	0.000203	0.000203
Lower Lim.	0.0001	0.0003027	6.88E-05	0.0001866	9.7E-05	7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5
2/7/2019	<0.000203
8/21/2019	<0.000203
4/15/2020	<0.000203
8/24/2020	<0.000203
3/16/2021	<0.000203
10/12/2021	8E-05 (J)
5/10/2022	<0.000203
10/26/2022	<0.000203
Mean	0.0001876
Std. Dev.	4.349E-05
Upper Lim.	0.000203
Lower Lim.	8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3
2/5/2019	<0.01				<0.01	
2/6/2019		<0.01	<0.01	<0.01		
6/18/2019						0.00285 (J)
8/20/2019					<0.01	<0.01
8/21/2019	<0.01					
8/22/2019		<0.01	<0.01	<0.01		
4/13/2020						<0.01
4/14/2020			<0.01	<0.01		
4/15/2020	<0.01	<0.01			<0.01	
8/25/2020	<0.01				<0.01	
8/26/2020		<0.01	<0.01	<0.01		<0.01
3/16/2021	0.000376 (J)					
3/22/2021						0.000293 (J)
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)		
3/24/2021					0.00047 (J)	
10/5/2021	0.00023 (J)			0.00034 (J)		0.00023 (J)
10/11/2021		0.00028 (J)			0.00048 (J)	
10/12/2021			0.00027 (J)			
5/10/2022	0.00025 (J)	0.0003 (J)		0.00041 (J)		0.00029 (J)
5/16/2022					0.00034 (J)	
5/17/2022			0.00038 (J)			
10/25/2022					0.00022 (J)	
10/26/2022	0.000321 (J)	0.000207 (J)	0.000318 (J)	0.000276 (J)		0.000276 (J)
Mean	0.005147	0.005142	0.005185	0.005182	0.005189	0.004242
Std. Dev.	0.005188	0.005193	0.005148	0.005151	0.005144	0.004847
Upper Lim.	0.01	0.01	0.01	0.01	0.01	0.01
Lower Lim.	0.00023	0.000207	0.00027	0.000276	0.00022	0.00023

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
2/5/2019	<0.001015	<0.001015	<0.00102			
2/6/2019				<0.001015	<0.001015	<0.001015
8/20/2019	<0.001015	<0.001015	<0.00102			
8/21/2019				<0.001015	<0.001015	<0.001015
4/13/2020		<0.001015	<0.00102			
4/14/2020					<0.001015	<0.001015
4/15/2020	<0.001015			<0.001015		
8/24/2020		<0.001015				
8/26/2020	<0.001015		<0.00102	<0.001015	<0.001015	<0.001015
3/16/2021		0.000397 (J)				
3/17/2021			0.000338 (J)			
3/23/2021				0.000406 (J)	0.0003 (J)	0.000422 (J)
3/24/2021	0.000323 (J)					
10/5/2021	<0.001015	0.00028 (J)	0.00025 (J)	0.00025 (J)		
10/12/2021					<0.001015	0.00031 (J)
5/9/2022		0.00053 (J)				
5/10/2022			<0.00102	0.00025 (J)		
5/11/2022					0.00022 (J)	0.00021 (J)
5/16/2022	0.00023 (J)					
10/26/2022	<0.001015	<0.001015	0.000222 (J)	<0.001015	<0.001015	<0.001015
Mean	0.0008304	0.0007853	0.0007387	0.0007476	0.0008263	0.0007521
Std. Dev.	0.0003428	0.0003241	0.0003895	0.0003721	0.0003502	0.0003672
Upper Lim.	0.001015	0.001015	0.00102	0.001015	0.001015	0.001015
Lower Lim.	0.00023	0.00028	0.000222	0.00025	0.00022	0.00021

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	<0.001015			
2/7/2019			<0.01	<0.01
8/20/2019	<0.001015			
8/21/2019			<0.01	<0.01
4/13/2020	<0.001015	<0.001015		
4/15/2020			<0.01	<0.01
8/24/2020	<0.001015	<0.001015	<0.01	<0.01
3/16/2021			0.000534 (J)	0.000534 (J)
3/17/2021		0.000764 (J)		
3/24/2021	0.000442 (J)			
10/5/2021	0.00035 (J)	0.00035 (J)		
10/12/2021			0.00034 (J)	0.00031 (J)
5/9/2022	0.00027 (J)	0.00062 (J)		
5/10/2022			0.00037 (J)	0.00037 (J)
10/26/2022	<0.001015	<0.001015	0.000251 (J)	0.000224 (J)
Mean	0.0007671	0.0007965	0.005187	0.00518
Std. Dev.	0.0003452	0.0002738	0.005146	0.005154
Upper Lim.	0.001015	0.0008137	0.01	0.01
Lower Lim.	0.00027	0.0003423	0.000251	0.000224

