

**2022 SEMI-ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT**

**ALABAMA POWER COMPANY
PLANT BARRY
ASH POND**

July 31, 2022

Prepared for

Alabama Power Company
Birmingham, Alabama

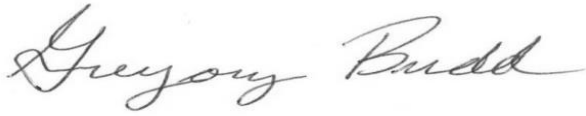
By

Southern Company Services
Earth Science and Environmental Engineering



CERTIFICATION STATEMENT

This *2022 Semi-Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Barry 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 Ch. 335-13-15, and Part E of ADEM Administrative Order No. 18-094-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.



7/31/2022

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7/31/2022

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Date

EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 18-094-GW, this 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report has been prepared to document the first 2022 semi-annual assessment groundwater monitoring activities at the Alabama Power Company (APC) James M. Barry Electric Generating Plant (Plant Barry) Ash Pond and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), and Part E of AO 18-094-GW. Semi-annual assessment monitoring and associated reporting for Plant Barry Ash Pond is performed in accordance with the monitoring requirements § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

The CCR unit began the monitoring period in assessment monitoring pursuant to § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6). Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the first detection monitoring event and assessment monitoring was initiated in January 2018. Statistically significant levels (SSLs) of Appendix IV parameters above groundwater protection standards were identified while in assessment monitoring. Consequently, an assessment of corrective measures (ACM) was initiated on January 13, 2019, and completed on June 12, 2019, according to the requirements of § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order No. 18-094-GW. A public meeting to discuss the ACM was held on June 30, 2020.

Since the submittal of the ACM extensive Site investigations have been performed to select effective corrective measures to address SSLs 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.18-094-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.

SSLs of Appendix IV parameters arsenic and cobalt were detected above GWPS during the first 2022 semi-annual monitoring event. The following summarizes results and activities during the first semi-annual monitoring period of 2022:

- Submitted the 2021 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2022
- Collected soil and groundwater samples for treatability studies using Site aquifer media and impacted groundwater prior to field implementation of an injection treatment pilot study between March 1, 2022 and June 3, 2022. The treatability studies will evaluate the effectiveness of various treatment solutions and doses in removing constituents of interest (COIs) from impacted groundwater.
- Completed the first semi-annual assessment groundwater sampling event between May 23, 2022 and May 31, 2022. Additional groundwater samples were collected during the first semi-annual monitoring event for the proposed injection treatability studies.
- Collected additional MNA parameters along with May 2022 sampling event to help establish baseline conditions and to provide input into geochemical modeling and future MNA monitoring/evaluation.
- Pursuant to 40 CFR 257.90(e)(6), a Monitoring Period Summary table has been prepared to describe the status of groundwater monitoring and corrective action during the monitoring period for this report.

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 monitoring-related activities are planned for the CCR unit:

- Conduct batch testing to evaluate removal of COIs, and selection of the optimum reagents and doses for column tests.
- Conduct column testing to evaluate removal of COIs 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 COIs 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 COIs and their host solids.

- After treatment, the post-column (treated) soils will be leached with upgradient (background) groundwater from the respective plant in additional column studies, to help assess long-term stability of the COIs and their host solids.
- Prepare Class V UIC permit.
- Conduct the second semi-annual assessment monitoring event in the fall of 2022 and submit the annual groundwater monitoring and corrective action report summarizing the findings to ADEM by January 31, 2023.

**Executive Summary Table.
Monitoring Period Summary
Plant Barry - Ash Pond**

Assessment Monitoring Initiated: January 15, 2018

Monitoring Period: January 1 - July 31, 2022

Beginning Status: Corrective Action

Ending Status: Corrective Action

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
Boron	BY-AP-MW-1, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-16
Calcium	BY-AP-MW-1, BY-AP-MW-2, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16
Chloride	BY-AP-MW-1, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16
Fluoride	BY-AP-MW-15
pH	BY-UP-MW-1, BY-UP-MW-2, BY-UP-MW-3, BY-UP-MW-4, BY-AP-MW-1, BY-AP-MW-2, BY-AP-MW-6, BY-AP-MW-8, BY-AP-MW-10, BY-AP-MW-13
Sulfate	BY-AP-MW-1, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14
TDS	BY-AP-MW-1, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16

Appendix IV SSLs

Parameter	Wells
Arsenic	BY-AP-MW-1, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16
Cobalt	BY-AP-MW-7, BY-AP-MW-15

* 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 Initiated: January 13, 2019

Date Complete: June 12, 2019

Public Meeting Date: June 30, 2020

Groundwater Remedy

Selected During Period: Yes

Selection Date: 10/29/2021

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), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 18-094-GW, this 2022 Semi-Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2022 semi-annual assessment groundwater monitoring activities at the Plant Barry Ash Pond and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), and Part E of AO No. 18-094-GW. Semi-annual assessment monitoring and associated reporting for Plant Barry Ash Pond is performed in accordance with the monitoring requirements § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

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 (November 13, 2018) 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 January 2018. SSIs of Appendix III and SSLs of Appendix IV parameters were identified at the Plant Barry Ash Pond during sampling events conducted in 2018. Alternate Source Demonstrations (ASD) were not completed for all Appendix IV constituents exceeding the GWPS; therefore, pursuant to § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), APC completed an assessment of corrective measures (ACM) in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM AO No. 18-094-GW. The ACM was completed June 12, 2019, and a public meeting was held to discuss the ACM on June 30, 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.18-094-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 § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6), APC will continue semi-annual assessment monitoring, including all monitoring wells in the certified groundwater monitoring system and any well installed to characterize the horizontal and vertical extent of SSLs. 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

The Alabama Power Company (APC) James M. Barry Electric Generating Plant (Plant Barry) is in northeastern Mobile County, Alabama, approximately 23 miles north of Mobile, AL and 1 mile east of the city of Bucks, AL. The physical address is 15300 U.S. Highway 43 North, Bucks, Alabama 36512. Plant Barry lies in Section 36 of Township 1 North, Range 1 West, Sections 31 and 32 of Township 1 North, Range 1 East, Section 1 of Township 1 South, Range 1 West, and Sections 5 and 6 of Township 1 South, Range 1 East. Section/Township/Range data are based on visual inspection of USGS topographic quadrangle maps and GIS maps (USGS, 1980, 1982a, 1982b, 1983). The Ash Pond is located east-southeast of the main plant, between the Mobile River and Plant Barry barge canal. **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 Barry is located within the Southern Pine Hills and the Alluvial-deltaic Plain districts of the East Gulf Coastal Plain physiographic section. The Alluvial-deltaic Plain district is composed of alluvium and terrace deposits of the Mobile River delta and is characterized by very little topographical relief (Gillet et al., 2000). The Southern Pine Hills district is a southward sloping plain developed on Miocene Series clay, sand, and gravel deposits. The Southern Pine Hills district is dissected by surface water features, and near Plant Barry, displays gentle topographic relief (Davis, 1987). Local site elevations near the Ash Pond range from approximately 0 to 50 feet above mean seal level (MSL). The embankment elevations that form the perimeter of the Ash Pond reside between 26 and 20 feet MSL. **Figure 2, Site Topographic Map,** provides the topography of the Site.

3.2 SITE GEOLOGY AND HYDROGEOLOGY

The geology of the site is characterized by sedimentary deposits ranging in age from Tertiary to Quaternary. The Pliocene age Citronelle formation, while present regionally, was not encountered at the site. Sedimentary alluvial and terrace deposits of the Quaternary Period overlie largely unconsolidated Tertiary deposits in and adjacent to the flood plains of the Mobile River. At the site, Holocene age alluvial and low terrace deposits overlie undifferentiated Miocene Series sediments. Miocene Series sediments were primarily deposited in a regressive marine depositional environment. The Miocene Series is composed of fine to very coarse-grained sand with interbedded sandy clays, silts, and shell fragments (Walter and Kidd,

1979). Siliciclastic sediments of the Miocene Series are often micaceous and pyritic, and contain wood fragments, shell debris, and heavy minerals (Chandler et al., 1985). Alluvial, low terrace, and coastal deposits reflect estuarine, deltaic, lagoonal, and shoreface deposition in lowland areas from late Pleistocene to Holocene time. These deposits consist of fine to coarse sand, which can be rich in heavy detrital minerals (Hsu, 1960), silt, sandy clay, clay, and shell fragments (Chandler et al., 1985). **Figure 3, Site Geologic Map**, illustrates the surface geology at the site and neighboring areas. **Figure 4A, Geologic Cross-Section A-A'**, **Figure 4B, Geologic Cross-Section B-B**, and **Figure 4C, Geologic Cross-Section C-C'**, provides an illustration of well screen intervals with respect to stratigraphy and elevation at the Site.

Around the site, the uppermost stratigraphic layer varies from approximately 5 to 20 feet and is defined as fill material composed of sandy and silty lean clays that were placed during the construction of the Ash Pond. Beneath the fill material, generalized near-surface stratigraphy of the site, in descending order, consists of (Unit 1) an organic-rich fat clay to lean clay, (Unit 2) a sandy lean clay to clayey sand with interbedded silty sand, and (Unit 3) a poorly graded sand with lenses of sandy lean clay and gravel. The stratigraphy of the site displays vertical and horizontal heterogeneity common with alluvial, low terrace, and coastal deposits.

- Unit 1 is described as a mottled gray to dark gray and red fat clay with some interlayered sandy lean clays. Unit 1 extends from the base of fill materials to elevations of approximately -10 to -25 feet mean sea level (MSL).
- Unit 2 consists of mottled light gray, brownish yellow, and red sandy lean clay with medium plasticity and trace amounts of interlayered sand. Lenses of clayey sands and silty sands are also present within this unit. Unit 2 extends from the base of the organic clay layer to elevations of approximately -30 to -40 feet MSL grading into sand of Unit 3.
- Unit 3 comprises the uppermost aquifer for groundwater monitoring purposes at the site and is described as a pale brown or light gray poorly graded sand with silt content. Fine gravel appears in the lower portion of Unit 3. Lenses of sandy clay and clayey sand are present in the upper portions of Unit 3 but are not prevalent.
- Unit 4 likely corresponds to the transition to Miocene Series sediments and is described as a pale greenish gray or blue, interbedded fat clay, lean clay, and silty sand. The top of Unit 4 generally appears between 90 and 120 feet below ground surface at the Site (-65 to -100 ft MSL) and select

borings (BY-AP-MW-8V, BY-AP-MW-12V, BY-AP-MW-12VM, BY-AP-MW-15VM) indicate a thickness of 10 to 20 feet. Unit 4 clays display a very low average hydraulic conductivity of 3.0×10^{-7} cm/s.

3.2.1 Uppermost Aquifer

The uppermost aquifer beneath the site generally corresponds to Unit 3 sands, which are part of the Watercourse Aquifer system. At the site, Watercourse Aquifer generally consists of fine to medium grained sands with discrete gravelly, coarse sand and gravel. Clay nodules, lenses, and stringers are present within Unit 3, but are not prevalent. Depth to the top of the Watercourse Aquifer generally ranges between 45 and 70 feet below ground surface (BGS). Groundwater recharge to the Watercourse Aquifer is largely accomplished by infiltration of precipitation and subsequent percolation down to the water table. Regionally, the Watercourse and Miocene-Pliocene Aquifers are considered to be hydraulically connected due to the discontinuous nature of clay aquitards. However, locally semi-confined to confined conditions may be present when a sufficient aquitard separates the aquifers or sand units.

3.2.2 Flow Interpretation

Groundwater flow at the site is a subdued replica of the natural topography where gravity is the dominant force driving flow. Groundwater flows from higher topographic elevations west of the Ash Pond to lower topographic elevations to the east. Groundwater elevations, potentiometric surfaces, and geologic cross-section indicate that the Watercourse Aquifer beneath the Site is not in communication with the discharge canal. Groundwater flow is accomplished by porous or Darcian flow mechanics through sands of the Watercourse Aquifer. Groundwater elevations fluctuate in response to rainfall and Mobile River stage. Seasonal variations of 5 to 7 feet are typical at the Site. These fluctuations are consistent in monitoring wells across the Site, indicating a relatively uniform response to rainfall events and fluctuations of the Mobile River. Potentiometric surface maps are presented in **Section 4.1**.

3.3 GROUNDWATER MONITORING SYSTEM

Pursuant to § 257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Barry has installed a groundwater monitoring well network to monitor groundwater quality within the uppermost aquifer. The certified groundwater monitoring system for the Plant Barry Ash Pond is designed to monitor groundwater passing the waste boundary of the CCR unit. Wells were located to serve as upgradient or downgradient monitoring

locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps.

Monitoring wells were screened in the Watercourse Aquifer. The Watercourse Aquifer is composed of Quaternary alluvial and low terrace deposits consisting of interbedded sand, gravel, and clay. The monitoring systems are designed to monitor water quality as groundwater flows laterally from south to north across the site. 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. Monitoring well locations are presented on **Figure 5, Monitoring Well Location Map** and **Table 1a. Compliance Monitoring Well Network Details, Table 1b. Delineation Monitoring Well Network Details, and Table 1c. Piezometer Well Network Details** summarize the monitoring well construction details and design purpose for the Plant Barry Ash Pond.

3.3.1.1 Upgradient Wells

Data used to establish background water quality or selection of upgradient wells include: (1) review of groundwater elevation data and potentiometric surface contour maps to determine groundwater flow direction and (2) a screening of Appendix III CCR indicator parameters (chiefly calcium, sulfate, and boron) for apparently elevated concentrations.

Historically, monitoring wells BY-AP-MW-2 through BY-AP-MW-4 have served as upgradient monitoring wells. These wells were selected as upgradient based on low concentrations of CCR indicator parameters and groundwater flow direction. Following discussions with ADEM, these wells were re-designated as compliance monitoring wells and not used for “background” purposes.

To establish a clear and distinct background, monitoring well locations BY-GSA-MW-1 through BY-GSA-MW-4 now serve as upgradient locations for the Ash Pond. Groundwater generally flows semi-radially

across the Ash Pond from the southwest to northeast with a northerly and southerly flow component. Upgradient wells are located south of the Gypsum Pond as determined by water level monitoring and potentiometric surface maps constructed for the Site. This re-designation of well locations was detailed in the revised groundwater monitoring plan submitted to ADEM on April 15, 2020 and resubmitted on August 24, 2020. Upgradient wells BY-GSA-MW-1 through BY-GSA-MW-4 are now being labeled as BY-UP-MW-1 through BY-UP-MW-4 by field and lab personnel to distinguish as upgradient locations for both the Barry Gypsum Pond and Barry Ash Pond. **Table 1a**, summarizes the monitoring well construction details and design purpose.

3.3.1.2 Downgradient Wells

Monitoring well locations BY-AP-MW-1 through BY-AP-MW-16 are used as downgradient compliance monitoring locations for the Ash Pond. Downgradient monitoring well details are included in **Table 1a**.

3.3.1.3 Delineation Wells

Pursuant to § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-094-GW, additional delineation wells were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring. Two phases of field investigation since late 2018 explored potential impacts to groundwater. Phase I was conducted between December 2018 and December 2019. Seven vertical delineation wells (BY-AP-MW-1V, BY-AP-MW-5V, BY-AP-MW-7V, BY-AP-MW-8V, BY-AP-MW-10V, BY-AP-MW-12V and BY-AP-MW-15V) and seven horizontal delineation wells (BY-AP-MW-17H, BY-AP-MW-18H, BY-AP-MW-19H, BY-AP-MW-20H, BY-AP-MW-22H, BY-AP-MW-23H, and BY-AP-MW-24H), were installed and sampled to assess the lateral extent of groundwater impact in the directions of groundwater flow away from the facility.

A Groundwater Investigation Report was submitted on December 15, 2019, summarizing Phase I groundwater investigation findings, and including a work plan for a Phase II investigation. Field work for Phase II was conducted between February 2020 and June 2020. Eight deep vertical delineation wells (BY-AP-MW-13V, BY-AP-MW-14V, BY-AP-MW-16V, BY-AP-MW-17V, BY-AP-MW-20V, BY-AP-MW-23V and BY-AP-MW-25V) and one horizontal delineation well (BY-AP-MW-25H) were installed to complete delineation activities at the Site.

Additionally, two Type III (double-cased) deep vertical delineation well borings (BY-AP-MW-12VM, and BY-AP-MW-15VM,) were advanced to vertically delineate the low-permeability Unit 4 interbedded fat clay, lean clay, and silty sand. Boring logs indicate thicknesses of greater than 25 feet (BY-AP-MW-12VM) and 20 feet (BY-AP-MW-15VM) of Unit 4 clays and a very low average hydraulic conductivity of 3.0×10^{-7} cm/s. Subsequently, soil boring BY-AP-MW-12VM was abandoned prior to well installation and BY-AP-MW-15VM was installed as a water level-only piezometer.

All delineation wells are sampled semi-annually as part of the semi-annual assessment groundwater monitoring program. A semi-annual progress and groundwater delineation report summarizing findings was submitted to ADEM on September 30, 2020.

Unlike compliance wells, which are installed on top of the Ash Pond dike, many delineation wells are installed at the base of the dike and surrounding lower-lying areas. During the wet season or after rainy periods, some delineation wells can be either temporarily inaccessible for sampling or unsafe to sample. In that case, another sampling event will be attempted after a drying period or during the next semi-annual sampling event. 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 assessment groundwater monitoring program.

3.3.1.4 Piezometers

Phase II delineation location BY-AP-MW-15VM is used as a water level-only piezometer. This location is separated from the Watercourse Aquifer (Unit 2/3 sands) by a lower confining layer (Unit 4) of sufficient thickness to justify water level-only monitoring at this location. BY-AP-MW-15VM encountered greater than 20 feet of clay and demonstrated a groundwater separation of 1.38 feet and 0.78 feet from paired Watercourse Aquifer well BY-AP-MW-15 during the first Phase II delineation sampling event conducted on June 15, 2020, and second semi-annual sampling event conducted on August 31, 2020, respectively. The groundwater elevations observed in well BY-AP-MW-15VM also indicate an upward vertical gradient (i.e., groundwater flowing upwards), providing further support for a piezometer designation. **Table 1c** summarizes the water-level only piezometer construction details.

3.3.1.5 Monitoring Well Replacement and Abandonment

No monitoring well replacements and/or abandonments were conducted during the reporting period.

3.4 GROUNDWATER MONITORING HISTORY

In accordance with § 257.94(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 October 17, 2017. Background sampling was performed over the period of March 2016 to June 2017. Groundwater sampling for the first detection monitoring event after the background period was performed in September 2017.

Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, Alabama Power initiated an assessment monitoring program on January 15, 2018. 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 January 2018, within 90 days of initiating the assessment monitoring program.

Statistical evaluations of 2018 assessment monitoring data identified SSLs 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 18-094-GW, additional monitoring wells (**Table 1b, Figure 5**) were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring in two phases of groundwater investigations between December 2018 and June 2020. 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 second semi-annual sampling event in September 2020. However, occasionally, additional data collection has occurred independent of routine compliance sampling events to support continuing assessment activities at the site.

3.4.1 Available Monitoring Data

Laboratory analytical data is available for the groundwater monitoring history outlined in **Section 3.4**. Tabulated results for Appendix III and Appendix IV constituents by monitoring well are included in **Appendix A, Groundwater Analytical Data**.

3.4.2 Historical Groundwater Flow

Historical groundwater elevations and potentiometric surface maps show that groundwater flow patterns are consistent across monitoring events and as described in **Section 3.2.2**. As Ash Pond closure activities

progress over the years and upon completion of closure, groundwater elevations will likely display variability representative of changing site hydrodynamics and eventually, a new set of equilibrium conditions. As this timeline progresses, groundwater elevations and trends will be qualitatively reviewed against this historical data set. Tables summarizing groundwater elevations from all groundwater monitoring events are included in **Appendix B, Historical Groundwater Elevations Summary**.

3.4.3 Monitoring Variances

The groundwater monitoring program at the Site is operating under a Variance granted by the Department 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 assessment 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 between: (1) late winter – mid spring and (2) early to late fall. 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 which often foster 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 to site groundwater.

The following subsections summarize the sequential steps and process for the sampling, handling/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 Barry 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 with 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 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). Both APCEL and Pace are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed. **Table 2, Monitoring Parameters and Reporting Limits**, lists assessment monitoring constituents analyzed from site groundwater samples. Lab reports and COC records 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 monitoring period. The first semi-annual assessment monitoring event took place between May 23, 2022, and May 31, 2022.

Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during the Assessment 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 event 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 ELEVATIONS

During the May 2022 sampling event, depths to water ranged from 4.48 to 26.11 feet below top of casing (BTOC) and groundwater elevations ranged from 6.75 to 1.71 feet above mean sea level (ft MSL) from west (near Gypsum Pond) to east (Ash Pond). Many vertical delineations wells (denoted with a “V”) installed deeper within Unit 3 sands display groundwater elevations higher than the more shallow, paired location. This indicates some level of confining conditions between the two zones in some locales and indicates an upward vertical gradient in which deeper groundwater is flowing upwards towards more shallow intervals. **Figure 6, Potentiometric Surface Contour Map (May 23, 2022)**, depict groundwater elevations and inferred groundwater flow direction during the first 2022 semi-annual sampling event.

As shown on **Figure 6**, groundwater flows from south to north across the Site, consistent with previous events. Tidal influences in river stage likely influence groundwater elevations – especially in closer proximity to the river. River stage varied from approximately 1.7 ft to 2.6 ft elevation during the May 23rd gauging event and are reflected in groundwater elevations presented north and east of the Ash Pond. A convergence of flow from the north and south appear in the vicinity of well BY-AP-MW-14 is apparent as presented on **Figure 6**.

Groundwater elevations from well BY-AP-MW-1 are not factored into potentiometric surfaces as this well is installed in a perched or laterally discontinuous sand layer beneath the Unit 1 clay and data shows vertical confinement between this layer and Unit 3. Recent groundwater elevation data has been tabulated and included in **Table 3, Recent Groundwater Elevations Summary**. All available historical groundwater elevation data recorded since 2016 has been tabulated and included in **Appendix B**.