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3
2/5/2019	0.0264				0.0362	
2/6/2019		<0.005	<0.005	0.00485 (J)		
6/18/2019						0.0263
8/20/2019					0.0366	0.0257
8/21/2019	0.0242					
8/22/2019		<0.005	0.00756	0.00658		
4/13/2020						0.0209
4/14/2020			<0.005	0.0035 (J)		
4/15/2020	0.0178	<0.005			0.0324	
8/25/2020	0.0193				0.0298	
8/26/2020		<0.005	0.00599	0.00547		0.0191
3/16/2021	0.0184					
3/22/2021						0.0183
3/23/2021		0.00037	0.000388	0.00378		
3/24/2021					0.0316	
10/5/2021	0.0169			0.00448		0.016
10/11/2021		0.00089			0.0165	
10/12/2021			0.00027			
5/10/2022	0.0136	0.00091		0.0049		0.0147
5/16/2022					0.0366	
5/17/2022			0.00044			
10/25/2022					0.0302	
10/26/2022	0.0152	0.000907	0.009	0.00603		0.0132
Mean	0.01898	0.002885	0.004206	0.004949	0.03124	0.01928
Std. Dev.	0.004337	0.002268	0.003442	0.001055	0.00659	0.004823
Upper Lim.	0.02357	0.005	0.006803	0.006068	0.03678	0.02439
Lower Lim.	0.01438	0.00037	-0.000708	0.00383	0.02603	0.01416

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
2/5/2019	0.0263	0.0021 (J)	<0.005			
2/6/2019				<0.005	0.00232 (J)	<0.005
8/20/2019	0.0293	0.00223 (J)	<0.005			
8/21/2019				<0.005	0.00303 (J)	<0.005
4/13/2020		<0.005	<0.005			
4/14/2020					0.00385 (J)	<0.005
4/15/2020	0.0252			<0.005		
8/24/2020		0.00222 (J)				
8/26/2020	0.0231		<0.005	<0.005	0.00388 (J)	<0.005
3/16/2021		0.00136				
3/17/2021			0.00102			
3/23/2021				0.00102	0.003	0.00103
3/24/2021	0.0268					
10/5/2021	0.0238	0.00116	0.00104	0.00018 (J)		
10/12/2021					0.00298	0.00113
5/9/2022		0.00101				
5/10/2022			0.00114	0.0004		
5/11/2022					0.00461	0.00091
5/16/2022	0.0289					
10/26/2022	0.0289	0.000936	0.0012	0.00016 (J)	0.00266	0.000812
Mean	0.02654	0.001689	0.00305	0.00272	0.003291	0.002985
Std. Dev.	0.002391	0.0006344	0.002085	0.002452	0.000755	0.002156
Upper Lim.	0.02907	0.002362	0.005	0.005	0.004091	0.005
Lower Lim.	0.024	0.001017	0.00102	0.00016	0.002491	0.000812