4.1 GROUNDWATER FLOW VELOCITY CALCULATIONS

Groundwater flow rates at the site were calculated based on hydraulic gradients, hydraulic conductivity from aquifer pump test results, and an estimated effective porosity of the screened horizon. Slug testing provided horizontal hydraulic conductivities for the Watercourse Aquifer (Unit 3) between 2.1×10^{-2} cm/sec and 6.75×10^{-3} cm/sec with an average of 1.0×10^{-2} cm/sec at the Ash Pond. Long duration pump testing of the Watercourse Aquifer revealed an average hydraulic conductivity of 3.3×10^{-3} cm/sec. The pumping test hydraulic conductivity value of 3.3×10^{-3} cm/sec or 9.4 ft/day was used because the larger volume of aquifer allows averaging of small-scale heterogeneities, while slug tests are smaller in scale and could allow some results to skew an average. An effective porosity of 25% was used based on the default values for effective porosity recommended by EPA for a silty sand-type soil (U.S. USEPA, 1996). The

hydraulic gradient was calculated between well pairs shown in **Appendix D, Horizontal Groundwater Flow Velocity Calculation.**

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

Appendix D presents the estimated horizontal flow velocity calculated using groundwater elevation data from the first semi-annual sampling event in 2022.

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at a rate of one sample per every group of 10 well samples. 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 is 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 RPD 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 to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4a, Relative Percent Difference (RPD) Calculations**, provides the relative percent differences for sample and sample duplicates during the first semi-annual monitoring event of 2022. Fluoride and Sulfate were detected at low level concentrations of duplicate groundwater samples collected from well locations BY-GSA-MW-15 and BY-UP-MW-13, respectively. Though RPD values exceeded 20%, both sample and duplicate concentrations were less than five times the MDL/RL. Consequently, validation flags to indicate RPD criteria failure were not required.

Analytical data reviewed provided low-level or trace detections in field and or equipment blanks during the monitoring period sampling event. **Table 4b, Field QC: Blank Detections** provides a summary of low-

level detections observed during the first 2022 semi-annual monitoring event. Each of these detections were estimated concentrations, 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.

Table 4C, Field QC: Validation Results (Blanks) provides a summarized list of data validation flags that could be applied to site data during the first 2022 semi-annual monitoring period. Validated flags do not have an impact on possible statistical analyses due to: (1) low-level concentrations flagged during validation and or (2) constituents flagged are not Site COI. The extent of trace chromium detections in blanks can be explained by a low MDL value of 0.000203 mg/L.

5.2 STATISTICAL METHODOLOGY AND TESTS

Sanitas software is used to perform statistical analyses of Site data. 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, are used for pH and sulfate to determine whether there has been a statistically significant increase (SSI) over background groundwater quality. Interwell prediction limits, combined with a 1-of-2 verification strategy, are used to evaluate boron, calcium, chloride, fluoride, and TDS. Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at that well. The most recent sample from the same well is compared to its respective background to identify SSIs over background. 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 SSIs.

Groundwater Stats Consulting demonstrated that these test methods were appropriate in the October 2017 Statistical Analysis Plan, which was updated in the September 2019 data screening evaluation and also, included in the revised Statistical Analysis Plan (August 2020). 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.

According to the Unified Guidance, the following adjustments are considered part of the statistical analysis program:

- 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% and 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 assessment monitoring, 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 (i.e. UTLs) 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 upon 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 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 assessment monitoring, when the Lower Confidence Limit (LCL), or the entire confidence interval, exceeds the GWPS as discussed in the USEPA Unified Guidance (2009), the result is recorded as an SSL. Data from upgradient wells collected in between updates may still be used to support ASDs if merited.

5.3 STATISTICAL EXCEEDANCES

Analytical data from the first semi-annual monitoring event in May 2022 were statistically analyzed in accordance with the professional engineer (PE)-certified Statistical Analysis Plan (October 2017 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 assessment 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 Analysis** 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**.

The following subsections describe statistical exceedances during the first 2022 semi-annual monitoring event.

Statistical analysis of Appendix IV data identified the following statistically significant levels (SSLs) over GWPS at the listed wells during the first 2022 semi-annual monitoring event:

- BY-AP-MW-1: Arsenic.
- BY-AP-MW-5: Arsenic
- BY-AP-MW-7: Arsenic, Cobalt.
- BY-AP-MW-8: Arsenic.
- BY-AP-MW-9: Arsenic.
- BY-AP-MW-10: Arsenic.
- BY-AP-MW-11: Arsenic.
- BY-AP-MW-12: Arsenic.
- BY-AP-MW-13: Arsenic.
- BY-AP-MW-14: Arsenic.
- BY-AP-MW-15: Arsenic, Cobalt.
- BY-AP-MW-16: Arsenic.

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

5.3.2.1 Delineation Wells

For delineation wells, groundwater quality data is compared to the GWPS in lieu of a statistical comparison using confidence intervals. A review of analytical data derived from delineation wells identified the following GWPS exceedances during the first 2022 semi-annual sampling event:

- BY-AP-MW-12V: Arsenic.
- BY-AP-MW-13V: Arsenic.
- BY-AP-MW-15V: Arsenic, Cobalt.
- BY-AP-MW-17H: Arsenic.
- BY-AP-MW-17V: Cobalt.
- BY-AP-MW-18H: Arsenic.
- BY-AP-MW-20H: Arsenic.
- BY-AP-MW-20V: Arsenic, Cobalt.
- BY-AP-MW-22H: Arsenic.

- BY-AP-MW-24H: Arsenic.

Details regarding the installation and sampling of these wells, and future proposed actions as a result of these exceedances, were submitted to ADEM in a Groundwater Investigation Report on May 13, 2019, and subsequent progress updates submitted in September 2019, March 2020, and on September 30, 2020.

To address SSLs at the site, an ACM was prepared to evaluate potential groundwater corrective measures for the occurrence of arsenic and cobalt in groundwater at the site in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM AO 18-094-GW. The ACM was submitted to ADEM and placed in the operating record on June 12, 2019. 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 ASSESSEMENT

As required by Part E of the Order (AO 18-094-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 (November 13, 2018). The primary purpose of this plan and subsequent phases of work were to identify the horizontal and vertical extent of groundwater impacts defined by EPA Appendix IV groundwater protection standards.

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in September 2020. The conclusions and results presented indicate that groundwater delineation have been completed to a sufficient degree to define spatial extent of groundwater impacts and to inform a groundwater remedy selection plan.

6.1 CHRONOLOGY OF DELINEATION ACTIVITIES

Beginning in 2019, Semi-Annual Progress Reports have routinely been provided to ADEM in March and September, 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 will now provide the Department with a discussion of delineation results and corrective action activities in each semi-annual groundwater monitoring and corrective action report (July; January) until released in writing.

6.1.1 Delineation Wells

Part B of the Order required the installation of additional wells as necessary to define the extent of groundwater impacts where Appendix IV constituents are identified at SSLs above the GWPS. Using the conceptual site model (CSM) and analytical results as a guide, horizontal delineation wells were installed to assess lateral extent of groundwater impact in the direction(s) of groundwater flow away from the facility in the upper and middle portions of the Unit 3 sands. Vertical delineation wells were also installed at the base of the Watercourse Aquifer (Unit 3 sands), just above the Unit 4 clay, to assess vertical extent of groundwater impacts to the Watercourse Aquifer. The follow sections describe monitoring wells installed to delineate impacts to groundwater:

Phase I – Groundwater Investigation (December 2018 to December 2019)

Phase I was conducted between the dates of December 2018 to December 2019. **Table 1b** and **Figure 5** present details and locations of on-site delineation wells. The following summarizes all activities that were completed during Phase I of groundwater delineation at the Site:

- Installed six vertical delineation wells (BY-AP-MW-1V, BY-AP-MW-5V, BY-AP-MW-7V, BY-AP-MW-8V, BY-AP-MW-10V, and BY-AP-MW-12V), three horizontal delineation wells (BY-AP-MW-17H, BY-AP-MW-18H, and BY-AP-MW-24H), and three ash pore-water piezometers (BY-AP-PW-24, BY-AP-PW-25, and BY-AP-PW-26) between December 11, 2018 and January 4, 2019. The remaining scope of delineation well installations described in the Facility Plan could not be achieved at the time due to flooded or wet conditions and were installed in July 2019.
- Collected nine ash samples for waste characterization analyses.
- Developed the six vertical delineation wells and three horizontal delineation wells between December 20, 2018, and January 8, 2019. Horizontal delineation well BY-AP-MW-18H could not be developed until March 20, 2019, due to persistent flood conditions over low-lying areas.
- Collected samples from each delineation and characterization well except BY-AP-MW-17H between January 7, 2019, and March 21, 2019. BY-AP-MW-17H was sampled July 31, 2019.
- Submitted a preliminary Groundwater Investigation Technical Memo to the Department on May 13, 2019. Submitted an Assessment of Corrective Measures for the Ash Pond to the Department on July 11, 2019, as required by Part C of the Order.
- Installed the four remaining horizontal delineation wells (BY-AP-MW-19H, BY-AP-MW-20H, BY-AP-MW-22H, AND BY-AP-MW-23H) and one vertical delineation well (BY-AP-MW-15V) in July 2019. Previously proposed horizontal delineation well BY-AP-MW-21H located south of the Ash Pond and monitor well BY-AP-MW-14 has not been installed due to pervasive wet and unsafe conditions for drilling and therefore, could not be safely accessed to install as planned.
- Developed and sampled the four horizontal delineation wells and one vertical delineation well between July 28, 2019, and August 2nd, 2019.
- Submitted Groundwater Investigation Report on December 15, 2019, to the Department summarizing Phase I groundwater investigation findings and included a work plan for a Phase II investigation.

- Provided the Department with a response on December 30, 2019, for comments received from the Department on November 14, 2019, regarding previously submitted CCR documents.
- Submitted the 2019 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2020.

Phase II – Groundwater Investigation (February 2020 to June 2020)

Following a review of data gathered from the Phase I Investigation, additional groundwater investigation was proposed to the ADEM in the Groundwater Investigation Report submitted December 15, 2019. The review of delineation results discussed in preceding sections indicated that an additional phase of investigation was warranted to complete delineation in certain areas of the Site. Phase II was conducted between the dates of February 2020 to June 2020. The following summarizes all activities that were completed during Phase II of groundwater delineation at the Site:

- Completed the semi-annual assessment groundwater sampling event between March 30, 2020, and April 1, 2020.
- Installed seven deep vertical delineation wells (BY-AP-MW-13V, BY-AP-MW-14V, BY-AP-MW-16V, BY-AP-MW-17V, BY-AP-MW-20V, BY-AP-MW-23V, and BY-AP-MW-25V) and one horizontal delineation well (BY-AP-MW-25H) between March 25, 2020, and April 13, 2020.
- Advanced two Type III (double-cased) deep vertical delineation well borings (BY-AP-MW-12VM, and BY-AP-MW-15VM,) between March 28, 2020, and April 23, 2020. BY-AP-MW-12VM was abandoned and BY-AP-MW-15VM was installed as a water level only piezometer.
- Developed eight delineation wells and one piezometer between May 4, 2020, and May 19, 2020. Partial development via airlifting was also employed while the drilling team was on-site in March 2020.
- Sampled the eight delineation wells between June 15, 2020, and June 17, 2020.

6.2 NATURE AND ESTIMATED QUANTITY OF RELEASE

Part B of the Order requires collecting data on the nature and estimated quantity of material released. To collect data regarding the nature of the source and estimated quantity of material released leachability testing of 9 ash samples and sampling of ash pore-water at 3 locations was conducted. Leachability testing was conducted for EPA Resource and Recovery Act (RCRA) heavy metals, while ash pore-water was

sampled for all EPA Appendix III and IV constituents. Groundwater quality data is compared to source water and leachate composition to provide a basis for evaluating the degree to which the source area has contributed constituents to groundwater.

6.3 DISCUSSION OF DELINEATION RESULTS

Two phases of delineation investigation have been completed at the site and the horizontal and vertical delineation of Appendix IV SSLs arsenic and cobalt, is largely complete. Additional delineation to define the horizontal extent of arsenic occurrences to the south of the Ash Pond is not practical, as the extent is constrained by surface waters. Sufficient data has been collected for the assessment of corrective measures and to develop a groundwater corrective action plan. Cross-sections and isoconcentration maps have been included to convey horizontal and vertical spatial distribution of arsenic and cobalt concentrations.

Lithium was identified at vertical delineation well BY-AP-MW-7V on January 9, 2019, during delineation efforts for arsenic and cobalt. However, during the seven subsequent sampling events lithium in well BY-AP-MW-7V was not detected indicating that the initial occurrence of lithium was likely the result of sampling or analytical error. An additional re-sample was collected and the result for lithium was non-detect. Additional delineation is not required in the area of this delineation well at this time. Lithium was detected above GWPS in well BY-AP-MW-7 (0.0882 mg/L) for the first time during the first 2021 semi-annual groundwater sampling event but was below GWPS (0.04 mg/L) during the second 2021 and first 2022 semi-annual groundwater sampling events. Additionally, a lithium concentration of 0.0484 mg/l was detected at vertical delineation well BY-AP-MW-13V slightly above the GWPS for the first time during the second 2021 semi-annual groundwater sampling event. The lithium concentration in delineation well BY-AP-MW-13V was below GWPS during the May 2022 sampling event. Historically, lithium has been detected above GWPS one time in three Site wells (BY-AP-MW-7V, BY-AP-MW-7, and BY-AP-MW-13V).

Analytical results from horizontal and vertical delineation wells identified concentrations above GWPS of EPA Appendix IV constituents: arsenic and cobalt during the first semi-annual monitoring period of 2022.

Arsenic concentrations above GWPS were detected in five horizontal delineation wells and four vertical delineation wells. **Figure 7A, Arsenic Isoconcentration Map** illustrates the horizontal extent of arsenic impacts to groundwater. **Figure 8A, Arsenic Concentrations Along Geologic Cross Section A-A'** and **Figure 8B, Arsenic Concentrations Along Geologic Cross Section B-B'** illustrate the vertical extent of arsenic impacts to groundwater.

Cobalt concentrations above GWPS were detected in three vertical delineation wells. **Figure 7B, Cobalt Isoconcentration Map** illustrates the horizontal extent of cobalt. **Figure 9A, Cobalt Concentrations Along Geologic Cross Section A-A'** and **Figure 9B, Cobalt Concentrations Along Geologic Cross Section B-B'** illustrate the vertical extent of cobalt impacts to groundwater.

Isoconcentration lines shown on **Figures 7A** and **7B** are data-driven contours derived from the spatial distribution of constituent concentrations in the well network. When spatially distributed objects are correlated (i.e., objects close together with similar characteristics are compared), mathematical interpolation can be used to predict quantities between the objects. In this case, the Geostatistical Analyst tool within ArcGIS was utilized to interpolate constituent concentrations between well locations within the area where concentrations were above laboratory method detection limits.

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 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 SSLs 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**, 22 delineation wells and one piezometer have been installed at the site to assess horizontal and vertical potential impacts.

Compliance (assessment) monitoring and delineation sampling events have shown elevated arsenic and cobalt in the Watercourse Aquifer beneath the Site. Arsenic is the most widely distributed of these constituents and this spatial distribution generally mimics the groundwater flow direction across the Site as

shown on **Figure 6**. Groundwater flow can generally be described as from west to east across the Site with bends to the north and southeast conforming to the shape of the Mobile River. A truly radial flow pattern is not evident at the Site because the Ash Pond is directly underlain by a low permeability, organic clay of sufficient thickness to form an aquitard between the Ash Pond and underlying Watercourse Aquifer (Unit 1). While piezometric data (groundwater elevations) presented on potentiometric surfaces are generally above the base of ash this does not mean that ash is in direct communication with the Watercourse Aquifer because piezometric elevations (groundwater elevations) are representative of the potential head in wells tapping the aquifer not the vertical elevation in which groundwater occurs. Beneath the Ash Pond, the Unit 1 clay physically and hydraulically separates ash pore water and Watercourse Aquifer groundwater and therefore, constituent migration occurs slowly across the Unit 1 clay and is driven by higher hydraulic heads (vertical gradient) in the Ash Pond relative to the underlying Watercourse Aquifer.

Horizontal delineation efforts at the Site are restricted to a high degree by physical site conditions. Year-round wet conditions exist a short distance away from the base of the Ash Pond dike in many areas around the Ash Pond. Except for areas to the far north of the pond, all other areas are inaccessible during the wet season and during the timeframe it takes to dry out post-wet season. Vertical delineation efforts largely focused near the base of the Unit 3 sand and above the Unit 4 clays.

6.3.1 Arsenic Delineation

Sampling results from the 22 Phase I and Phase II delineation wells show that arsenic concentrations above the GWPS (0.01 mg/L) extend proximal to the river and include two horizontal delineation wells to the north (BY-AP-MW-17H and BY-AP-MW-18H), one horizontal delineation well (BY-AP-MW-20H) and three vertical delineation wells (BY-AP-MW-12V, BY-AP-MW-13V, and BY-AP-MW-20V) to the southeast, and two horizontal delineation wells (BY-AP-MW-22H and BY-AP-MW-24H) and one vertical delineation well (BY-AP-MW-15V) to the southwest of the Ash Pond in the direction of groundwater flow. In general, groundwater impacted by arsenic is distributed spatially into two lobes – (1) a smaller lobe that underlies the very northwestern corner of the Ash Pond and extends in the direction of groundwater flow north-northwest to the plant proper and (2) an eastern lobe that extends east of the Ash Pond.

These two lobes are separated by a north to north-northeast trending wedge of un-impacted groundwater water between the western boundary (between wells MW-1 and MW-5) and the northern boundary (between well pair MW-17H/17V and well MW-18H) as shown on **Figure 7A**. It is not understood exactly why this wedge exists, but wells within this area also display different geochemical facies than surrounding

downgradient wells (calcium-chloride to sodium-chloride water vs calcium-magnesium bicarbonate to calcium-sodium bicarbonate water).

Arsenic concentrations over the GWPS did not extend to any of the vertical delineation wells (BY-AP-MW-5V, BY-AP-MW-7V, BY-AP-MW-8V, BY-AP-MW-17V, BY-AP-MW-23V, and BY-AP-MW-25V) and horizontal delineation well BY-AP-MW-23H, located to the north, northwest, or northeast of the Ash Pond. Horizontal delineation well BY-AP-MW-25H and vertical delineation well BY-AP-MW-25V were installed to define the extent of arsenic impacts to the west of BY-AP-MW-17H/V and northwest of BY-AP-MW-5 and have historically been non-detect (**Appendix A** and **Figure 7A**). Arsenic concentrations over the GWPS did not extend to delineation wells BY-AP-MW-10V and BY-AP-MW-19H to the northeast, BY-AP-MW-14V to the southeast, or BY-AP-MW-16V, BY-AP-MW-1V, and BY-AP-MW-5V to the west. (**Figures 8A and 8B**).

Arsenic concentrations exceed the GWPS in horizontal delineation wells BY-AP-MW-17H and BY-AP-MW-18H located at the property boundary (Mobile River) northwest and northeast of the Ash Pond. Arsenic concentrations exceed the GWPS in horizontal delineation wells BY-AP-MW-20H, BY-AP-MW-22H and BY-AP-MW-24 located southeast and southwest of the Ash Pond. To the southeast, south, and southwest of the Site, horizontal delineation wells could not be installed proximal to the property boundary due to wet or unsafe access conditions.

Vertically, arsenic concentrations are delineated within the Unit 3 sands. Arsenic concentrations were detected above the GWPS in one well, BY-AP-MW-15V, southwest of the Ash Pond and three wells, BY-AP-MW-12V, BY-AP-MW-13V, and BY-AP-MW-20V, located along the southeast side of the Ash Pond, respectively.

Figure 8A, depicts the spatial extent of arsenic SSLs along the “western dike”. The general spatial pattern matches the interpretation of groundwater flow at the Site. SSLs are observed to the northwest along section A-A’ and near the middle of the Ash Pond dike extending southwest. These impacts are observed where groundwater elevation contours bend semi-radially to the northwest and southeast to conform to the geometry of the Mobile River and obliquely cross the western dike.

To the northwest, arsenic impacts to groundwater historically begin near well BY-AP-MW-5 and extend to delineation well BY-AP-MW-17H. Arsenic concentrations over the GWPS previously observed in the vicinity of BY-AP-MW-5 extend down to approximately -50 ft MSL and are delineated vertically downward to base of Unit 3 as observed in BY-AP-MW-5V and BY-AP-MW-17V. To the southwest,

arsenic impacts initially are confined to sands of Unit 2 near BY-AP-MW-1 but slope down to the base of Unit 3 near well BY-AP-MW-15V and are delineated vertically with the installation of BY-AP-MW-15VM.

Phase II delineation location BY-AP-MW-15VM was designated as a water-level only piezometer. This location appears separated from the Watercourse Aquifer (Unit 2/3 sands) by a lower confining layer (Unit 4) of sufficient thickness to justify water level-only monitoring. BY-AP-MW-15VM encountered greater than 20 feet of the Unit 4 clays and demonstrates a groundwater elevation difference of 1.79 feet from paired Watercourse Aquifer well BY-AP-MW-15. The groundwater elevation observed in well BY-AP-MW-15VM also indicates an upward vertical gradient (i.e., groundwater flowing upwards), providing further support for a piezometer designation.

Figure 8B, depicts arsenic concentrations proximal to the eastern margin of the site following the same geometry as the Mobile River. In general, **Figure 8B** shows that arsenic SSLs in groundwater are generally contained within the Unit 3 sands with maybe some limited impacts to the very base of Unit 2. Arsenic impacts do not extend to the base of Unit 3 near BY-AP-MW-8V, BY-AP-MW-10V, or BY-AP-MW-14V.

Arsenic concentrations that do extend down to the base of Unit 3 as shown on **Figures 8A** and **8B** are confined by Unit 4 which displays sufficient clay thickness and low hydraulic conductivity (ranging from 1.15×10^{-7} cm/sec to 3.76×10^{-8} cm/sec) to serve as a lower confining unit. A piezometer (BY-AP-MW-15VM) installed in Unit 5 sands (Miocene) also displays an upward hydraulic gradient which prohibits downward vertical migration.

6.3.2 Cobalt Delineation

Delineation results show that cobalt concentrations above the GWPS are limited to small, localized areas northwest (BY-AP-MW-17V) southwest (BY-AP-MW-15V) and southeast (BY-AP-MW-20V) of the Ash Pond. Compliance wells BY-AP-MW-7 and BY-AP-MW-15 located along the southwest side of the Ash Pond exhibited cobalt above the GWPS. However, paired vertical delineation well BY-AP-MW-7V does not exhibit a cobalt concentration above GWPS (**Figure 7B**).

Cobalt concentrations over the GWPS do not extend to BY-AP-MW-8/8V, BY-AP-MW-23H/V, and BY-AP-MW-25H/V to the north, BY-AP-MW-1/1V and BY-AP-MW-5/5V to the west, BY-AP-MW-16/16V to the southwest, BY-AP-MW-10/10V and BY-AP-MW-12/12V to the east, BY-AP-MW-13/13V and BY-AP-MW-14/14V to the southeast, or BY-AP-MW-22H to the south of BY-AP-MW-15.