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	<0.0002			
2/7/2019			<0.0002	<0.005
8/20/2019	<0.0002			
8/21/2019			0.00225 (J)	<0.005
4/13/2020	<0.0002	0.00489 (J)		
4/15/2020			<0.0002	<0.005
8/24/2020	<0.0002	0.00237 (J)	<0.0002	<0.005
3/16/2021			0.000384	0.000108 (J)
3/17/2021		0.00616		
3/24/2021	<0.0002			
10/5/2021	0.00044	0.00287		
10/12/2021			8E-05 (J)	0.00014 (J)
5/9/2022	0.00014 (J)	0.00691		
5/10/2022			0.00015 (J)	0.00012 (J)
10/26/2022	<0.0002	0.0021	<0.0002	7.8E-05 (J)
Mean	0.0002225	0.004217	0.000458	0.002556
Std. Dev.	9.036E-05	0.002059	0.0007291	0.002613
Upper Lim.	0.00044	0.007045	0.00225	0.005
Lower Lim.	0.00014	0.001389	8E-05	7.8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3
2/5/2019	0.637				1.09	0.299 (U)
2/6/2019		0.537	0.779	-0.0241 (U)		
8/20/2019					0.553 (U)	0.709 (U)
8/21/2019	0.643 (U)					
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)		
4/13/2020						0.942 (U)
4/14/2020			0.922 (U)	0.643 (U)		
4/15/2020	0.538 (U)	0.64 (U)			0.182 (U)	
8/25/2020	0.502 (U)				0.43 (U)	
8/26/2020		0.221 (U)	1.28	1.31		0.177 (U)
3/16/2021	0.722 (U)					
3/22/2021						0.263 (U)
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)		
3/24/2021					0.769 (U)	
10/5/2021	1.21			1.48		3.21
10/11/2021		6.52			2.38	
10/12/2021			1.02 (U)			
5/10/2022	0.761 (U)	0.421 (U)		0.531 (U)		0.189 (U)
5/16/2022					1.06	
5/17/2022			1.01 (U)			
10/25/2022					0.683 (U)	
10/26/2022	0.38 (U)	0.42 (U)	0.505 (U)	0.446 (U)		0.551 (U)
Mean	0.6741	1.196	0.931	0.637	0.8934	0.7925
Std. Dev.	0.249	2.167	0.2983	0.5204	0.6732	1.014
Upper Lim.	0.9381	2.772	1.247	1.189	1.546	1.369
Lower Lim.	0.4102	0.00515	0.6148	0.08541	0.2948	0.1725

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
2/5/2019	0.467 (U)	0.551 (U)	0.196 (U)			
2/6/2019				0.0774 (U)	0.378 (U)	0.244 (U)
8/20/2019	0.814	0.206 (U)	-0.086 (U)			
8/21/2019				-0.0134 (U)	0.552 (U)	1.53 (U)
4/13/2020		1.19	0.0901 (U)			
4/14/2020					0.641 (U)	0.119 (U)
4/15/2020	-0.0841 (U)			0.526 (U)		
8/24/2020		0.482 (U)				
8/26/2020	0.26 (U)		0.416 (U)	0.691 (U)	0.339 (U)	1.18
3/16/2021		0.709 (U)				
3/17/2021			0.539 (U)			
3/23/2021				0.45 (U)	0.662 (U)	0.694 (U)
3/24/2021	0.664 (U)					
10/5/2021	1.75	1.44	1.36	1.27		
10/12/2021					0.291 (U)	0.311 (U)
5/9/2022		1.16				
5/10/2022			0.0979 (U)	0.599 (U)		
5/11/2022					0.475 (U)	0.605 (U)
5/16/2022	0.978					
10/26/2022	0.609 (U)	0.643 (U)	0.432 (U)	0.559 (U)	0.528 (U)	0.572 (U)
Mean	0.6822	0.7976	0.3806	0.5199	0.4833	0.6569
Std. Dev.	0.5428	0.4209	0.4479	0.3937	0.1376	0.4821
Upper Lim.	1.258	1.244	1.36	0.9371	0.6291	1.168
Lower Lim.	0.1069	0.3515	-0.086	0.1026	0.3374	0.1459

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	0.274 (U)			
2/7/2019			0.0202 (U)	0.395 (U)
8/20/2019	0.663			
8/21/2019			0.442 (U)	-0.00256 (U)
4/13/2020	-0.129 (U)	0.472 (U)		
4/15/2020			0.432 (U)	0.000738 (U)
8/24/2020	0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)
3/16/2021			0.32 (U)	0.589 (U)
3/17/2021		0.756 (U)		
3/24/2021	0.245 (U)			
10/5/2021	2.07	1.13		
10/12/2021			0.963 (U)	1.57
5/9/2022	0.784 (U)	0.352 (U)		
5/10/2022			0.659 (U)	0.468 (U)
10/26/2022	0.561 (U)	0.391 (U)	1.08	0.283 (U)
Mean	0.5806	0.5163	0.5463	0.4634
Std. Dev.	0.6697	0.3869	0.3447	0.4946
Upper Lim.	2.07	1.048	0.9116	1.174
Lower Lim.	-0.129	-0.01521	0.1809	0.004111