Vertically, cobalt concentrations above the GWPS are delineated within the Unit 3 sands and extend to the base of Unit 3 sands at vertical delineation wells BY-AP-MW-17V to the north of the ash pond, BY-AP-MW-15V along the southwest side of the Ash Pond, and BY-AP-MW-20V along the southeast side of the Ash Pond. The cobalt concentration in vertical delineation well BY-AP-MW-16V was below GWPS during the first 2022 semi-annual sampling event and has exceeded GWPS two times both during the fall sampling events.

No other vertical wells at the Site returned cobalt concentrations above the GWPS. Vertically, cobalt concentrations are delineated as defined by the previously discussed; thickness of the Unit 4 clay provides sufficient vertical separation between the Unit 3 aquifer and deeper Miocene sand units, permeameter testing values ranging from 1.15×10^{-7} cm/sec to 3.76×10^{-8} cm/sec, and calculated groundwater elevations indicating an upward vertical gradient.

Cobalt has effectively been delineated at the Site and was not detected in ash pore-water samples. This, combined with the isolated occurrences of cobalt over GWPS, indicates potential for a natural source either driven by minor changes in lithology or changes in geochemistry. As shown on **Figure 7B** and **Figures 9A** and **9B**, cobalt exceedances typically occur at greater depths within Unit 3 where the lithology can change (more gravel) and geochemistry changes to a more favorable environment for cobalt mobilization. Cobalt occurrences over the GWPS will be thoroughly evaluated for an alternate source.

6.4 STATUS OF DELINEATION

A plan was executed to investigate potential impacts to groundwater at the Plant Barry ash pond. Two phases of delineation investigation have been completed at the site and the horizontal and vertical delineation of Appendix IV SSLs arsenic and cobalt, is largely complete. Additional delineation to define the horizontal extent of arsenic occurrences to the south of the Ash Pond is not practical, as the extent is constrained by surface waters. Additional vertical delineation of Unit 4 clays confirmed thicknesses of greater than 20 feet and vertical hydraulic conductivity (K_z) values ranging from 5.91×10^{-7} cm/sec to 2.16×10^{-8} cm/sec (1.7×10^{-3} ft/d to 6.1×10^{-5} ft/d), demonstrated that Unit 4 clays do display sufficiently low permeability to be considered confining.

6.5 GROUNDWATER REMEDY AND CORRECTIVE ACTION

An Assessment of Corrective Measures (ACM) for groundwater impacts was conducted and formally submitted to ADEM in June 2019. 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	06/2019	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.

6.5.1 Groundwater Remedy Selection

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

- Source control to include dewatering, consolidation, and capping of the Site.
- Geochemical manipulation via injections in areas of relatively high concentrations of COI to remove them from groundwater and immobilize them in situ.
- Monitored natural attenuation (MNA) over the entire Site.

Closure of the CCR Unit — including dewatering, consolidation, and capping will greatly reduce source contributions to groundwater. Geochemical manipulation 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 no byproducts that would require further treatment or disposal. MNA was selected because substantial evidence indicates that it is currently occurring at the Site.

6.5.2 Corrective Action – Groundwater Monitoring Program

The Corrective Action Groundwater Monitoring Program describes early plans for implementation and monitoring of groundwater remedies described above. The Corrective Action Groundwater Monitoring Program will be performed at the Site in two stages.

- Stage 1 will include ongoing compliance monitoring, remedial effectiveness monitoring for geochemical manipulation (injection treatment) pilot studies, MNA performance monitoring, sentinel/clean-line monitoring (including surface water monitoring), and demonstration that Site conditions remain protective of potential human and ecological receptors. Prompt action will be taken should data or data trends indicate such actions are warranted.
- Stage 2 monitoring will be implemented upon Site closure, with the first 2 years of Stage 2 monitoring consisting of background data collection to serve as a baseline. Stage 2 monitoring will be composed of ongoing compliance monitoring, additional wells or sampling locations as needed to evaluate remedy effectiveness, additional MNA parameters as needed, mass and mass flux calculations, additional monitoring associated with permeation grouting (if implemented), re-evaluation of natural attenuation processes and efficacy every 10 years, and demonstration that Site conditions remain protective of potential human and ecological receptors.

Stage 1

The initial phase of Stage 1 has implementation tasks associated with each selected groundwater remedy that serve as a foundation for the remainder of Stage 1 and Stage 2:

Selected Remedy	Implementation Task(s)
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 (COIs) 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.
Source Control/Closure Activities	1. Evaluation of geochemical changes in groundwater with respect to transient closure activities (excavation, de-watering, etc.). 2. Implementation of field data collection instruments/telemetry within key monitoring wells to further understand the nature of geochemical changes over time and with respect to closure activities and MNA/geochemical modelling.

Implementation of Monitored Natural Attenuation

MNA sampling parameters were added to the sampling plans and analyzed in the laboratory during the May 2022 sampling event (Table 6). These parameters in addition to field parameters, Appendix III, and Appendix IV parameters are utilized to study the processes that govern or facilitate MNA as well as changes in geochemical conditions. Parameters will be included into 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. The Laboratory Treatability Study Work Plan is presented in **Appendix F**. 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 to carry forward to 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 outlined as:

- Aquifer solids (soils) and groundwater sample collection from the selected pilot test areas – First and Second quarters of 2022 (complete).
- Laboratory batch and column testing, and selective sequential extraction of treated soil – Third and Fourth quarters of 2022 (in progress).
- Underground Injection Permit application – Fourth quarter 2022 to Second quarter 2023.
- Geochemical Injection Pilot Program – TBD, pending requisite documents and approvals supporting the injection program.

To facilitate further understanding of trends and correlating relationships, AquaTROLL instrumentation is being utilized at select key Site observation and monitoring well locations for the near continuous monitoring of field parameters. This additional data will allow for a better understanding of the degree of changes driven by dewatering and construction closure activities, the response of site flow systems, and possible correlations/changes noted in semi-annual monitoring data.

AquaTROLL instrumentation was installed during the 1st quarter of 2022 in previous dewatering pilot testing observation wells at the following locations along the northeast and northwest sides of the ash pond in the areas of closure construction are occurring:

- PRW-E1
- APT-OB-ED1S
- APT-OB-ED2D
- BY-AP-PZ-8
- APT-OB-WD1S
- APT-OB-WD1D
- APT-OB-WD3S
- APT-OB-WD3D

6.5.3 Groundwater Quality Changes and Trends

Important groundwater quality changes or trends have been noted in **Section 6.3**. The key findings include:

- Arsenic concentrations in horizontal delineation well BY-AP-MW-23H were below GWPS during the second 2021 and first 2022 sampling events and have continued to decrease since the September 2020 sampling event.
- Vertical delineation well BY-AP-MW-13V exhibited an arsenic concentration (0.0102 mg/L) slightly above GWPS for the second time during the first 2022 sampling event.
- Arsenic was not detected above GWPS in any vertical delineation wells located north, northeast, northwest, or west of the ash pond.

- Cobalt concentrations in vertical delineation well BY-AP-MW-16V decreased to below GWPS during the first 2022 sampling event and have exhibited a seasonal trend of fluctuating concentrations above GWPS to below GWPS over the last five sampling events.
- Cobalt concentrations in compliance well BY-AP-MW-4 were below GWPS during the second 2021 and first 2022 sampling events. BY-AP-MW-4 has exhibited a cobalt concentration above GWPS in only two of eighteen sampling events.
- Cobalt concentrations were detected above GWPS in only two compliance wells and three vertical delineation wells during the first 2022 semi-annual sampling event.
- Lithium concentrations were not detected in any monitoring wells above GWPS during the first 2022 sampling event.
- Historically, lithium has been detected above GWPS one time in three Site wells BY-AP-MW-7V (January 2019), BY-AP-MW-7 (May 2021), and BY-AP-MW-13V (October 2021).

Groundwater quality changes and/or trends are related to closure construction activities and will continue to be observed throughout the closure process. Many of the trends appear to be associated with the ash pond closure activities - namely the halt to sluicing and ash dewatering. Trends and groundwater quality changes will continue to be monitored throughout closure to evaluate assessment needs and to better inform groundwater remedy plans.

7.0 SUMMARY AND CONCLUSIONS

The first semi-annual assessment monitoring event was conducted in May 2022. Statistical evaluations of the assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS. To address previously identified SSLs, 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.

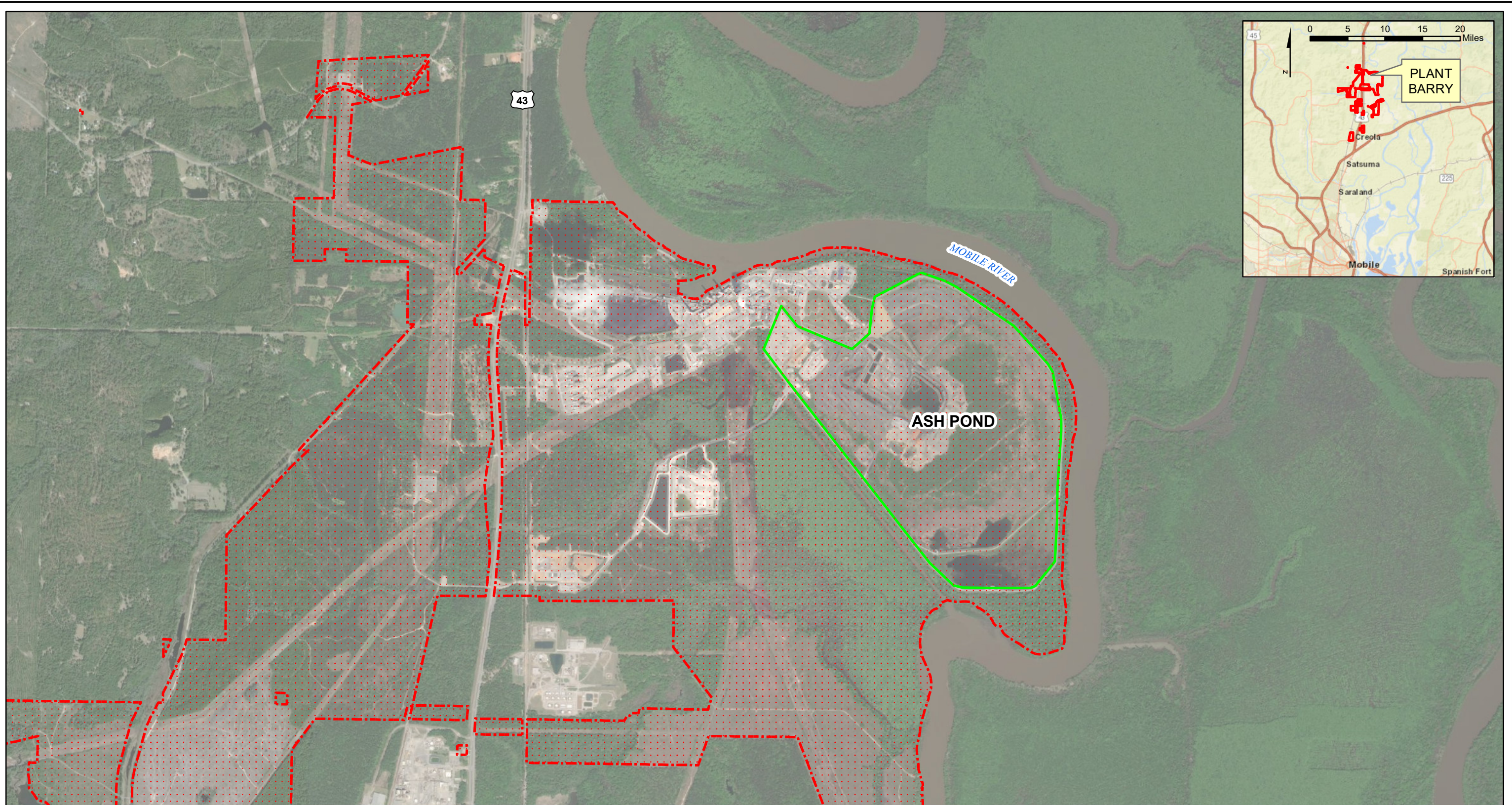
The following future actions will be taken or are recommended for the site:



- Conduct batch testing to evaluate removal of COIs, and selection of the optimum reagents and doses for column tests.
- Conduct column testing to evaluate removal of COIs 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 COIs 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 COIs and their host solids.
- After treatment, the post-column (treated) soils will be leached with upgradient (background) groundwater from the respective plant in additional column studies, to help assess long-term stability of the COIs and their host solids.
- Prepare Class V UIC permit.
- Conduct the second semi-annual assessment monitoring event in the fall of 2022 and submit the annual groundwater monitoring and corrective action report summarizing the findings to ADEM by January 31, 2023.

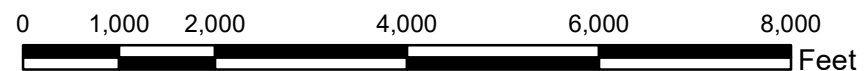
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Figures



- Legend**
-  Property Boundary (Approximate)
 -  Ash Pond Boundary

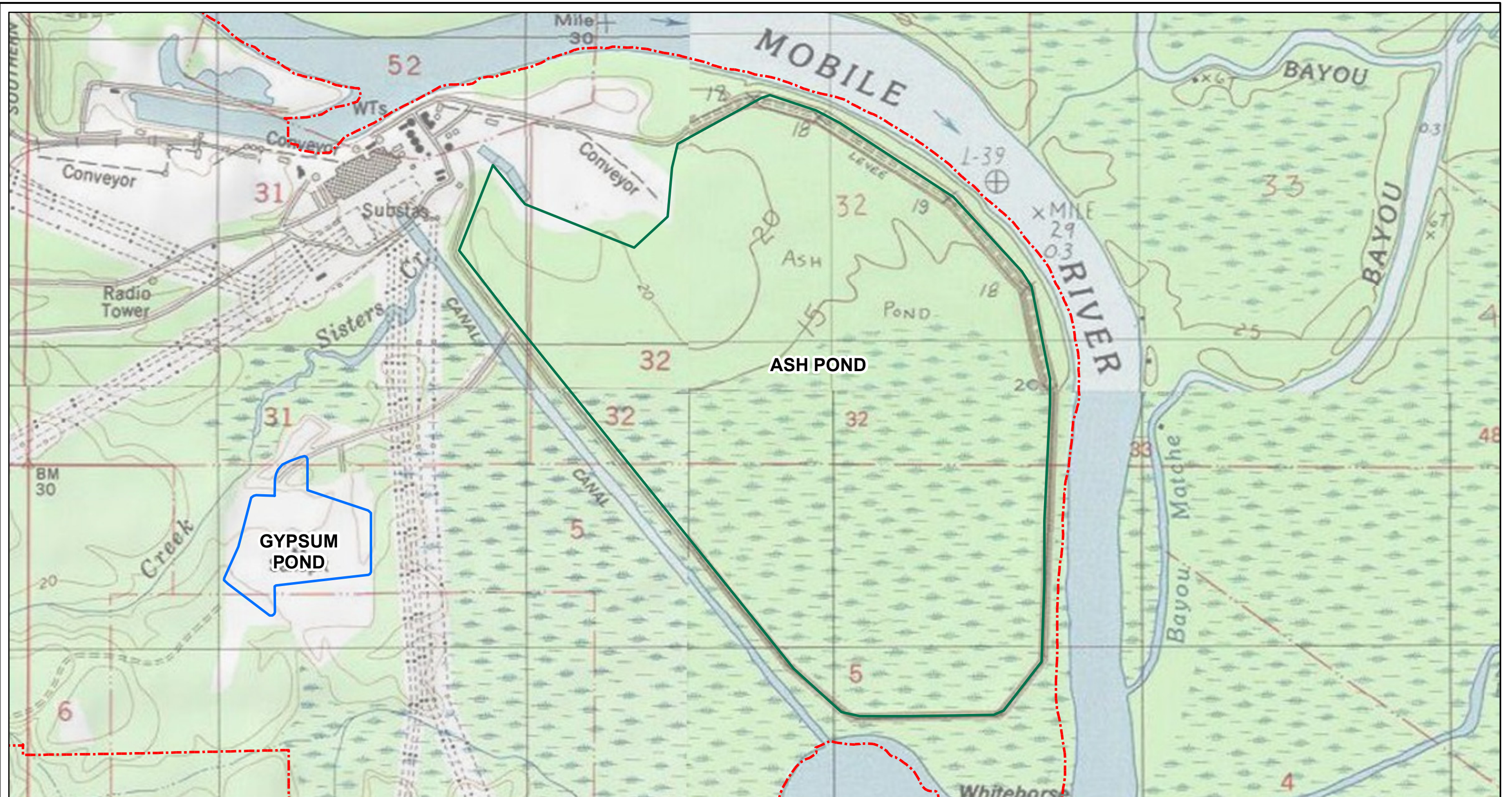


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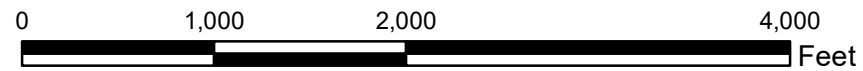
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**SITE LOCATION MAP
 PLANT BARRY ASH POND**

FIGURE NO
FIGURE 1






- Legend**
- Property Boundary (Approximate)
 - Ash Pond Boundary
 - Gypsum Pond Boundary

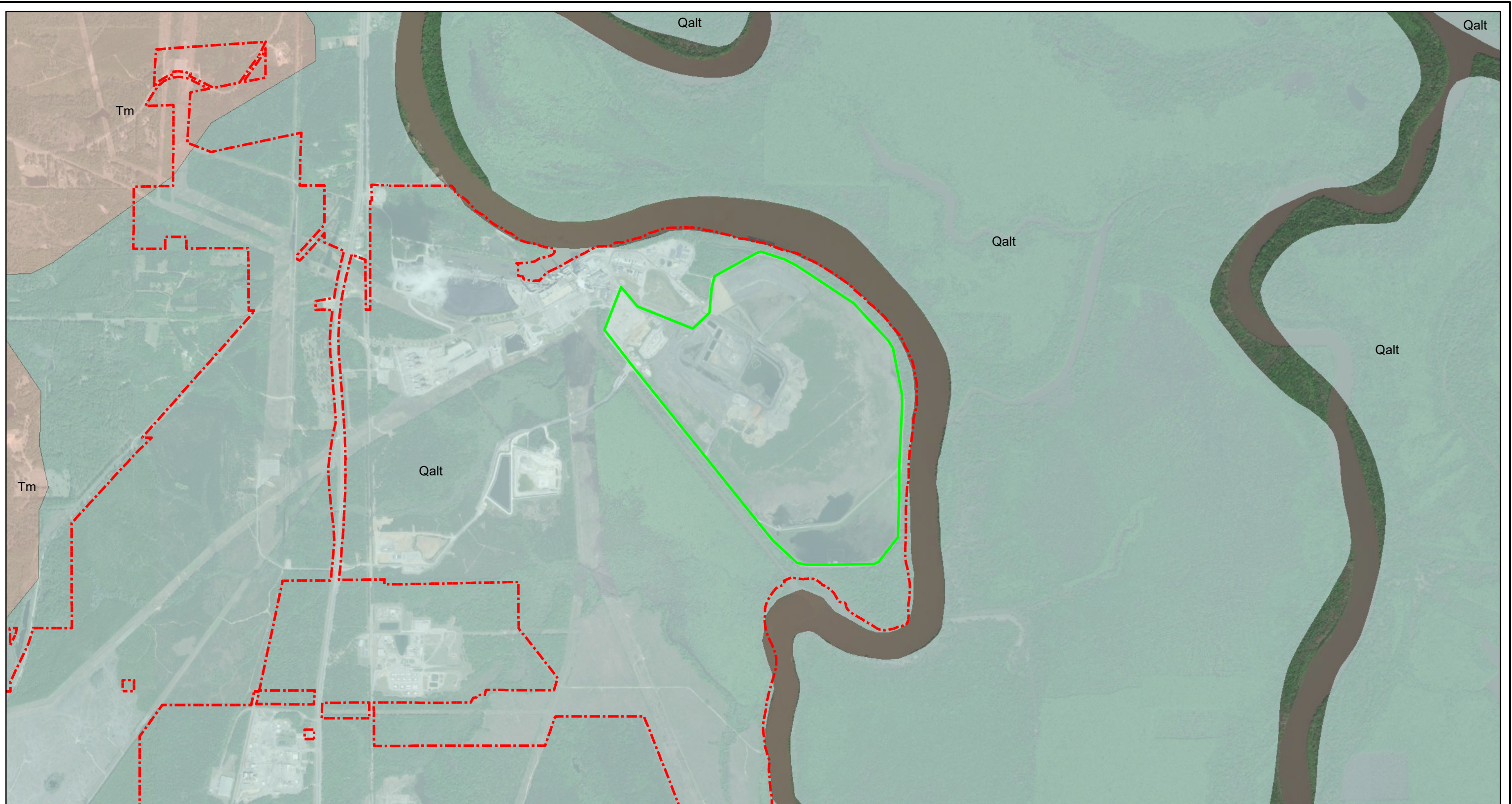


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**SITE TOPOGRAPHIC MAP
 PLANT BARRY ASH POND**

FIGURE NO
FIGURE 2



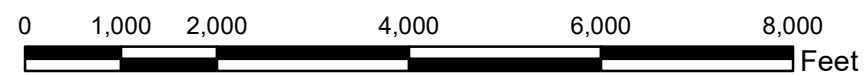


Legend

- Ash Pond Boundary
- Property Boundary (Approximate)

Geologic Units

- Alluvial, coastal, and low terrace deposits (Qalt)
- Miocene Series undifferentiated (Tm)



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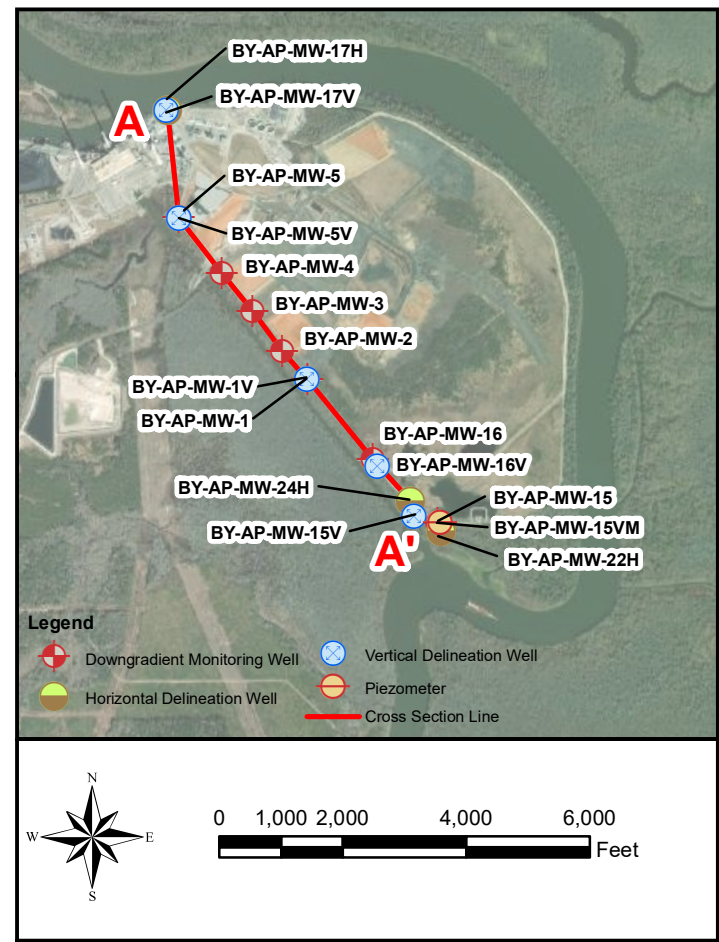
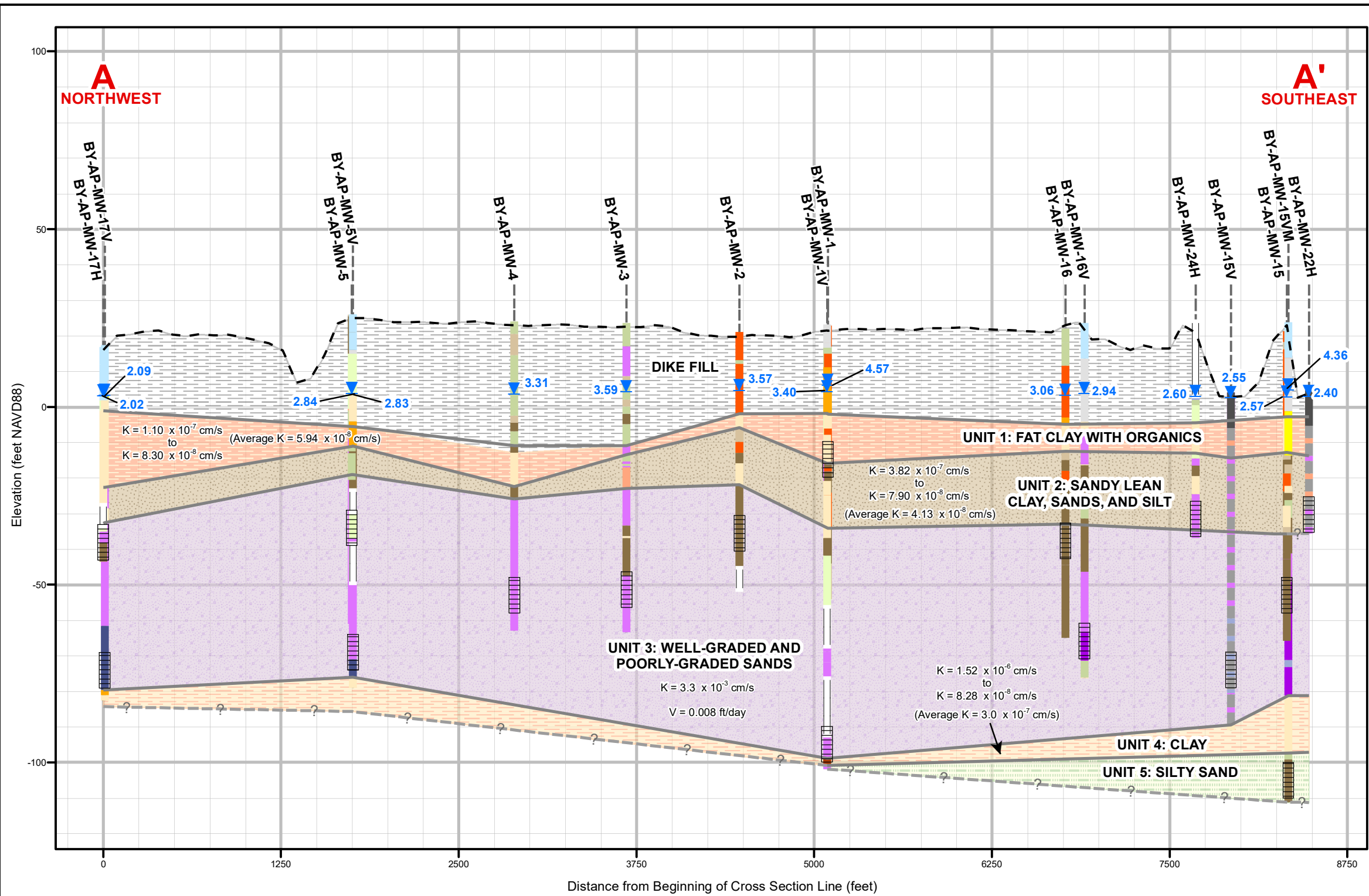
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**SITE GEOLOGIC MAP
PLANT BARRY ASH POND**

FIGURE NO

FIGURE 3

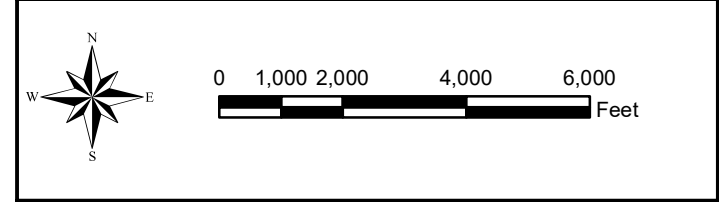
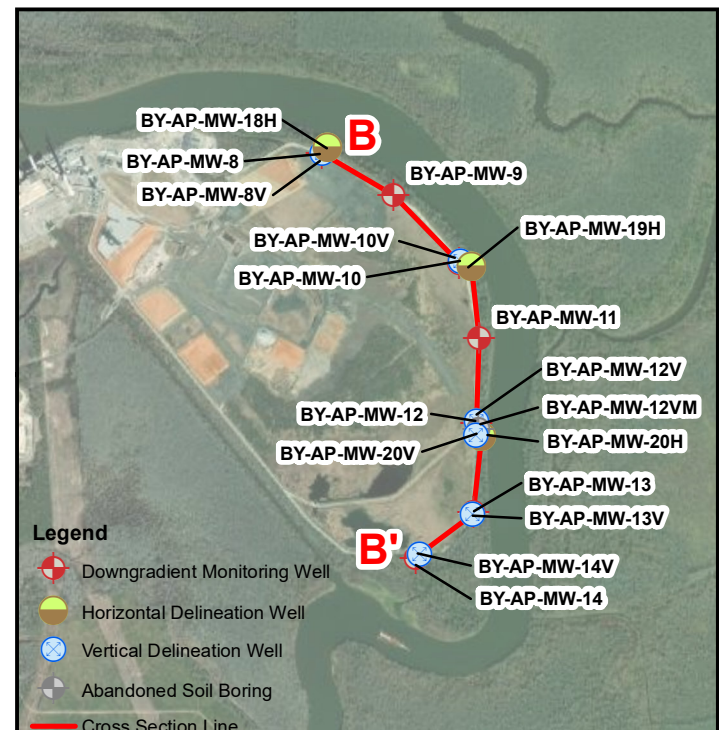
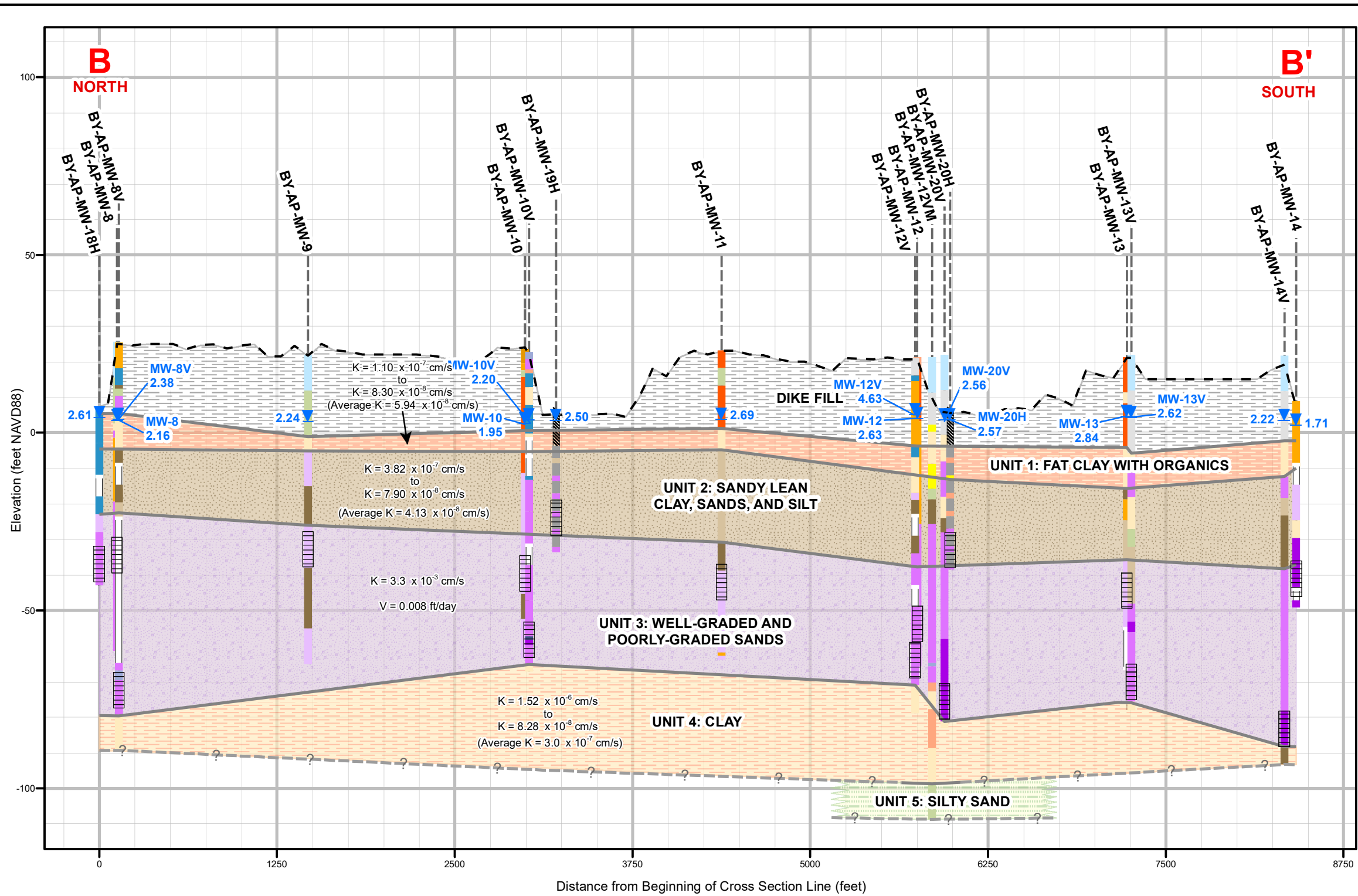




- Notes:
1. Source of ground surface elevation data: Lidar
 2. NAVD88 indicates North American Vertical Datum of 1988.
 3. Groundwater elevations were measured on May 23, 2022.
 4. K indicates hydraulic conductivity.
 5. Units 1, 2, and 4 hydraulic conductivity calculated from Shelby tube permeameter testing on undisturbed soil samples.
 6. Unit 3 hydraulic conductivity calculated from long duration pumping test data.
 7. V indicates groundwater flow velocity.
 8. NM indicates not measured.
 9. Vertical exaggeration: 25x.

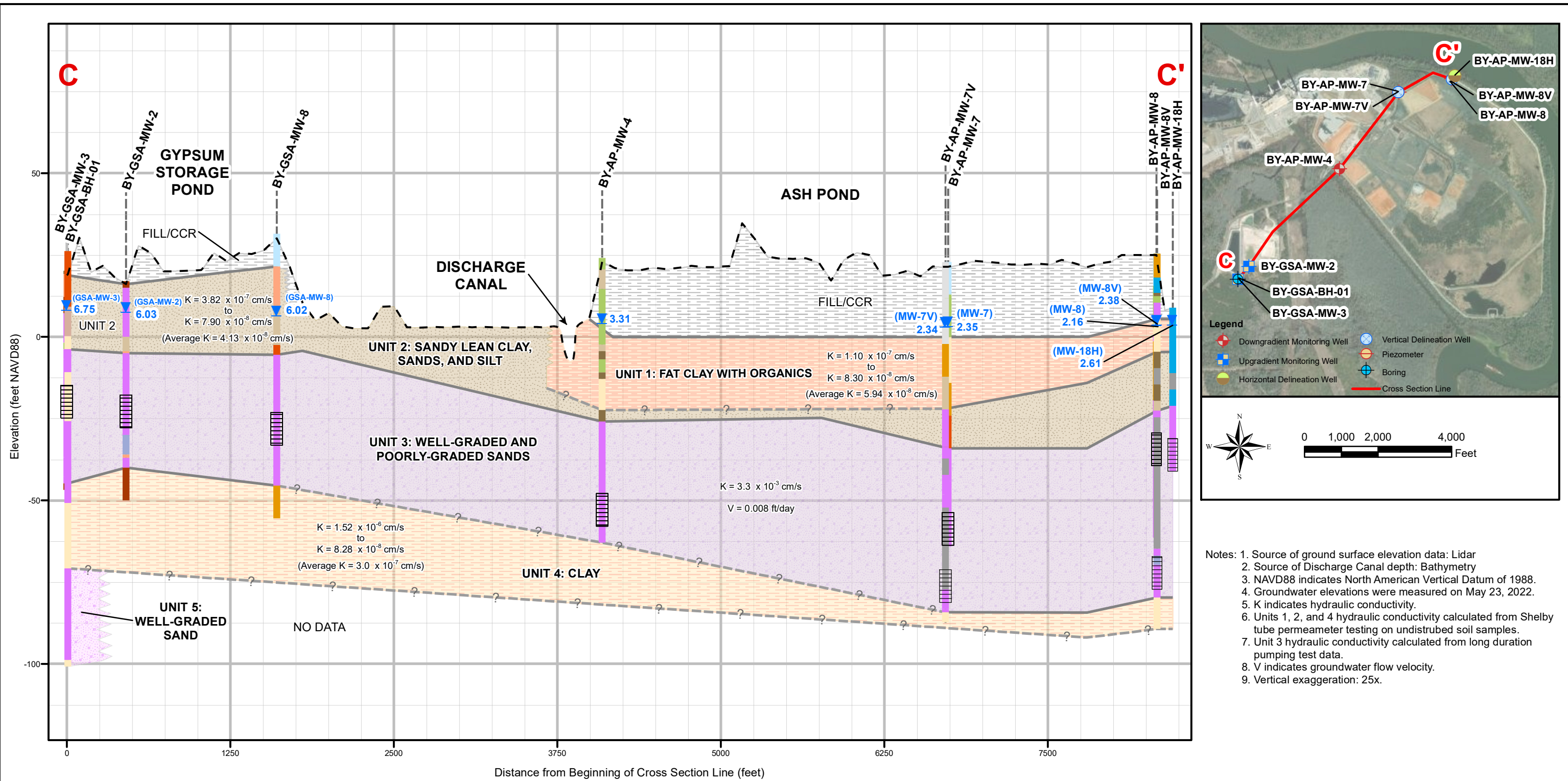
Legend		Borehole Description		Geologic Unit	
	Groundwater Elevation		Hydroexcavation		Unit 1: Fat Clay with Organics
	Well Location		Hand Auger		Unit 2: Sandy Lean Clay, Sands, and Silt
	Ground Surface Elevation		No Data		Unit 3: Well-graded and Poorly-graded Sands
	Screen Interval		No Recovery		Unit 4: Clay
	Unit Boundary (inferred)		Fill		Unit 5: Silty Sand
	Unit Boundary		Organic Soil		Well-graded and Poorly-graded Sands
			Fat Clay		Well-graded Gravelly Sand
			Lean Clay		Well-graded Gravel with Sand and/or Silt
			Silty Sand		Fill
			Sandy Fat Clay		Unit 1: Fat Clay with Organics
			Sandy Lean Clay		Unit 2: Sandy Lean Clay, Sands, and Silt
			Gravelly Fat Clay		Unit 3: Well-graded and Poorly-graded Sands
			Silt		Unit 4: Clay
			Sandy Silt		Unit 5: Silty Sand
			Clayey Sand		
			Silty Sand		

SCALE	As Shown	DRAWING TITLE
DATE	7/27/2022	
DRAWN BY	KAR	
CHECKED BY	GFB	FIGURE NO
		FIGURE 4A



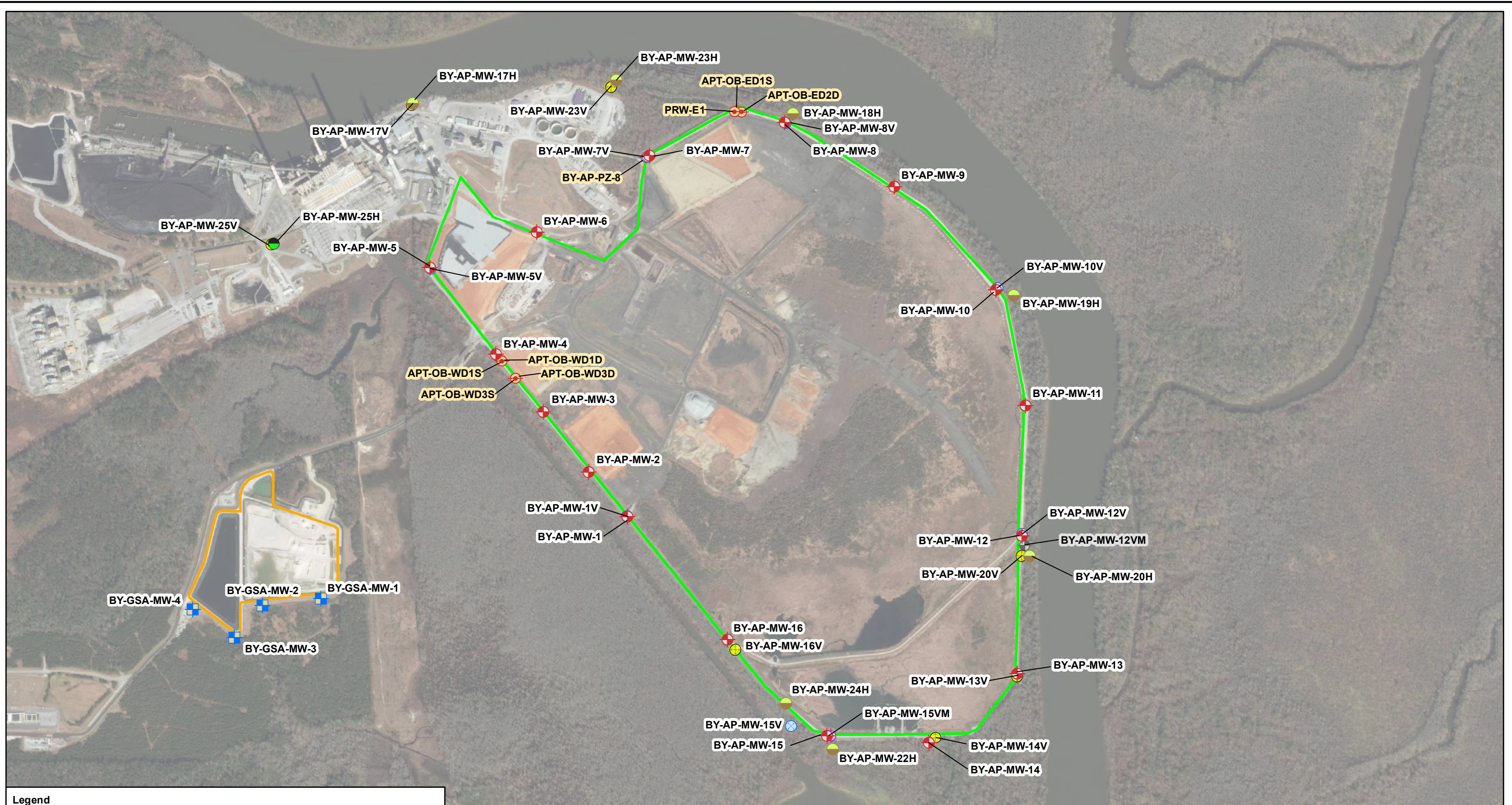
- Notes:
1. Source of ground surface elevation data: Lidar
 2. NAVD88 indicates North American Vertical Datum of 1988.
 3. Groundwater elevations were measured on May 23, 2022.
 4. K indicates hydraulic conductivity.
 5. Units 1, 2, and 4 hydraulic conductivity calculated from Shelby tube permeameter testing on undisturbed soil samples.
 6. Unit 3 hydraulic conductivity calculated from long duration pumping test data.
 7. V indicates groundwater flow velocity.
 8. Vertical exaggeration: 25x.

Legend		Borehole Description		Geologic Unit		SCALE	DRAWING TITLE
	Well Location		Hydroexcavation		Silty Clay	As Shown	GEOLOGIC CROSS SECTION B - B' PLANT BARRY ASH POND
	Ground Surface Elevation		Hand Auger		Sandy Fat Clay	DATE	
	Screen Interval		No Data		Sandy Lean Clay	7/27/2022	
	Unit Boundary (inferred)		No Recovery		Silt	DRAWN BY	FIGURE NO FIGURE 4B
	Unit Boundary		Fill		Sandy Silt	KAR	
	Groundwater Elevation		Fat Clay		Clayey Sandy	CHECKED BY	
			Lean Clay		Silty Sand	GFB	
			Well-graded and Poorly-graded Sand with Silt		Well-graded Gravelly Sand		
			Well-graded and Poorly-graded Sand with Silt		Well-graded and Poorly-graded Gravels		
			Well-graded and Poorly-graded Sand with Silt		Well-graded Gravel with Sand and/or Silt		
			Fill		Unit 1: Fat Clay with Organics		
			Unit 2: Sandy Lean Clay, Sands, and Silt		Unit 3: Well-graded and Poorly-graded Sands		
			Unit 4: Clay		Unit 5: Silty Sand		



- Notes:
1. Source of ground surface elevation data: Lidar
 2. Source of Discharge Canal depth: Bathymetry
 3. NAVD88 indicates North American Vertical Datum of 1988.
 4. Groundwater elevations were measured on May 23, 2022.
 5. K indicates hydraulic conductivity.
 6. Units 1, 2, and 4 hydraulic conductivity calculated from Shelby tube permeameter testing on undisturbed soil samples.
 7. Unit 3 hydraulic conductivity calculated from long duration pumping test data.
 8. V indicates groundwater flow velocity.
 9. Vertical exaggeration: 25x.