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4
2/26/2019	<0.125	0.0813 (J)		0.264		0.246
2/27/2019			0.0985 (J)			
6/18/2019					0.0664 (J)	
8/20/2019				0.252	0.0592 (J)	0.197
8/21/2019	<0.125					
8/22/2019		0.084 (J)	<0.125			
4/13/2020					<0.125	
4/14/2020			0.0878 (J)			
4/15/2020	<0.125	0.112		0.21		0.238
8/25/2020	<0.125			0.273		
8/26/2020		0.0997 (J)	<0.125		<0.125	0.251
3/16/2021	<0.125					
3/22/2021					<0.125	
3/23/2021		0.101	0.0819 (J)			
3/24/2021				0.194		0.227
10/5/2021	0.0601 (J)				<0.125	0.214
10/11/2021		0.201		0.283		
10/12/2021			0.134			
5/10/2022	<0.125	0.0918 (J)			0.0714 (J)	
5/16/2022				0.264		0.17
5/17/2022			<0.125			
10/25/2022				0.271		
10/26/2022	<0.125	0.0929 (J)	0.069 (J)		<0.125	0.283
Mean	0.1169	0.108	0.1058	0.2514	0.1028	0.2283
Std. Dev.	0.02295	0.03884	0.02451	0.03202	0.03088	0.03485
Upper Lim.	0.125	0.201	0.1109	0.2816	0.125	0.2652
Lower Lim.	0.0601	0.0813	0.07014	0.2207	0.0592	0.1913

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1
2/25/2019						<0.125
2/26/2019		0.0816 (J)				
2/27/2019	0.0578 (J)		0.0824 (J)	0.108	0.147	
8/20/2019	0.0567 (J)	<0.125				0.0889 (J)
8/21/2019			0.068 (J)	0.0648 (J)	0.0984 (J)	
4/13/2020	0.0688 (J)	<0.125				0.103
4/14/2020				0.0845 (J)	0.133	
4/15/2020			0.0775 (J)			
8/24/2020	0.0607 (J)					0.114
8/26/2020		<0.125	<0.1	0.0732 (J)	0.13	
3/16/2021	0.065 (J)					
3/17/2021		<0.125				
3/23/2021			<0.1	0.0802 (J)	0.132	
3/24/2021						0.0725 (J)
10/5/2021	0.122	<0.125	0.0933 (J)			<0.125
10/12/2021				0.123	0.147	
5/9/2022	0.0682 (J)					0.0824 (J)
5/10/2022		<0.125	0.0627 (J)			
5/11/2022				0.0695 (J)	0.108 (J)	
10/26/2022	0.0845 (J)	<0.125	0.128	0.0911 (J)	0.119 (J)	<0.125
Mean	0.07296	0.1196	0.08899	0.08679	0.1268	0.1045
Std. Dev.	0.02167	0.01534	0.02101	0.01998	0.01737	0.02107
Upper Lim.	0.122	0.125	0.1041	0.108	0.1452	0.1078
Lower Lim.	0.0567	0.0816	0.06229	0.06561	0.1084	0.07653

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	<0.000203			
2/7/2019			<0.000203	<0.000203
8/20/2019	<0.000203			
8/21/2019			<0.000203	<0.000203
4/13/2020		<0.000203		
4/15/2020	<0.000203		<0.000203	<0.000203
8/24/2020		<0.000203	<0.000203	<0.000203
8/25/2020	<0.000203			
3/16/2021			0.00013 (J)	8.35E-05 (J)
3/17/2021		0.000191 (J)		
3/24/2021	<0.000203			
10/5/2021		0.00012 (J)		
10/11/2021	9E-05 (J)			
10/12/2021			<0.000203	0.00012 (J)
5/9/2022		0.00018 (J)		
5/10/2022			<0.000203	0.00012 (J)
5/16/2022	<0.000203			
10/25/2022	<0.000203			
10/26/2022		<0.000203	<0.000203	<0.000203
Mean	0.0001889	0.0001833	0.0001939	0.0001673
Std. Dev.	3.995E-05	3.238E-05	2.581E-05	5.053E-05
Upper Lim.	0.000203	0.000203	0.000203	0.000203
Lower Lim.	9E-05	0.00012	0.00013	8.35E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2
2/5/2019	0.0545
8/20/2019	0.0583
4/15/2020	0.0406
8/25/2020	0.041
3/24/2021	0.0318
10/11/2021	0.0225
5/16/2022	0.0271
10/25/2022	0.0304
Mean	0.03828
Std. Dev.	0.01284
Upper Lim.	0.05189
Lower Lim.	0.02466