Legend 		SCALE As Shown DATE 7/27/2022 DRAWN BY KAR CHECKED BY GFB	DRAWING TITLE GEOLOGIC CROSS SECTION C - C' PLANT BARRY ASH POND FIGURE NO FIGURE 4C	
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Legend	
	Downgradient Monitoring Well
	Upgradient Monitoring Well
	Phase I Horizontal Delineation Monitoring Well
	Phase I Vertical Delineation Monitoring Well
	Phase II Horizontal Delineation Monitoring Well
	Phase II Vertical Delineation Monitoring Well
	Phase II Piezometer (Miocene Series)
	Abandoned Soil Boring
	Groundwater Field Parameters Instrumentation Observation Well Locations
	Ash Pond Boundary
	Gypsum Pond Boundary

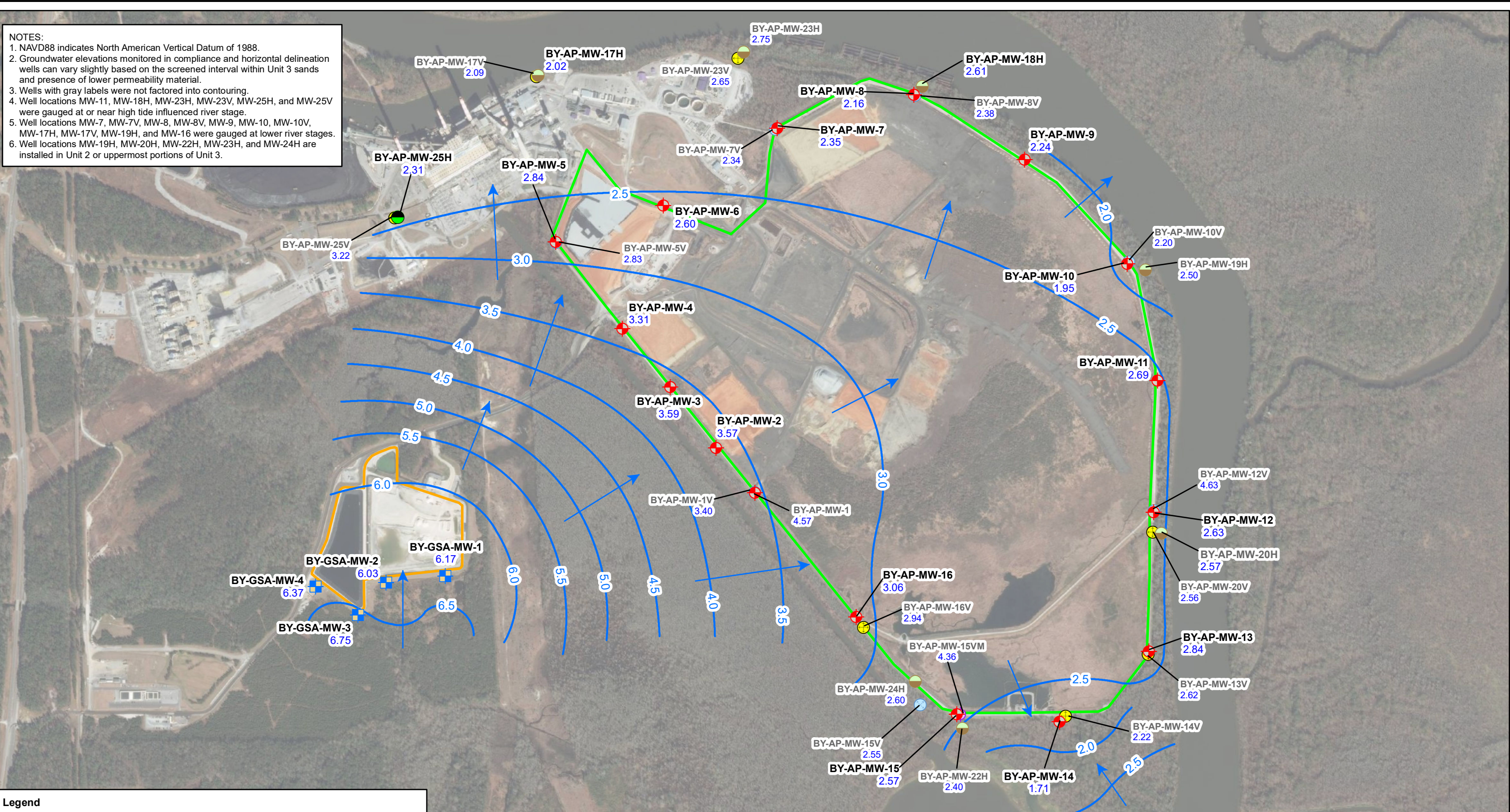


SCALE	1:12000
DATE	7/26/2022
DRAWN BY	KAR
CHECKED BY	GFB

DRAWING TITLE	
MONITORING WELL LOCATION MAP PLANT BARRY ASH POND	
FIGURE NO	FIGURE 5
Southern Company	

NOTES:

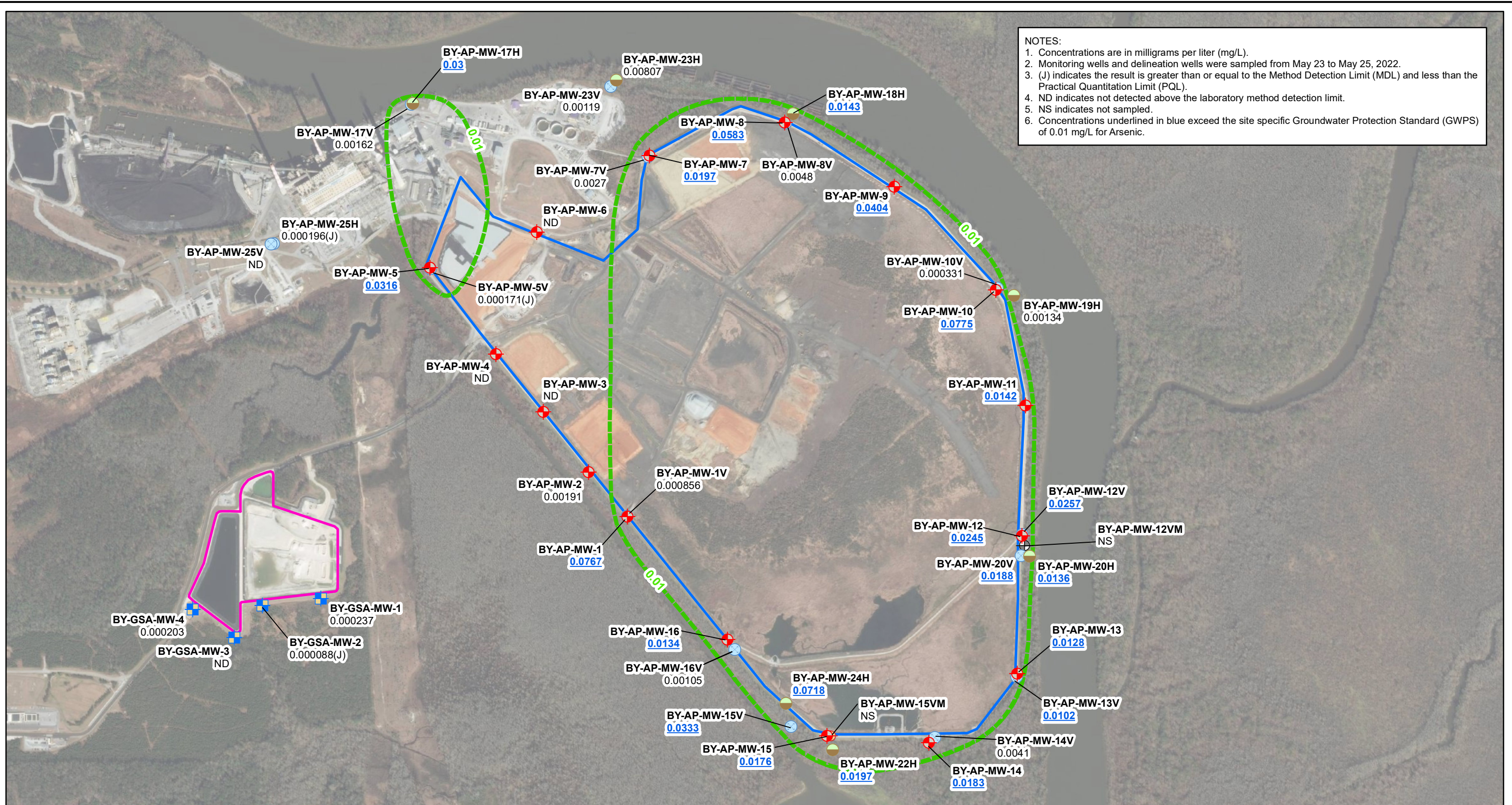
1. NAVD88 indicates North American Vertical Datum of 1988.
2. Groundwater elevations monitored in compliance and horizontal delineation wells can vary slightly based on the screened interval within Unit 3 sands and presence of lower permeability material.
3. Wells with gray labels were not factored into contouring.
4. Well locations MW-11, MW-18H, MW-23H, MW-23V, MW-25H, and MW-25V were gauged at or near high tide influenced river stage.
5. Well locations MW-7, MW-7V, MW-8, MW-8V, MW-9, MW-10, MW-10V, MW-17H, MW-17V, MW-19H, and MW-16 were gauged at lower river stages.
6. Well locations MW-19H, MW-20H, MW-22H, MW-23H, and MW-24H are installed in Unit 2 or uppermost portions of Unit 3.



- Legend**
- Downgradient Monitoring Well
 - Upgradient Monitoring Well
 - Phase I Horizontal Delineation Well
 - Phase I Vertical Delineation Well
 - Phase II Horizontal Delineation Well
 - Phase II Vertical Delineation Well
 - Phase II Piezometer (Miocene Series)
 - Potentiometric Surface Contour (ft NAVD88)
 - Approximate Groundwater Flow Direction
 - Ash Pond Boundary
 - Gypsum Pond Boundary
- BY-AP-MW-1** Well ID
4.57 Groundwater Elevation (ft NAVD88)



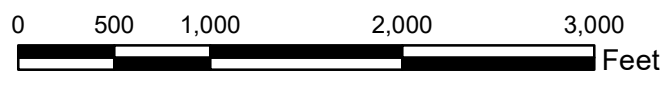
SCALE	1:12000	DRAWING TITLE	POTENTIOMETRIC SURFACE CONTOUR MAP MAY 23, 2022 PLANT BARRY ASH POND
DATE	7/28/2022		
DRAWN BY	KAR/KWR	FIGURE NO	FIGURE 6
CHECKED BY	GBD		
		Southern Company	



NOTES:
 1. Concentrations are in milligrams per liter (mg/L).
 2. Monitoring wells and delineation wells were sampled from May 23 to May 25, 2022.
 3. (J) indicates the result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL).
 4. ND indicates not detected above the laboratory method detection limit.
 5. NS indicates not sampled.
 6. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.01 mg/L for Arsenic.

Legend

- Arsenic GWPS (mg/L)
- Ash Pond Boundary
- Gypsum Pond Boundary
- ⊕ Downgradient Monitoring Well
- ⊕ Upgradient Monitoring Well
- Horizontal Delineation
- ⊗ Vertical Delineation Well
- Piezometer
- ⊕ Abandoned Soil Boring



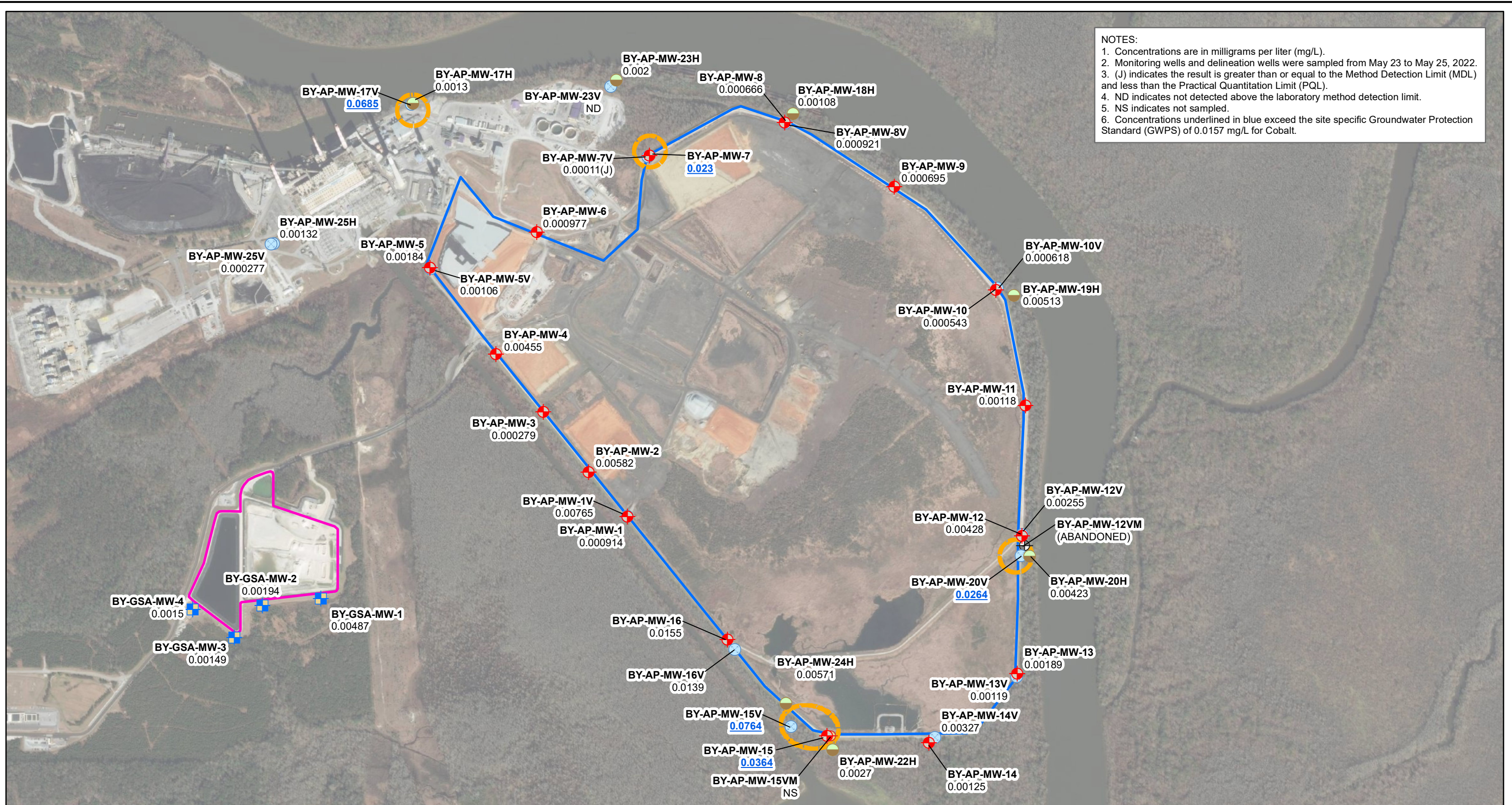
SCALE	1:12000
DATE	7/14/2022
DRAWN BY	KAR
CHECKED BY	GFB

DRAWING TITLE

ARSENIC ISOCONCENTRATION MAP PLANT BARRY ASH POND

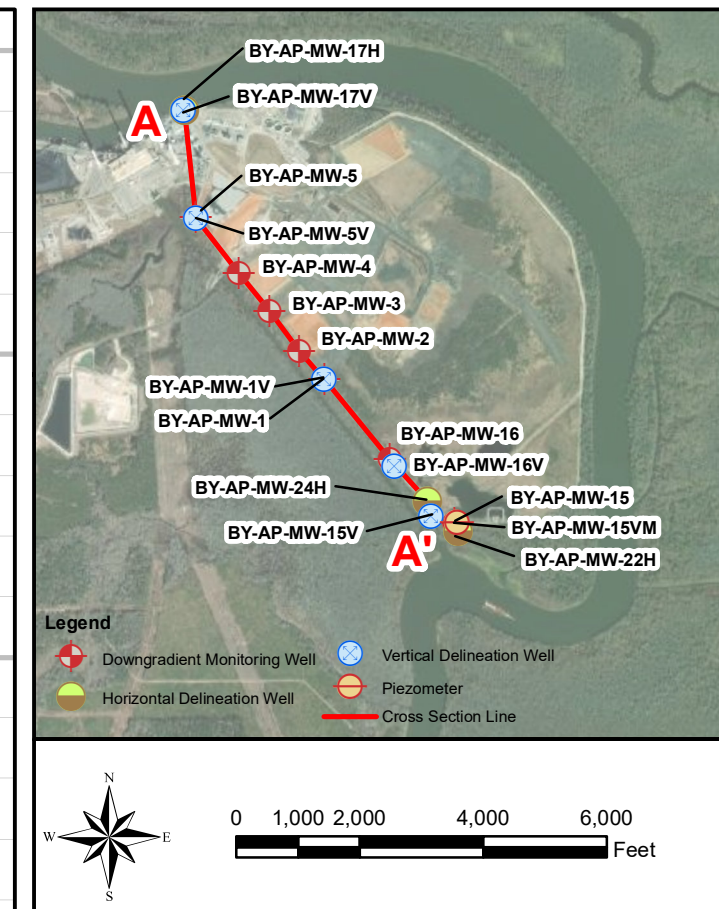
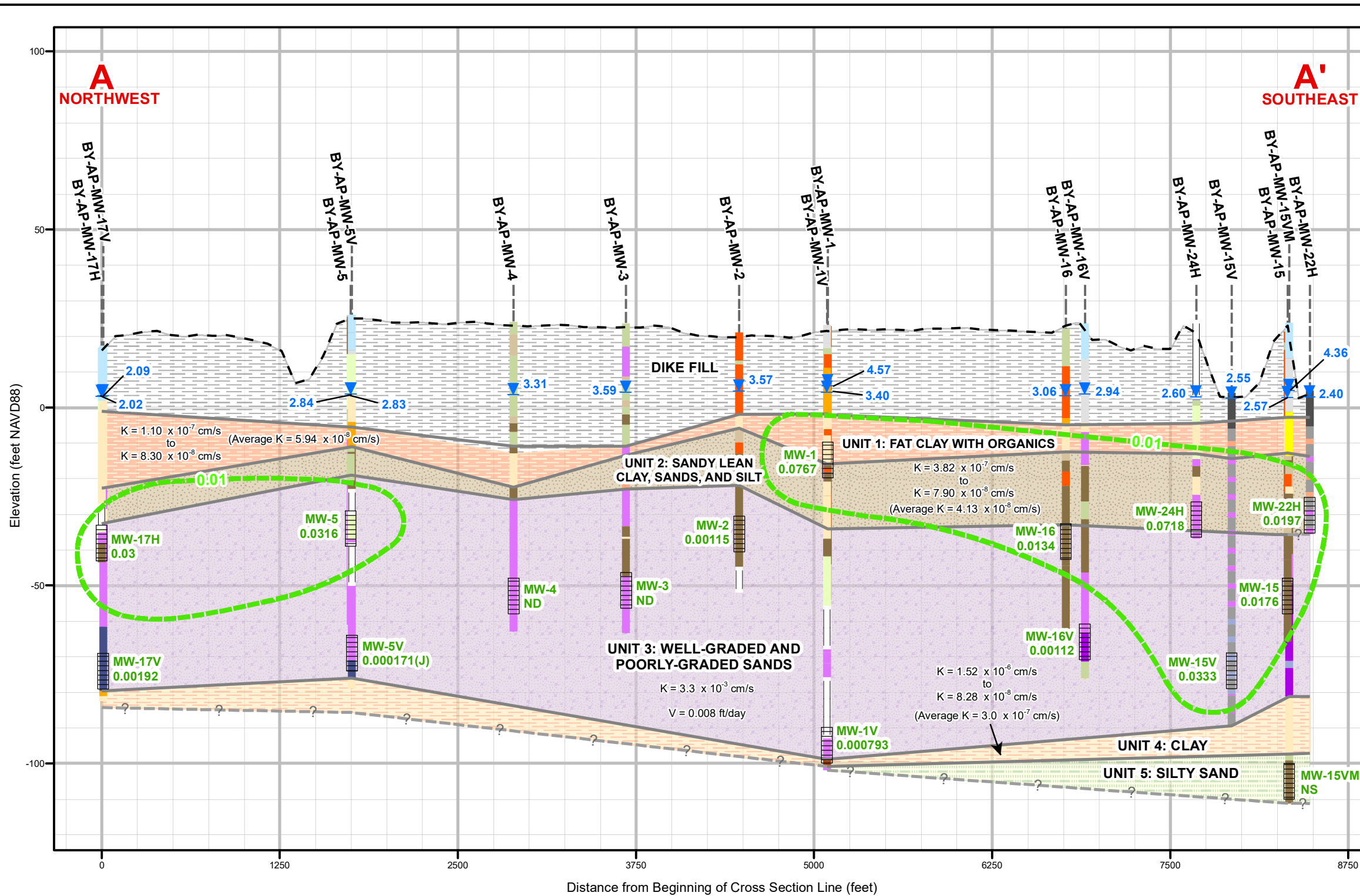
FIGURE NO

FIGURE 7A



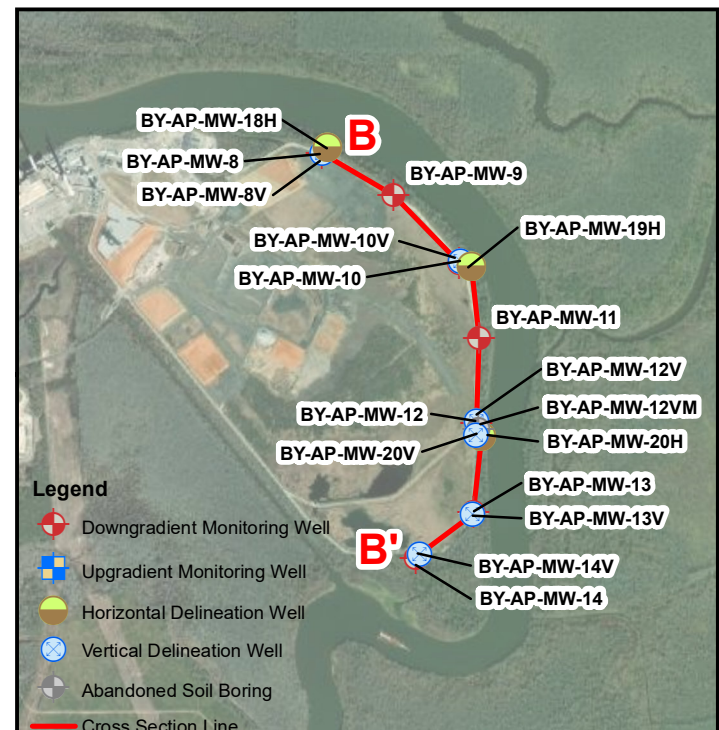
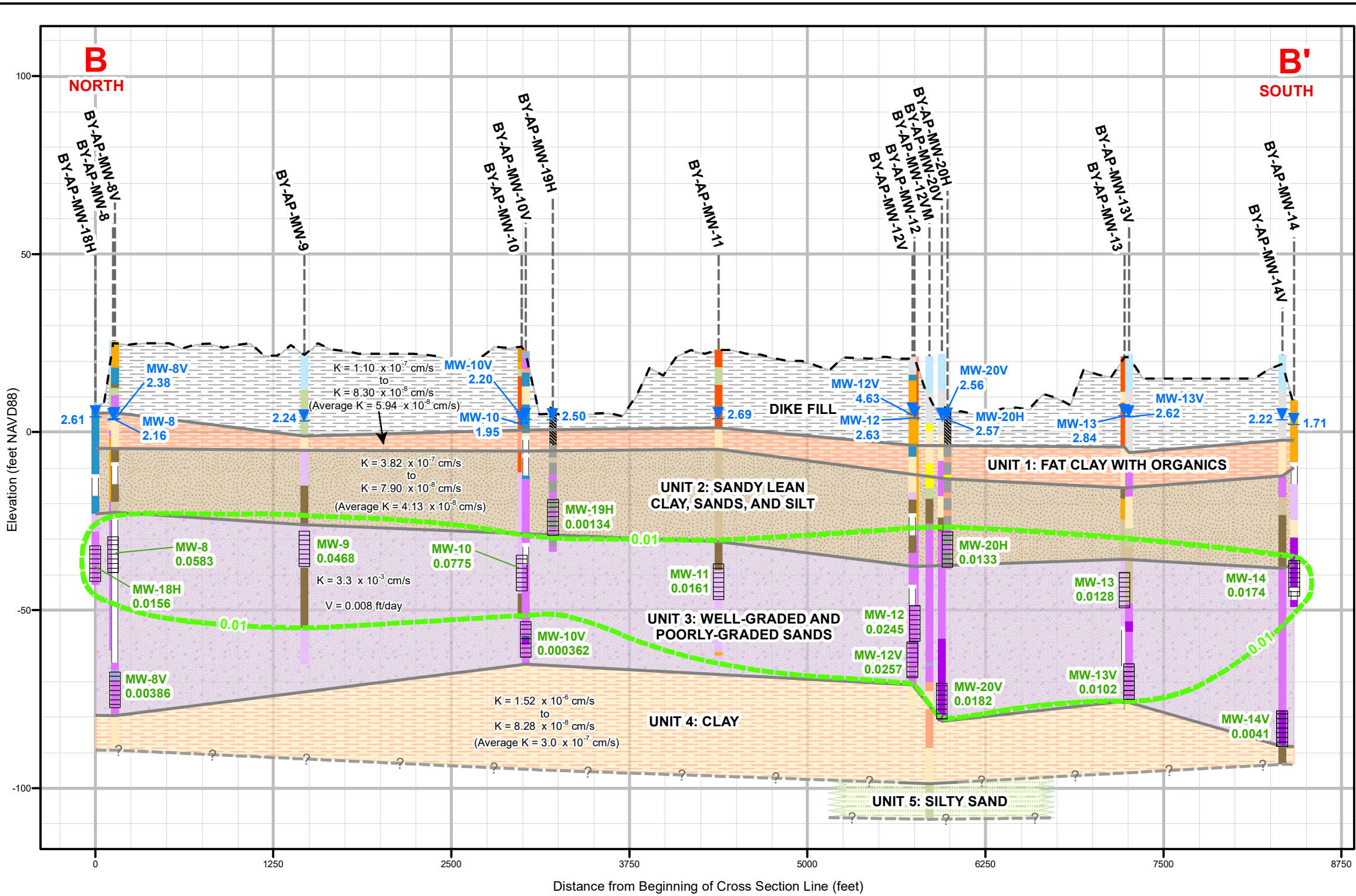
NOTES:
 1. Concentrations are in milligrams per liter (mg/L).
 2. Monitoring wells and delineation wells were sampled from May 23 to May 25, 2022.
 3. (J) indicates the result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL).
 4. ND indicates not detected above the laboratory method detection limit.
 5. NS indicates not sampled.
 6. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.0157 mg/L for Cobalt.

Legend Cobalt GWPS (mg/L) Ash Pond Boundary Gypsum Pond Boundary Downgradient Monitoring Well Upgradient Monitoring Well Horizontal Delineation Vertical Delineation Well Piezometer Abandoned Soil Boring		 	SCALE 1:12000	DRAWING TITLE COBALT ISOCONCENTRATION MAP PLANT BARRY ASH POND
			DATE 7/14/2022	
			DRAWN BY KAR	
			CHECKED BY GFB	



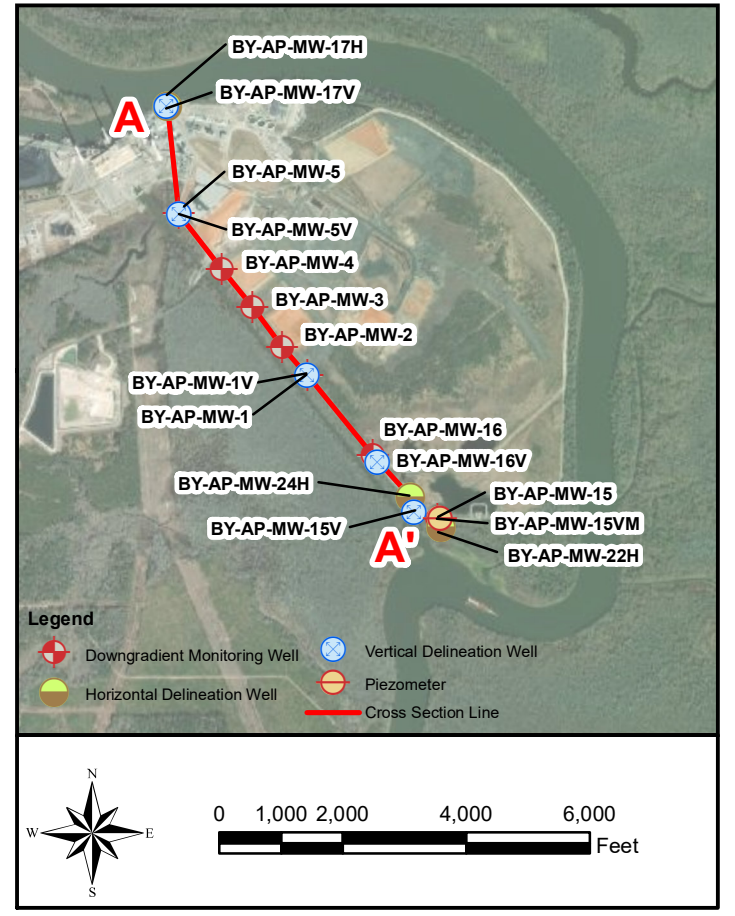
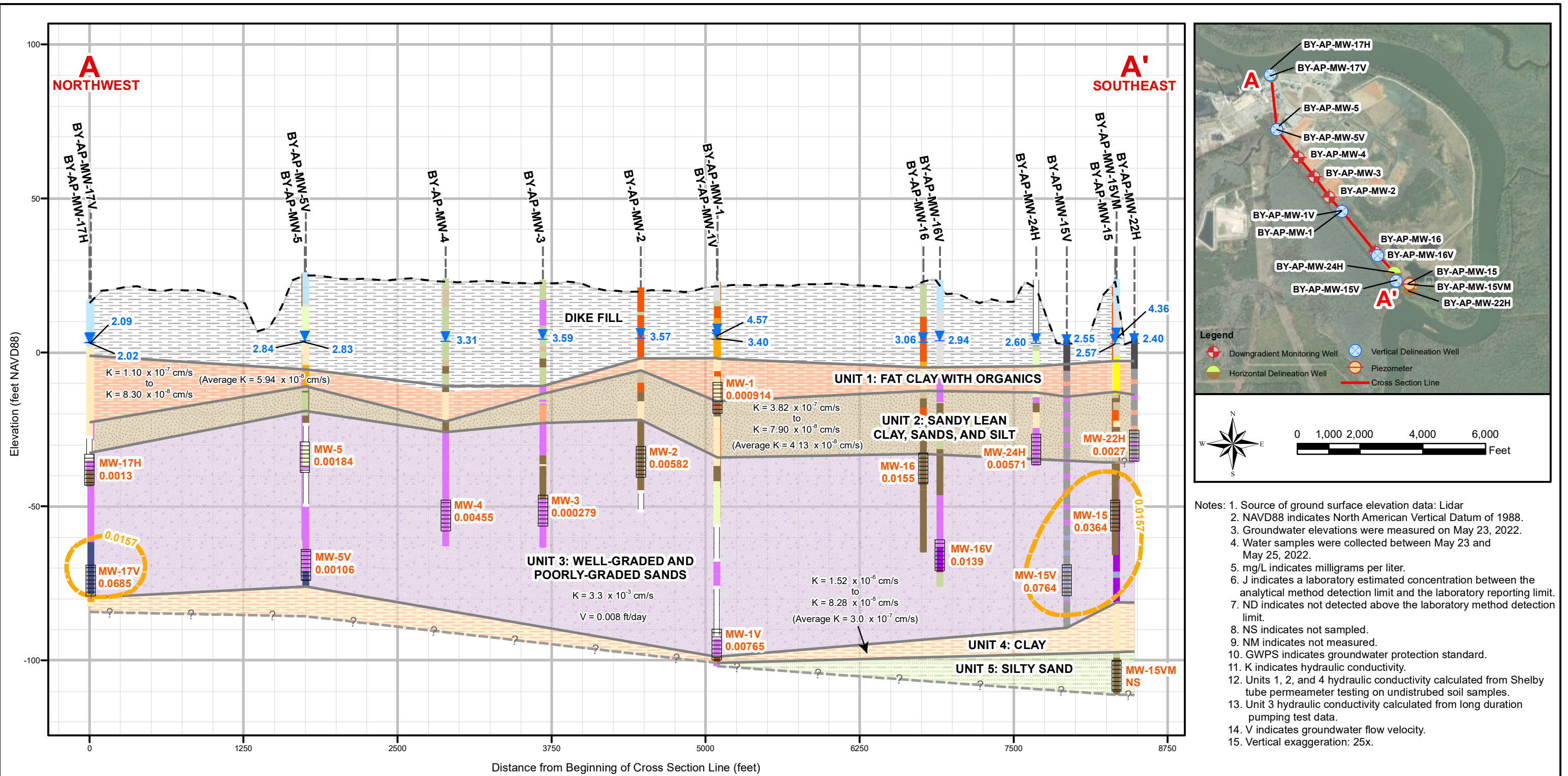
- Notes:
- Source of ground surface elevation data: Lidar
 - NAVD88 indicates North American Vertical Datum of 1988.
 - Groundwater elevations were measured on May 23, 2022.
 - Water samples were collected between May 23 and May 25, 2022.
 - mg/L indicates milligrams per liter.
 - J indicates a laboratory estimated concentration between the analytical method detection limit and the laboratory reporting limit.
 - ND indicates not detected above the laboratory method detection limit.
 - NS indicates not sampled.
 - NM indicates not measured.
 - GWPS indicates groundwater protection standard.
 - K indicates hydraulic conductivity.
 - Units 1, 2, and 4 hydraulic conductivity calculated from Shelby tube permeameter testing on undisturbed soil samples.
 - Unit 3 hydraulic conductivity calculated from long duration pumping test data.
 - V indicates groundwater flow velocity.
 - Vertical exaggeration: 25x.

Legend		Borehole Description		Geologic Unit		SCALE	DRAWING TITLE
Groundwater Elevation	Arsenic GWPS (mg/L)	Hydroexcavation	Sandy Fat Clay	Well-graded and Poorly-graded Sands	Unit 1: Fat Clay with Organics	As Shown	ARSENIC CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION A - A' PLANT BARRY ASH POND
Well Location	Arsenic GWPS (mg/L)	Hand Auger	Sandy Lean Clay	Well-graded Gravelly Sand	Unit 2: Sandy Lean Clay, Sands, and Silt	DATE 7/27/2022	
Ground Surface Elevation	Arsenic GWPS (mg/L)	No Data	Gravelly Fat Clay	Well-graded and Poorly-graded Gravels	Unit 3: Well-graded and Poorly-graded Sands	DRAWN BY KAR	
Screen Interval	Arsenic GWPS (mg/L)	No Recovery	Silt	Well-graded Gravel with Sand and/or Silt	Unit 4: Clay	CHECKED BY GFB	
Unit Boundary (inferred)	Arsenic GWPS (mg/L)	Organic Soil	Sandy Silt	Unit 5: Silty Sand		FIGURE NO FIGURE 8A	
Unit Boundary	Arsenic GWPS (mg/L)	Fat Clay	Clayey Sand			Southern Company	
		Lean Clay	Silty Sand				



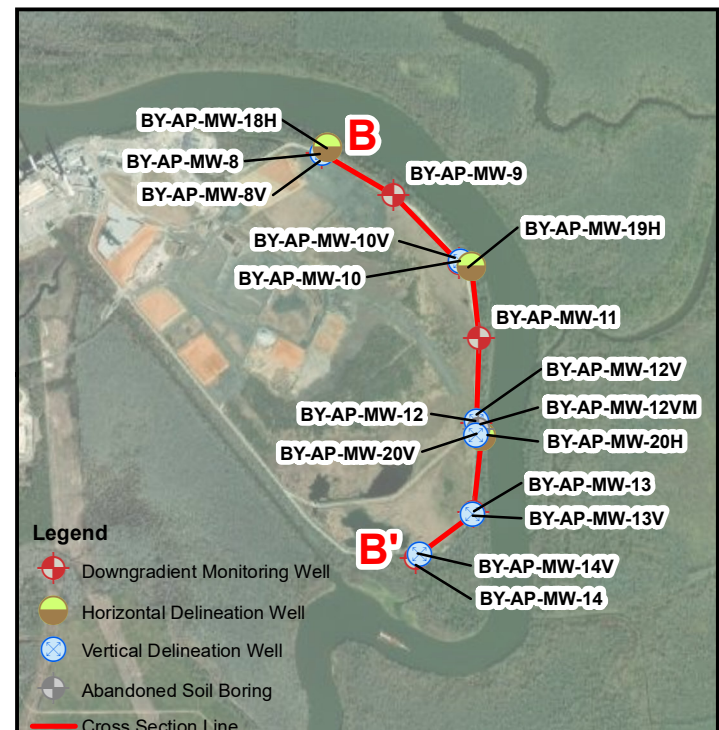
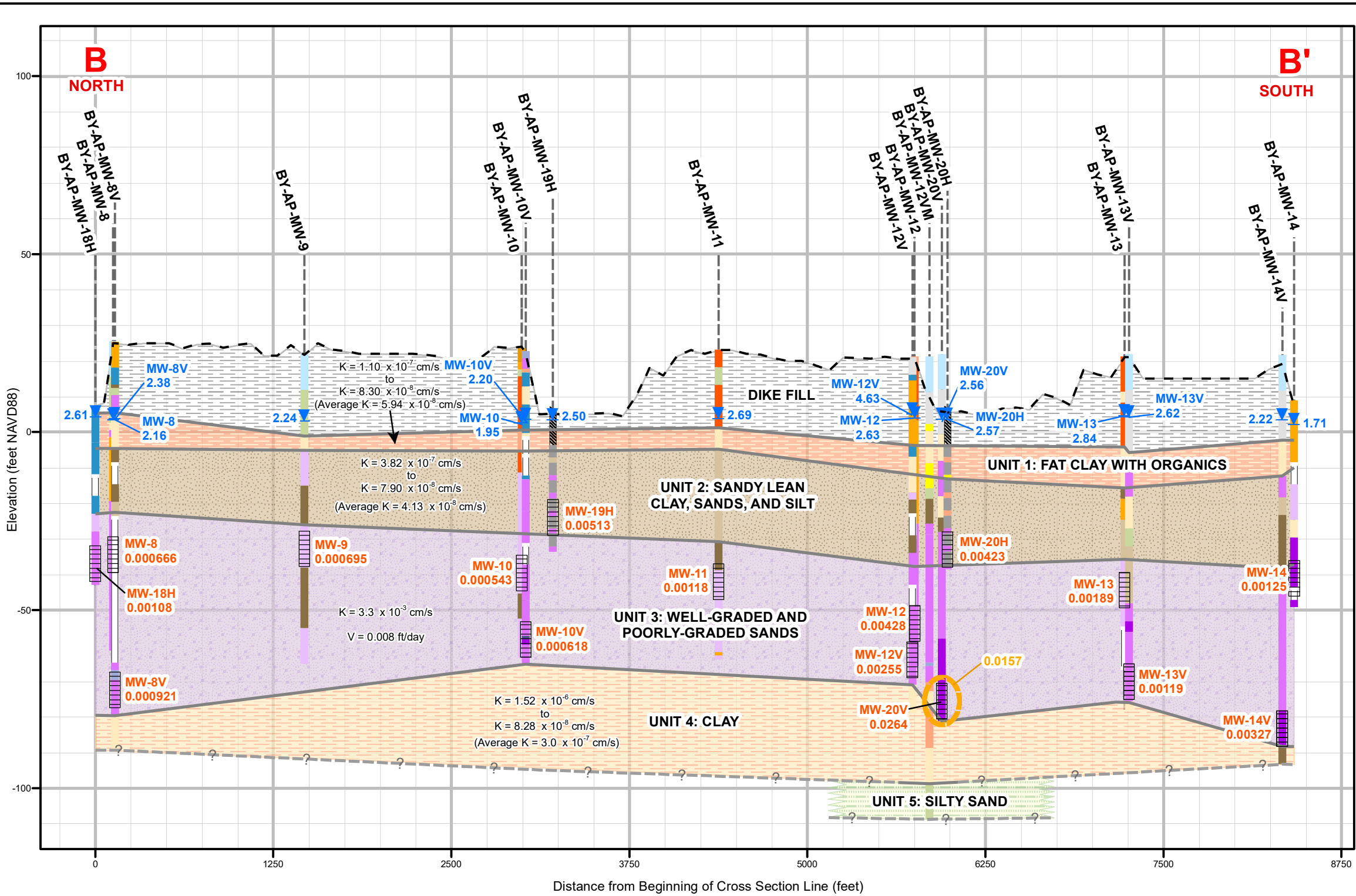
- Notes:
1. Source of ground surface elevation data: Lidar
 2. NAVD88 indicates North American Vertical Datum of 1988.
 3. Groundwater elevations were measured on May 23, 2022.
 4. Water samples were collected between May 23 and May 25, 2022.
 5. mg/L indicates milligrams per liter.
 6. GWPS indicates groundwater protection standard.
 7. K indicates hydraulic conductivity.
 8. Units 1, 2, and 4 hydraulic conductivity calculated from Shelby tube permeameter testing on undisturbed soil samples.
 9. Unit 3 hydraulic conductivity calculated from long duration pumping test data.
 10. V indicates groundwater flow velocity.
 11. Vertical exaggeration: 25x.

Legend 	Legend 	Scale As Shown	Drawing Title ARSENIC CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION B - B' PLANT BARRY ASH POND
	Scale As Shown	Date 7/27/2022	Figure No FIGURE 8B
	Drawn By KAR		
	Checked By GFB		Figure No FIGURE 8B



- Notes:
1. Source of ground surface elevation data: Lidar
 2. NAVD88 indicates North American Vertical Datum of 1988.
 3. Groundwater elevations were measured on May 23, 2022.
 4. Water samples were collected between May 23 and May 25, 2022.
 5. mg/L indicates milligrams per liter.
 6. J indicates a laboratory estimated concentration between the analytical method detection limit and the laboratory reporting limit.
 7. ND indicates not detected above the laboratory method detection limit.
 8. NS indicates not sampled.
 9. NM indicates not measured.
 10. GWPS indicates groundwater protection standard.
 11. K indicates hydraulic conductivity.
 12. Units 1, 2, and 4 hydraulic conductivity calculated from Shelby tube permeameter testing on undisturbed soil samples.
 13. Unit 3 hydraulic conductivity calculated from long duration pumping test data.
 14. V indicates groundwater flow velocity.
 15. Vertical exaggeration: 25x.

Legend		Borehole Description		Geologic Unit		SCALE	DRAWING TITLE
Groundwater Elevation	Cobalt GWPS (mg/L)	Hydroexcavation	Sandy Fat Clay	Well-graded and Poorly-graded Sands	Unit 1: Fat Clay with Organics	As Shown	COBALT CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION A - A' PLANT BARRY ASH POND
Well Location	Cobalt GWPS (mg/L)	Hand Auger	Sandy Lean Clay	Well-graded Gravelly Sand	Unit 2: Sandy Lean Clay, Sands, and Silt	DATE 7/26/2022	
Ground Surface Elevation		No Data	Gravelly Fat Clay	Well-graded and Poorly-graded Gravels	Unit 3: Well-graded and Poorly-graded Sands	DRAWN BY KAR	
Screen Interval		No Recovery	Silt	Well-graded Gravel with Sand and/or Silt	Unit 4: Clay	CHECKED BY GFB	FIGURE NO FIGURE 9A
Unit Boundary (inferred)		Organic Soil	Sandy Silt		Unit 5: Silty Sand		Southern Company
Unit Boundary		Fat Clay	Clayey Sand				
		Lean Clay	Silty Sand				



- Notes:
1. Source of ground surface elevation data: Lidar
 2. NAVD88 indicates North American Vertical Datum of 1988.
 3. Groundwater elevations were measured on May 23, 2022.
 4. Water samples were collected between May 23 and May 25, 2022.
 5. mg/L indicates milligrams per liter.
 6. GWPS indicates groundwater protection standard.
 7. K indicates hydraulic conductivity.
 8. Units 1, 2, and 4 hydraulic conductivity calculated from Shelby tube permeameter testing on undisturbed soil samples.
 9. Unit 3 hydraulic conductivity calculated from long duration pumping test data.
 10. V indicates groundwater flow velocity.
 11. Vertical exaggeration: 25x.