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6
2/7/2019	<0.0005
8/21/2019	<0.0005
4/15/2020	<0.0005
8/24/2020	<0.0005
3/16/2021	<0.0005
10/12/2021	<0.0005
5/10/2022	0.00286
10/26/2022	<0.0005
Mean	0.000795
Std. Dev.	0.0008344
Upper Lim.	0.00286
Lower Lim.	0.0005

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-2	GSD-AP-MW-4	GSD-AP-MW-5
2/5/2019	<0.0002			0.0196	<0.01	<0.000203
2/6/2019		<0.01	<0.000203			
8/20/2019				0.027	<0.01	<0.000203
8/21/2019	<0.0002					
8/22/2019		<0.01	<0.000203			
4/13/2020						<0.000203
4/14/2020			<0.000203			
4/15/2020	<0.0002	<0.01		0.0202	<0.01	
8/24/2020						<0.000203
8/25/2020	<0.0002			0.0269		
8/26/2020		<0.01	<0.000203		<0.01	
3/16/2021	<0.0002					<0.000203
3/23/2021		0.000204	0.000124 (J)			
3/24/2021				0.0164	0.00118	
10/5/2021	<0.0002				0.00111	0.00015 (J)
10/11/2021		0.00045		0.0204		
10/12/2021			0.00015 (J)			
5/9/2022						0.00011 (J)
5/10/2022	<0.0002	0.00047				
5/16/2022				0.0201	0.00122	
5/17/2022			0.00012 (J)			
10/25/2022				0.0202		
10/26/2022	0.000198 (J)	0.000438	<0.000203		0.00106	0.000371
Mean	0.0001997	0.005195	0.0001761	0.02135	0.005571	0.0002058
Std. Dev.	7.1E-07	0.005137	3.81E-05	0.003692	0.004735	7.523E-05
Upper Lim.	0.0002	0.01	0.000203	0.027	0.01	0.000371
Lower Lim.	0.000198	0.000204	0.00012	0.0164	0.00106	0.00011

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2
2/5/2019				<0.000203	
2/6/2019	<0.0002	<0.01	<0.01		
8/20/2019				<0.000203	
8/21/2019	<0.0002	<0.01	<0.01		
4/13/2020				<0.000203	<0.0002
4/14/2020		<0.01	<0.01		
4/15/2020	<0.0002				
8/24/2020				<0.000203	<0.0002
8/26/2020	<0.0002	<0.01	<0.01		
3/17/2021					<0.0002
3/23/2021	<0.0002	0.000357	0.00027		
3/24/2021				9.88E-05 (J)	
10/5/2021	0.0001 (J)			7E-05 (J)	0.00028
10/12/2021		0.00032	0.00018 (J)		
5/9/2022				<0.000203	<0.0002
5/10/2022	<0.0002				
5/11/2022		0.0004	0.00024		
10/26/2022	0.000169 (J)	0.000422	0.000276	<0.000203	0.00022
Mean	0.0001836	0.005187	0.005121	0.0001734	0.0002167
Std. Dev.	3.549E-05	0.005145	0.005216	5.544E-05	3.204E-05
Upper Lim.	0.0002	0.01	0.01	0.000203	0.00028
Lower Lim.	0.0001	0.00032	0.00018	7E-05	0.0002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 12/28/2022 3:18 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-3
2/5/2019	<0.000203	0.000256 (J)	
6/18/2019			<0.001
8/20/2019		0.000322 (J)	<0.001
8/21/2019	<0.000203		
4/13/2020			<0.001
4/15/2020	<0.000203	0.000318 (J)	
8/25/2020	<0.000203	0.000347 (J)	
8/26/2020			<0.001
3/16/2021	0.000112 (J)		
3/22/2021			0.000121 (J)
3/24/2021		0.00037	
10/5/2021	<0.000203		0.00014 (J)
10/11/2021		0.00029	
5/10/2022	0.00013 (J)		0.00011 (J)
5/16/2022		0.00041	
10/25/2022		0.000361	
10/26/2022	<0.000203		0.00011 (J)
Mean	0.0001825	0.0003343	0.0005601
Std. Dev.	3.826E-05	4.839E-05	0.0004703
Upper Lim.	0.000203	0.0003855	0.001
Lower Lim.	0.000112	0.000283	0.00011

ND substitution: RL or RL/2 if <15% NDs.