Legend		Borehole Description		Geologic Unit	
Groundwater Elevation	Cobalt GWPS (mg/L)	Hydroexcavation	Silty Clay	Well-graded and Poorly-graded Sand with Silt	Fill
Well Location	0.0157 Cobalt GWPS (mg/L)	Hand Auger	Sandy Fat Clay	Well-graded Gravelly Sand	Unit 1: Fat Clay with Organics
Ground Surface Elevation		No Data	Sandy Lean Clay	Well-graded and Poorly-graded Gravels	Unit 2: Sandy Lean Clay, Sands, and Silt
Screen Interval		No Recovery	Silt	Well-graded Gravel with Sand and/or Silt	Unit 3: Well-graded and Poorly-graded Sands
Unit Boundary (inferred)		Fill	Sandy Silt	Well-graded Gravel with Sand and/or Silt	Unit 4: Clay
Unit Boundary		Fat Clay	Clayey Sandy	Well-graded Gravel with Sand and/or Silt	Unit 5: Silty Sand
		Lean Clay	Silty Sand		
			Well-graded and Poorly-graded Sand with Silt		

SCALE As Shown	DRAWING TITLE COBALT CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION B - B' PLANT BARRY ASH POND
DATE 7/27/2022	
DRAWN BY KAR	
CHECKED BY GFB	FIGURE NO FIGURE 9B



Tables



**Table 1a. - Compliance Monitoring Well Network Details
Plant Barry Ash Pond**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
BY-UP-MW-1	Upgradient	Unit 3: Middle Sands (Watercourse Aq)	30.99445	-88.01134	17.49	20.66	44.4	-13.23	-23.23	10	10/7/2015
BY-UP-MW-2	Upgradient	Unit 3: Middle Sands (Watercourse Aq)	30.99425	-88.01331	17.00	19.95	47.6	-17.23	-27.23	10	10/7/2015
BY-UP-MW-3	Upgradient	Unit 3: Middle Sands (Watercourse Aq)	30.9933	-88.01424	20.15	23.24	48.5	-14.89	-24.89	10	10/7/2015
BY-UP-MW-4	Upgradient	Unit 3: Middle Sands (Watercourse Aq)	30.99413	-88.01566	26.16	29.12	64.1	-24.54	-34.54	10	10/13/2015
BY-AP-MW-1	Downgradient	Unit 1-Unit 2 Transition	30.99687	-88.00104	22.91	25.80	46.1	-9.90	-19.90	10	10/7/2015
BY-AP-MW-2	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	30.99815	-88.00234	21.10	23.89	65.4	-31.11	-41.11	10	10/7/2015
BY-AP-MW-3	Downgradient	Unit 3: Middle Sands (Watercourse Aq)	30.99989	-88.00388	23.60	26.61	83.2	-46.18	-56.18	10	10/7/2015
BY-AP-MW-4	Downgradient	Unit 3: Middle Sands (Watercourse Aq)	31.00156	-88.00548	24.05	26.97	84.9	-47.54	-57.54	10	10/7/2015
BY-AP-MW-5	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	31.00405	-88.00772	25.97	28.93	69.0	-29.62	-39.62	10	10/7/2015
BY-AP-MW-6	Downgradient	Unit 3: Middle Sands (Watercourse Aq)	31.0051	-88.00414	23.78	26.69	88.5	-51.42	-61.42	10	10/7/2015
BY-AP-MW-7	Downgradient	Unit 3: Middle Sands (Watercourse Aq)	31.00734	-88.00035	25.78	25.47	89.5	-53.58	-63.58	10	10/7/2015
BY-AP-MW-8	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	31.00832	-87.9958	25.44	25.11	64.8	-29.29	-39.29	10	10/7/2015
BY-AP-MW-9	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	31.00647	-87.9921	21.91	24.39	62.7	-27.92	-37.92	10	10/7/2015

Notes:
 ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing
 (1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.
 (2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
 (3) Total well depth accounts for sump if data provided on well construction logs.



**Table 1a. - Compliance Monitoring Well Network Details
Plant Barry Ash Pond**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
BY-AP-MW-10	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	31.00349	-87.98866	24.21	24.07	68.7	-34.18	-44.18	10	10/7/2015
BY-AP-MW-11	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	31.00014	-87.98764	23.13	23.11	71.1	-37.60	-47.60	10	10/7/2015
BY-AP-MW-12	Downgradient	Unit 3: Middle Sands (Watercourse Aq)	30.99636	-87.98774	21.24	23.88	82.9	-48.65	-58.65	10	10/7/2015
BY-AP-MW-13	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	30.99237	-87.98788	21.29	24.22	73.5	-38.89	-48.89	10	10/7/2015
BY-AP-MW-14	Downgradient	Unit 3: Upper Sands (Watercourse Aq)	30.99035	-87.99085	9.27	11.74	58.0	-35.88	-45.88	10	10/1/2013
BY-AP-MW-15	Downgradient	Unit 3: Middle Sands (Watercourse Aq)	30.99054	-87.99429	21.23	23.89	82.7	-48.39	-58.39	10	10/7/2015
BY-AP-MW-16	Downgradient	Unit 3: Middle Sands (Watercourse Aq)	30.99332	-87.99764	22.05	25.01	67.7	-32.31	-42.31	10	10/7/2015

Notes:
 ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing
 (1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.
 (2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
 (3) Total well depth accounts for sump if data provided on well construction logs.



**Table 1b. - Delineation Well Network Details
Plant Barry Ash Pond**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
BY-AP-MW-1V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	30.99688	-88.00105	23.13	26.23	126.5	-89.87	-99.87	10	12/18/2018
BY-AP-MW-5V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	31.00403	-88.00771	25.98	28.94	103.4	-64.02	-74.02	10	12/20/2018
BY-AP-MW-7V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	31.00731	-88.0004	25.62	25.06	106.7	-71.27	-81.27	10	12/12/2018
BY-AP-MW-8V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	31.0083	-87.99577	25.54	25.18	103.0	-67.41	-77.41	10	12/14/2018
BY-AP-MW-10V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	31.00355	-87.98861	22.76	25.39	89.0	-53.24	-63.24	10	12/16/2018
BY-AP-MW-12V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	30.99641	-87.98773	21.05	25.51	94.9	-58.95	-68.95	10	12/17/2018
BY-AP-MW-13V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	30.99228	-87.98791	21.89	24.65	100.8	-65.75	-75.75	10	4/9/2020
BY-AP-MW-14V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	30.9905	-87.99065	21.68	24.72	113.4	-78.18	-88.18	10	4/10/2020
BY-AP-MW-15V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	30.9908	-87.9955	4.05	7.03	86.3	-68.85	-78.85	10	7/23/2019

Notes:
 ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing
 (1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.
 (2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
 (3) Total well depth accounts for sump if data provided on well construction logs.



**Table 1b. - Delineation Well Network Details
Plant Barry Ash Pond**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
BY-AP-MW-16V	Vertical Delineation	Unit 3: Middle Sands (Watercourse Aq)	30.99302	-87.99739	23.61	23.65	95.2	-61.09	-71.09	10	4/11/2020
BY-AP-MW-17V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	31.00879	-88.00838	17.41	20.40	100.2	-69.25	-79.25	10	4/11/2020
BY-AP-MW-20V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	30.99579	-87.98777	21.94	24.91	105.7	-70.33	-80.33	10	4/10/2020
BY-AP-MW-23V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	31.00934	-88.00166	12.04	15.33	103.0	-77.14	-87.14	10	3/25/2020
BY-AP-MW-25V	Vertical Delineation	Unit 3: Lower Sands & Gravel (Watercourse Aq)	31.00473	-88.01308	20.90	23.81	112.9	-78.54	-88.54	10	4/14/2020
BY-AP-MW-17H	Horizontal Delineation	Unit 3: Upper Sands (Watercourse Aq)	31.00883	-88.00832	16.88	19.83	63.4	-33.12	-43.12	10	12/21/2018
BY-AP-MW-18H	Horizontal Delineation	Unit 3: Upper Sands (Watercourse Aq)	31.00856	-87.99552	7.08	10.30	52.6	-31.92	-41.92	10	7/18/2019
BY-AP-MW-19H	Horizontal Delineation	Unit 2: Mixed Sand and Clay	31.00332	-87.98806	6.39	9.40	38.4	-18.61	-28.61	10	7/18/2019
BY-AP-MW-20H	Horizontal Delineation	Unit 2: Mixed Sand and Clay	30.99577	-87.98749	6.51	9.40	47.4	-27.59	-37.59	10	7/18/2019
BY-AP-MW-22H	Horizontal Delineation	Unit 2: Mixed Sand and Clay	30.99014	-87.99409	4.73	7.85	43.1	-27.87	-37.87	10	7/24/2019
BY-AP-MW-23H	Horizontal Delineation	Unit 3: Upper Sands (Watercourse Aq)	31.00953	-88.00147	7.92	10.63	45.1	-24.08	-34.08	10	7/18/2019

Notes:
 ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing
 (1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.
 (2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
 (3) Total well depth accounts for sump if data provided on well construction logs.



**Table 1b. - Delineation Well Network Details
Plant Barry Ash Pond**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
BY-AP-MW-24H	Horizontal Delineation	Unit 2: Mixed Sand and Clay	30.99147	-87.99567	23.51	26.28	63.2	-26.49	-36.49	10	12/19/2018
BY-AP-MW-25H	Horizontal Delineation	Unit 3: Middle Sands (Watercourse Aq)	31.00474	-88.01299	20.89	23.82	80.4	-46.09	-56.09	10	4/13/2020

Notes:

ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing

(1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.

(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.

(3) Total well depth accounts for sump if data provided on well construction logs.



**Table 1c. - Piezometer Well Network Details
Plant Barry Ash Pond**

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
BY-AP-MW-15VM	Piezometer	Unit 5: Sands (Interpreted Miocene)	30.99054	-87.99416	23.79	23.51	133.5	-99.52	-109.52	10	4/23/2020

Notes:
 ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing
 (1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.
 (2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
 (3) Total well depth accounts for sump if data provided on well construction logs.



Table 2. Parameters And Reporting Limits

Plant Barry Ash Pond
05/23/2022 - 05/31/2022

Appendix III Parameters			
Parameters	Analytical Methods	Reporting Limits	Units of Measure
Boron	EPA 200.7	0.1015	mg/L
Calcium	EPA 200.7	0.406-20.3	mg/L
Chloride	SM4500Cl E	1-40	mg/L
Fluoride	SM4500F G 2017	0.125	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	2-16	mg/L
TDS	NA	NA	mg/L
Appendix IV Parameters			
Parameters	Analytical Methods	Reporting Limits	Units of Measure
Antimony	EPA 200.8	0.001015	mg/L
Arsenic	EPA 200.8	0.000203	mg/L
Barium	EPA 200.8	0.001015	mg/L
Beryllium	EPA 200.8	0.001015	mg/L
Cadmium	EPA 200.8	0.000203	mg/L
Chromium	EPA 200.8	0.001015	mg/L
Cobalt	EPA 200.8	0.000203	mg/L
Lead	EPA 200.8	0.000203	mg/L
Lithium	EPA 200.7	0.02	mg/L
Mercury	EPA 245.1	0.0005	mg/L
Molybdenum	EPA 200.8	0.000203	mg/L
Selenium	EPA 200.8	0.001015	mg/L
Thallium	EPA 200.8	0.000203	mg/L
Combined Radium 226 + 228	Total Radium Calculation	0.768-1.84	pCi/L

Notes:

1. Reporting Limit values can display range depending upon matrix interferences and dilution factors
2. pH is a field acquired parameter and does not have a laboratory method or reporting limit
3. Combined Radium 226 + 228 – product of radium-226 + radium-228; reporting limits presented are sum of radium 226, radium 228 reporting limits



**Table 3.
Recent Groundwater Elevations Summary**

Well Name	Top of Casing Elevation									
		5/28/2019	9/30/2019	3/30/2020	5/12/2020	6/15/2020	8/31/2020	5/24/2021	10/18/2021	5/23/2022
BY-AP-MW-1	25.80	4.33	3.4	6.97	4.38	5.02	5.02	5.28	5.06	4.57
BY-AP-MW-2	23.89	3.55	2.74	6.53	3.55	3.81	3.84	3.96	3.63	3.57
BY-AP-MW-3	26.61	3.41	2.6	6.46	3.39	3.70	3.84	3.84	3.47	3.59
BY-AP-MW-4	26.97	3.14	2.33	6.21	3.06	3.39	3.60	3.57	3.15	3.31
BY-AP-MW-5	28.93	2.89	2.08	5.9	2.66	3.00	3.29	--	2.81	2.84
BY-AP-MW-6	26.69	2.66	1.91	6.1	2.51	2.85	3.30	3.04	2.64	2.60
BY-AP-MW-7	25.94	2.47	1.69	6.25	2.31	2.90	3.35	2.53	2.21	2.35
BY-AP-MW-8	28.45	2.17	1.32	5.89	1.53	2.41	3.21	2.35	4.96	2.16
BY-AP-MW-9	24.39	1.96	1.26	5.83	1.47	2.36	2.97	2.36	2.05	2.24
BY-AP-MW-10	26.89	2.12	1.34	4.96	1.58	2.46	3.11	2.17	1.89	1.95
BY-AP-MW-11	26.08	2.32	1.54	5.94	1.64	2.50	3.16	2.41	2.06	2.69
BY-AP-MW-12	23.88	1.97	1.26	6.02	1.52	2.31	2.95	2.48	2.13	2.63
BY-AP-MW-13	24.22	2.11	1.42	5.83	1.68	2.43	3.11	2.64	2.29	2.84
BY-AP-MW-14	11.74	1.6	0.89	5.04	0.97	1.77	1.96	1.89	1.56	1.71
BY-AP-MW-15	23.89	2.23	1.58	5.77	1.93	2.57	3.12	2.74	2.45	2.57
BY-AP-MW-16	25.01	2.82	2.2	6.08	2.35	3.83	3.45	3.22	2.92	3.06
BY-AP-MW-1V	26.23	--	2.65	7.34	3.69	3.61	3.72	3.72	3.43	3.40
BY-AP-MW-5V	28.94	--	2.1	5.88	2.63	3.00	3.32	--	2.79	2.83
BY-AP-MW-7V	25.54	--	1.66	6.03	2.15	2.68	3.13	2.51	2.21	2.34
BY-AP-MW-8V	28.25	--	1.23	5.74	1.44	2.23	2.82	2.41	2.07	2.38
BY-AP-MW-10V	25.39	--	1.21	5.65	1.23	2.17	2.78	2.21	1.93	2.20
BY-AP-MW-12V	25.51	--	3.46	7.83	3.53	4.33	5.00	4.53	4.19	4.63
BY-AP-MW-13V	24.65	--	--	--	1.48	2.23	2.93	2.47	2.57	2.62
BY-AP-MW-14V	24.72	--	--	--	2.13	2.26	2.88	2.41	2.09	2.22
BY-AP-MW-15V	7.03	--	1.97	--	2.17	2.71	3.23	2.83	2.52	2.55
BY-AP-MW-15VM	23.51	--	--	--	4.15	3.95	3.90	3.98	3.45	4.36
BY-AP-MW-16V	23.65	--	--	--	2.97	3.15	3.47	3.26	2.94	2.94
BY-AP-MW-17H	19.83	--	1.51	5.88	1.47	2.36	2.93	2.37	2.14	2.02
BY-AP-MW-17V	20.40	--	--	--	1.51	2.11	3.01	2.44	2.20	2.09
BY-AP-MW-18H	10.30	--	1.34	5.88	1.87	2.03	3.00	2.40	2.05	2.61
BY-AP-MW-19H	9.40	--	1.42	5.85	2.02	2.07	3.04	2.45	2.14	2.50
BY-AP-MW-20H	9.40	--	1.55	5.79	1.55	2.31	2.97	2.51	2.13	2.57
BY-AP-MW-20V	24.91	--	--	--	1.4	2.19	2.87	2.39	2.04	2.56
BY-AP-MW-22H	7.85	--	1.85	--	2.17	2.75	3.09	2.80	2.46	2.40
BY-AP-MW-23H	10.63	--	1.67	5.98	1.55	2.48	3.07	2.44	2.14	2.75
BY-AP-MW-23V	15.33	--	--	--	1.5	2.09	2.98	2.34	2.15	2.65
BY-AP-MW-24H	26.28	--	1.86	5.82	1.4	2.74	3.16	2.92	2.60	2.60
BY-AP-MW-25H	23.82	--	--	--	3.49	3.53	3.37	3.63	3.29	2.31
BY-AP-MW-25V	23.81	--	--	--	3.22	3.42	3.38	3.58	3.19	3.22

Well Name	Top of Casing Elevation							
		5/28/2019	10/2/2019	3/30/2020	9/8/2020	5/24/2021	10/18/2021	5/23/2022
BY-GSA-MW-1 ³	20.66	6.60	4.78	8.38	5.31	7.13	6.64	6.17
BY-GSA-MW-2 ³	19.95	6.32	4.71	8.05	5.16	6.80	6.4	6.03
BY-GSA-MW-3 ³	23.24	7.02	5.37	8.54	5.83	7.49	7.19	6.75
BY-GSA-MW-4 ³	29.12	6.57	5.16	8.20	5.53	6.99	6.68	6.37

Notes:

1. ft. AMSL - feet above mean sea level
2. -- Not Measured
3. BY-GSA-MW-1 - BY-GSA-MW-4 designated as upgradient Ash Pond well locations.



Table 4a. Relative Percent Difference (RPD) Calculations

Plant Barry Ash Pond
05/24/2022 - 05/31/2022

BY-UP-MW-3				
Sample Date = 5/31/2022				
Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	1.95	1.97	1.02%
Chloride	mg/L	3.39	3.41	0.59%
Sulfate	mg/L	7.02	7.18	2.25%
Barium	mg/L	0.0992	0.101	1.80%
Chromium	mg/L	0.00139	0.00134	3.66%
Cobalt	mg/L	0.00149	0.00152	1.99%
BY-AP-MW-15				
Sample Date = 5/25/2022				
Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	6.41	6.35	0.94%
Chloride	mg/L	80.7	79.7	1.25%
Fluoride	mg/L	0.214	0.168	24.08%
Arsenic	mg/L	0.0176	0.0163	7.67%
Barium	mg/L	0.0846	0.0806	4.84%
Cobalt	mg/L	0.0364	0.0358	1.66%
Molybdenum	mg/L	0.0018	0.00157	13.65%
BY-AP-MW-13				
Sample Date = 5/24/2022				
Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	19.2	19	1.05%
Chloride	mg/L	43.5	38.2	12.97%
Sulfate	mg/L	38.3	51	28.44%
Arsenic	mg/L	0.0128	0.0131	2.32%
Barium	mg/L	0.0723	0.0721	0.28%
Chromium	mg/L	0.00685	0.00665	2.96%
Cobalt	mg/L	0.00189	0.00187	1.06%
Molybdenum	mg/L	0.00356	0.00369	3.59%
BY-AP-MW-20V				
Sample Date = 5/24/2022				
Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	14.4	14.4	0.00%
Chloride	mg/L	35.4	37.5	5.76%
Sulfate	mg/L	3.79	3.66	3.49%
Arsenic	mg/L	0.0188	0.0186	1.07%



Table 4a. Relative Percent Difference (RPD) Calculations

Plant Barry Ash Pond
05/24/2022 - 05/31/2022

BY-AP-MW-20V				
Sample Date = 5/24/2022				
Analyte	Units	Original Result	Duplicate Result	RPD (%)
Barium	mg/L	0.0906	0.0907	0.11%
Cobalt	mg/L	0.0264	0.0268	1.50%
Molybdenum	mg/L	0.00164	0.00161	1.85%
BY-AP-MW-7				
Sample Date = 5/24/2022				
Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	10.5	10.7	1.89%
Chloride	mg/L	13.2	12.9	2.30%
Sulfate	mg/L	7.14	7.53	5.32%
Arsenic	mg/L	0.0197	0.0192	2.57%
Barium	mg/L	0.0717	0.0715	0.28%
Cobalt	mg/L	0.023	0.0234	1.72%

Notes:

1. The RPD calculations presented are for analyte pairs where original and duplicate results are valid, unqualified detections.
2. RPD calculation results less than or equal to 20% are considered acceptable.
3. Results greater than 20% are given data validation flags to indicate RPD criteria failure. Communication to sampling team and lab may be necessary to explore nature of RPD failure(s).



Table 4b. - Field QC: Blank Detections

Plant Barry Ash Pond
05/24/2022 - 05/31/2022

Parameters Detected Above MDL					
Sample Date	QC Location	Parameter	Blank Concentration	Units	MDL
05/31/2022	EB-1	Chromium	0.00027 J	mg/L	0.0002
05/31/2022	FB-1	Chromium	0.00027 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



Table 5. Summary of Background Levels and Groundwater Protection Standards

Plant Barry Ash Pond

Appendix IV Analytes			
Analyte	Units	Background	GWPS
Fluoride	mg/L	0.1	4
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.0017	0.01
Barium	mg/L	0.183	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0157	0.0157
Lead	mg/L	0.00126	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.0002	0.002
Combined Radium 226 + 228	pCi/L	3	5

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. Background concentrations/limits are used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and ADEM Rule 335-13-15-.06(h).

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022

Field Parameters								
Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Upgradient	BY-UP-MW-1	05/31/2022	0.34	193.96	2	20.77	3.89	57.06
Upgradient	BY-UP-MW-2	05/31/2022	6.27	226.41	4.82	20	3.31	50.04
Upgradient	BY-UP-MW-3	05/31/2022	5.82	223.76	3.1	20.09	3.54	49.57
Upgradient	BY-UP-MW-4	05/31/2022	6.48	223.18	8.23	22.67	3.97	52.45
Downgradient	BY-AP-MW-1	05/24/2022	0.12	-8.45	2.83	21.65	5.44	758.26
Downgradient	BY-AP-MW-10	05/24/2022	0.32	-17.07	0.2	21.37	5.81	680.19
Downgradient	BY-AP-MW-11	05/23/2022	0.27	-96.88	3.74	21.18	6.32	555.51
Downgradient	BY-AP-MW-12	05/23/2022	0.12	-72.55	2.67	20.85	6.12	578.36
Downgradient	BY-AP-MW-13	05/24/2022	0.23	36.78	4.94	20.79	5.5	445.45
Downgradient	BY-AP-MW-14	05/25/2022	0.33	-33.94	3.06	20.59	6.14	512.57
Downgradient	BY-AP-MW-15	05/25/2022	0.09	-119.75	3.64	21.92	6.68	564.84
Downgradient	BY-AP-MW-16	05/25/2022	0.09	-3.49	1.8	22.27	5.74	474.44
Downgradient	BY-AP-MW-2	05/24/2022	0.26	168.85	0.78	22.12	4.78	53.16
Downgradient	BY-AP-MW-3	05/25/2022	1.61	129.55	0.66	21.52	4.64	65.47
Downgradient	BY-AP-MW-4	05/25/2022	1.3	226.63	1.54	22.57	4.6	72.52
Downgradient	BY-AP-MW-5	05/25/2022	0.13	-73.02	1.77	22.21	5.99	426.36
Downgradient	BY-AP-MW-6	05/25/2022	0.49	268.89	0.87	21.47	4.57	52.89
Downgradient	BY-AP-MW-7	05/24/2022	0.3	-25	3.47	21.47	6.32	243.46
Downgradient	BY-AP-MW-8	05/24/2022	0.19	-16.23	3.51	21.81	5.6	508.1
Downgradient	BY-AP-MW-9	05/24/2022	0.25	-73.75	1.63	22.35	6.03	543.47
Vert. Delineation	BY-AP-MW-10V	05/24/2022	0.19	-41.2	1.76	21.44	5.77	726.04

Notes:

- "J" indicates the result was detected above the MDL but below the PQL
- "<" indicates the result was not detected above the MDL and is considered a non-detect.
- U - 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.
- DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
- mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
- Shaded cells indicate result greater than GWPS, but does not necessarily indicate an SSL.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022

Field Parameters								
Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Vert. Delineation	BY-AP-MW-12V	05/23/2022	0.11	-67.29	1.04	20.7	6.22	616.65
Vert. Delineation	BY-AP-MW-13V	05/25/2022	0.17	-52.01	2.04	20.8	6.3	561.68
Vert. Delineation	BY-AP-MW-14V	05/24/2022	0.42	-104.33	1.07	21.42	6.71	969.26
Vert. Delineation	BY-AP-MW-15V	05/24/2022	0.26	44.5	6.89	21.14	5.7	594.35
Vert. Delineation	BY-AP-MW-16V	05/25/2022	0.39	117.25	1.38	22.23	5.26	318.16
Vert. Delineation	BY-AP-MW-17V	05/25/2022	0.39	116.46	1.38	21.85	6.34	2332.61
Vert. Delineation	BY-AP-MW-1V	05/24/2022	0.14	133.41	0.51	22.07	4.9	375.09
Vert. Delineation	BY-AP-MW-20V	05/24/2022	0.25	-77.95	1.01	20.55	6.28	549.97
Vert. Delineation	BY-AP-MW-23V	05/25/2022	0.44	-36.42	2.11	20.55	7.44	636.87
Vert. Delineation	BY-AP-MW-25V	05/25/2022	3.54	261.01	1.53	22.35	5.45	29.82
Vert. Delineation	BY-AP-MW-5V	05/25/2022	1.23	99.33	1.64	22.54	5.88	114.39
Vert. Delineation	BY-AP-MW-7V	05/24/2022	0.37	-124.32	1.73	22.25	6.92	424.17
Vert. Delineation	BY-AP-MW-8V	05/23/2022	0.24	-24.72	1.61	20.86	6.08	557.51
Horiz. Delineation	BY-AP-MW-17H	05/25/2022	0.29	-16.59	2.84	21.46	6.21	388.95
Horiz. Delineation	BY-AP-MW-18H	05/23/2022	0.2	-70.12	1.58	20.29	6.24	495.93
Horiz. Delineation	BY-AP-MW-19H	05/24/2022	0.21	-59.87	1.65	20.19	5.8	206.31
Horiz. Delineation	BY-AP-MW-20H	05/23/2022	0.12	-56.87	1.75	19.98	6.15	784.43
Horiz. Delineation	BY-AP-MW-22H	05/24/2022	0.17	-70.67	2.32	20.28	6.57	669.92
Horiz. Delineation	BY-AP-MW-23H	05/25/2022	0.22	-1.91	1.45	20.16	5.92	411.87
Horiz. Delineation	BY-AP-MW-24H	05/24/2022	0.1	-80.03	2.5	21.7	6.22	792.5
Horiz. Delineation	BY-AP-MW-25H	05/25/2022	0.84	285.43	0.93	22.54	5.23	43

Notes:

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

EPA Appendix III Set								
Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Upgradient	BY-UP-MW-1	05/31/2022	0.0567 J	1.14	1.93	<0.06	3.89	12.8
Upgradient	BY-UP-MW-2	05/31/2022	<0.03	1.24	2.17	<0.06	3.31	8.09
Upgradient	BY-UP-MW-3	05/31/2022	<0.03	1.95	3.39	<0.06	3.54	7.02
Upgradient	BY-UP-MW-4	05/31/2022	<0.03	2.02	3.31	<0.06	3.97	7.94
Downgradient	BY-AP-MW-1	05/24/2022	2.08	43.9	27.6	0.0801 J	5.44	21
Downgradient	BY-AP-MW-10	05/24/2022	2.34	63.9	27.7	<0.06	5.81	14.7
Downgradient	BY-AP-MW-11	05/23/2022	0.0558 J	26	25.1	0.0709 J	6.32	29.3
Downgradient	BY-AP-MW-12	05/23/2022	0.0626 J	20.6	26.2	0.0873 J	6.12	13
Downgradient	BY-AP-MW-13	05/24/2022	0.0457 J	19.2	43.5	0.0769 J	5.5	38.3
Downgradient	BY-AP-MW-14	05/25/2022	0.0618 J	11.4	45.3	0.0733 J	6.14	105
Downgradient	BY-AP-MW-15	05/25/2022	0.0826 J	6.41	80.7	0.214	6.68	1.8 J
Downgradient	BY-AP-MW-16	05/25/2022	1.98	13.9	20	<0.06	5.74	6.29
Downgradient	BY-AP-MW-2	05/24/2022	<0.03	2.45	9.21	<0.06	4.78	0.615 J
Downgradient	BY-AP-MW-3	05/25/2022	<0.03	1.29	15.2	<0.06	4.64	1.41 J
Downgradient	BY-AP-MW-4	05/25/2022	<0.03	1.69	16.1	<0.06	4.6	1.97 J
Downgradient	BY-AP-MW-5	05/25/2022	0.063 J	14.6	20	<0.06	5.99	5.53
Downgradient	BY-AP-MW-6	05/25/2022	<0.03	1.62	6.63	<0.06	4.57	1.27 J
Downgradient	BY-AP-MW-7	05/24/2022	0.0369 J	10.5	13.2	0.0724 J	6.32	7.14
Downgradient	BY-AP-MW-8	05/24/2022	1.12	31.5	27.2	0.0713 J	5.6	9.75
Downgradient	BY-AP-MW-9	05/24/2022	2.01	38.3	17.3	<0.06	6.03	5.76
Vert. Delineation	BY-AP-MW-10V	05/24/2022	0.938	65	19.4	<0.06	5.77	5.73

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022

EPA Appendix III Set								
Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Vert. Delineation	BY-AP-MW-12V	05/23/2022	0.0765 J	20.6	25.6	<0.06	6.22	6.64
Vert. Delineation	BY-AP-MW-13V	05/25/2022	0.0852 J	12	59.3	<0.06	6.3	122
Vert. Delineation	BY-AP-MW-14V	05/24/2022	0.376	7.03	184	0.291	6.71	13.6
Vert. Delineation	BY-AP-MW-15V	05/24/2022	0.0376 J	8.1	191	<0.06	5.7	1.77 J
Vert. Delineation	BY-AP-MW-16V	05/25/2022	<0.03	1.8	56.6	<0.06	5.26	35.1
Vert. Delineation	BY-AP-MW-17V	05/25/2022	0.177	49.6	649	0.0799 J	6.34	49.1
Vert. Delineation	BY-AP-MW-1V	05/24/2022	0.0333 J	3.55	95.1	<0.06	4.9	21.1
Vert. Delineation	BY-AP-MW-20V	05/24/2022	0.0977 J	14.4	35.4	0.0811 J	6.28	3.79
Vert. Delineation	BY-AP-MW-23V	05/25/2022	0.307	0.899	106	0.385	7.44	4.25
Vert. Delineation	BY-AP-MW-25V	05/25/2022	<0.03	0.573	3.22	<0.06	5.45	2.13
Vert. Delineation	BY-AP-MW-5V	05/25/2022	<0.03	2.62	22.6	<0.06	5.88	2.91
Vert. Delineation	BY-AP-MW-7V	05/24/2022	0.165	8.84	40.4	0.0869 J	6.92	6.06
Vert. Delineation	BY-AP-MW-8V	05/23/2022	0.259	24.4	22.1	0.108 J	6.08	8.35
Horiz. Delineation	BY-AP-MW-17H	05/25/2022	0.0597 J	11.6	16	0.138	6.21	3.58
Horiz. Delineation	BY-AP-MW-18H	05/23/2022	0.91	25.5	18.9	0.0857 J	6.24	9.46
Horiz. Delineation	BY-AP-MW-19H	05/24/2022	0.159	18.6	10.4	<0.06	5.8	34.7
Horiz. Delineation	BY-AP-MW-20H	05/23/2022	0.0653 J	28.6	44.1	0.124 J	6.15	95.1
Horiz. Delineation	BY-AP-MW-22H	05/24/2022	0.0562 J	14.4	57.1	0.318	6.57	103
Horiz. Delineation	BY-AP-MW-23H	05/25/2022	0.0526 J	24.5	6.63	<0.06	5.92	4.01
Horiz. Delineation	BY-AP-MW-24H	05/24/2022	0.351	17.9	45.7	0.149	6.22	92.3
Horiz. Delineation	BY-AP-MW-25H	05/25/2022	<0.03	0.949	5.32	<0.06	5.23	4.24

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	BY-UP-MW-1	05/31/2022	<0.000508	0.000237	0.1	<0.000406	<6.8e-005	0.000334 J	0.00487	<0.06
Upgradient	BY-UP-MW-2	05/31/2022	<0.000508	8.79e-005 J	0.153	0.000413 J	<6.8e-005	0.0012	0.00194	<0.06
Upgradient	BY-UP-MW-3	05/31/2022	<0.000508	<8.1e-005	0.0992	<0.000406	<6.8e-005	0.00139	0.00149	<0.06
Upgradient	BY-UP-MW-4	05/31/2022	<0.000508	0.000203	0.129	<0.000406	<6.8e-005	0.00156	0.0015	<0.06
Downgradient	BY-AP-MW-1	05/24/2022	<0.000508	0.0767	0.343	<0.000406	<6.8e-005	0.00238	0.000914	<0.06
Downgradient	BY-AP-MW-10	05/24/2022	<0.000508	0.0775	0.0618	<0.000406	<6.8e-005	0.000522 J	0.000543	<0.06
Downgradient	BY-AP-MW-11	05/23/2022	<0.000508	0.0142	0.0691	<0.000406	<6.8e-005	0.00474	0.00118	0.0709 J
Downgradient	BY-AP-MW-12	05/23/2022	<0.000508	0.0245	0.0802	<0.000406	<6.8e-005	0.00374	0.00428	0.0873 J
Downgradient	BY-AP-MW-13	05/24/2022	<0.000508	0.0128	0.0723	<0.000406	<6.8e-005	0.00685	0.00189	0.0769 J
Downgradient	BY-AP-MW-14	05/25/2022	<0.000508	0.0183	0.0693	<0.000406	<6.8e-005	0.00345	0.00125	0.0733 J
Downgradient	BY-AP-MW-15	05/25/2022	<0.000508	0.0176	0.0846	<0.000406	<6.8e-005	0.000489 J	0.0364	0.214
Downgradient	BY-AP-MW-16	05/25/2022	<0.000508	0.0134	0.0977	<0.000406	<6.8e-005	0.00135	0.0155	<0.06
Downgradient	BY-AP-MW-2	05/24/2022	<0.000508	0.00115	0.0248	<0.000406	<6.8e-005	<0.000203	0.00582	<0.06
Downgradient	BY-AP-MW-3	05/25/2022	<0.000508	<8.1e-005	0.0494	<0.000406	<6.8e-005	0.00104	0.000279	<0.06
Downgradient	BY-AP-MW-4	05/25/2022	<0.000508	<8.1e-005	0.0399	0.000649 J	<6.8e-005	0.000257 J	0.00455	<0.06
Downgradient	BY-AP-MW-5	05/25/2022	<0.000508	0.0316	0.155	<0.000406	<6.8e-005	0.00103	0.00184	<0.06
Downgradient	BY-AP-MW-6	05/25/2022	<0.000508	<8.1e-005	0.0268	<0.000406	0.000306	0.000286 J	0.000977	<0.06
Downgradient	BY-AP-MW-7	05/24/2022	<0.000508	0.0197	0.0717	<0.000406	<6.8e-005	0.000584 J	0.023	0.0724 J
Downgradient	BY-AP-MW-8	05/24/2022	<0.000508	0.0583	0.142	<0.000406	<6.8e-005	0.00128	0.000666	0.0713 J
Downgradient	BY-AP-MW-9	05/24/2022	<0.000508	0.0404	0.117	<0.000406	<6.8e-005	0.000701 J	0.000695	<0.06

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

EPA Appendix IV Set									
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Upgradient	BY-UP-MW-1	05/31/2022	8.38e-005 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.34
Upgradient	BY-UP-MW-2	05/31/2022	7.81e-005 J	<0.007105	<0.0003	<0.000102	0.000633 J	<6.8e-005	1.38
Upgradient	BY-UP-MW-3	05/31/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.67
Upgradient	BY-UP-MW-4	05/31/2022	0.000173 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.47
Downgradient	BY-AP-MW-1	05/24/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	2.12
Downgradient	BY-AP-MW-10	05/24/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.36 U
Downgradient	BY-AP-MW-11	05/23/2022	9.32e-005 J	0.0269	<0.0003	0.00141	<0.000508	<6.8e-005	0.452 U
Downgradient	BY-AP-MW-12	05/23/2022	0.000179 J	<0.007105	<0.0003	0.00109	<0.000508	<6.8e-005	1.4
Downgradient	BY-AP-MW-13	05/24/2022	0.000146 J	<0.007105	<0.0003	0.00356	0.000558 J	<6.8e-005	0.915 U
Downgradient	BY-AP-MW-14	05/25/2022	0.000102 J	<0.007105	<0.0003	0.000518	<0.000508	<6.8e-005	1.25
Downgradient	BY-AP-MW-15	05/25/2022	<6.8e-005	0.0118 J	<0.0003	0.0018	<0.000508	<6.8e-005	1.3
Downgradient	BY-AP-MW-16	05/25/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.927 U
Downgradient	BY-AP-MW-2	05/24/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.732 U
Downgradient	BY-AP-MW-3	05/25/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.72
Downgradient	BY-AP-MW-4	05/25/2022	0.000176 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.821 U
Downgradient	BY-AP-MW-5	05/25/2022	<6.8e-005	<0.007105	<0.0003	0.000114 J	<0.000508	<6.8e-005	1.71
Downgradient	BY-AP-MW-6	05/25/2022	0.0112	<0.007105	<0.0003	0.000325	<0.000508	<6.8e-005	1.06 U
Downgradient	BY-AP-MW-7	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.000178 J	<0.000508	<6.8e-005	1.05 U
Downgradient	BY-AP-MW-8	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.000234	<0.000508	<6.8e-005	0.733 U
Downgradient	BY-AP-MW-9	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.00024	<0.000508	<6.8e-005	2.11

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Vert. Delineation	BY-AP-MW-10V	05/24/2022	<0.000508	0.000362	0.188	<0.000406	<6.8e-005	0.000493 J	0.000618	<0.06
Vert. Delineation	BY-AP-MW-12V	05/23/2022	<0.000508	0.0257	0.103	<0.000406	<6.8e-005	0.000813 J	0.00255	<0.06
Vert. Delineation	BY-AP-MW-13V	05/25/2022	<0.000508	0.0102	0.0888	<0.000406	<6.8e-005	0.00488	0.00119	<0.06
Vert. Delineation	BY-AP-MW-14V	05/24/2022	<0.000508	0.00572	0.067	<0.000406	<6.8e-005	0.000602 J	0.00327	0.291
Vert. Delineation	BY-AP-MW-15V	05/24/2022	<0.000508	0.0333	0.156	<0.000406	0.00018 J	0.000234 J	0.0764	<0.06
Vert. Delineation	BY-AP-MW-16V	05/25/2022	<0.000508	0.00112	0.0569	<0.000406	<6.8e-005	<0.000203	0.0139	<0.06
Vert. Delineation	BY-AP-MW-17V	05/25/2022	<0.000508	0.00192	0.698	<0.000406	<6.8e-005	0.000477 J	0.0685	0.0799 J
Vert. Delineation	BY-AP-MW-1V	05/24/2022	<0.000508	0.000793	0.0863	<0.000406	<6.8e-005	0.000381 J	0.00765	<0.06
Vert. Delineation	BY-AP-MW-20V	05/24/2022	<0.000508	0.0188	0.0906	<0.000406	<6.8e-005	0.000464 J	0.0264	0.0811 J
Vert. Delineation	BY-AP-MW-23V	05/25/2022	<0.000508	0.00149	0.00735	<0.000406	<6.8e-005	0.000455 J	<6.8e-005	0.385
Vert. Delineation	BY-AP-MW-25V	05/25/2022	<0.000508	<8.1e-005	0.00993	<0.000406	<6.8e-005	0.00126	0.000277	<0.06
Vert. Delineation	BY-AP-MW-5V	05/25/2022	<0.000508	0.000171 J	0.0574	<0.000406	<6.8e-005	0.000476 J	0.00106	<0.06
Vert. Delineation	BY-AP-MW-7V	05/24/2022	<0.000508	0.00218	0.0803	<0.000406	<6.8e-005	0.000226 J	0.00011 J	0.0869 J
Vert. Delineation	BY-AP-MW-8V	05/23/2022	<0.000508	0.00386	0.277	<0.000406	<6.8e-005	0.00124	0.000921	0.108 J
Horiz. Delineation	BY-AP-MW-17H	05/25/2022	<0.000508	0.03	0.126	<0.000406	<6.8e-005	0.000334 J	0.0013	0.138
Horiz. Delineation	BY-AP-MW-18H	05/23/2022	<0.000508	0.0143	0.127	<0.000406	<6.8e-005	0.00133	0.00108	0.0857 J
Horiz. Delineation	BY-AP-MW-19H	05/24/2022	<0.000508	0.000993	0.0796	<0.000406	<6.8e-005	0.000423 J	0.00513	<0.06
Horiz. Delineation	BY-AP-MW-20H	05/23/2022	<0.000508	0.0136	0.0963	<0.000406	<6.8e-005	0.00233	0.00423	0.124 J
Horiz. Delineation	BY-AP-MW-22H	05/24/2022	<0.000508	0.0197	0.215	<0.000406	<6.8e-005	0.000566 J	0.0027	0.318
Horiz. Delineation	BY-AP-MW-23H	05/25/2022	<0.000508	0.00518	0.174	<0.000406	<6.8e-005	0.000514 J	0.002	<0.06

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

EPA Appendix IV Set									
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Vert. Delineation	BY-AP-MW-10V	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.000111 J	<0.000508	<6.8e-005	1.2
Vert. Delineation	BY-AP-MW-12V	05/23/2022	<6.8e-005	<0.007105	<0.0003	0.00123	<0.000508	<6.8e-005	0.962 U
Vert. Delineation	BY-AP-MW-13V	05/25/2022	<6.8e-005	0.0318	<0.0003	0.000796	<0.000508	<6.8e-005	0.951 U
Vert. Delineation	BY-AP-MW-14V	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.0031	<0.000508	<6.8e-005	1.26
Vert. Delineation	BY-AP-MW-15V	05/24/2022	0.000111 J	<0.007105	<0.0003	<0.000102	<0.000508	0.00014 J	1.85
Vert. Delineation	BY-AP-MW-16V	05/25/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	8.86e-005 J	1.03 U
Vert. Delineation	BY-AP-MW-17V	05/25/2022	7.37e-005 J	<0.007105	<0.0003	0.000428	<0.000508	0.000103 J	5.37
Vert. Delineation	BY-AP-MW-1V	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.000108 J	<0.000508	<6.8e-005	2
Vert. Delineation	BY-AP-MW-20V	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.00164	<0.000508	<6.8e-005	0.97 U
Vert. Delineation	BY-AP-MW-23V	05/25/2022	0.000124 J	<0.007105	<0.0003	0.00142	<0.000508	<6.8e-005	0.285 U
Vert. Delineation	BY-AP-MW-25V	05/25/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.527 U
Vert. Delineation	BY-AP-MW-5V	05/25/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.03 U
Vert. Delineation	BY-AP-MW-7V	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.00074	<0.000508	<6.8e-005	0.619 U
Vert. Delineation	BY-AP-MW-8V	05/23/2022	<6.8e-005	<0.007105	<0.0003	0.000286	<0.000508	<6.8e-005	1.13
Horiz. Delineation	BY-AP-MW-17H	05/25/2022	<6.8e-005	<0.007105	<0.0003	0.000454	<0.000508	<6.8e-005	1.71
Horiz. Delineation	BY-AP-MW-18H	05/23/2022	<6.8e-005	<0.007105	<0.0003	0.000361	<0.000508	<6.8e-005	1.03 U
Horiz. Delineation	BY-AP-MW-19H	05/24/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	1.06 U
Horiz. Delineation	BY-AP-MW-20H	05/23/2022	<6.8e-005	<0.007105	<0.0003	0.000537	0.000538 J	<6.8e-005	0.657 U
Horiz. Delineation	BY-AP-MW-22H	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.00145	<0.000508	<6.8e-005	0.656 U
Horiz. Delineation	BY-AP-MW-23H	05/25/2022	<6.8e-005	<0.007105	<0.0003	0.000131 J	<0.000508	<6.8e-005	0.674 U

Notes:

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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. Shaded cells indicate result greater than GWPS, but does not necessarily indicate an SSL.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Horiz. Delineation	BY-AP-MW-24H	05/24/2022	<0.000508	0.0718	0.245	<0.000406	<6.8e-005	0.000809 J	0.00571	0.149
Horiz. Delineation	BY-AP-MW-25H	05/25/2022	<0.000508	0.000196 J	0.0197	<0.000406	<6.8e-005	0.00103	0.00132	<0.06

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022

EPA Appendix IV Set									
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Horiz. Delineation	BY-AP-MW-24H	05/24/2022	<6.8e-005	<0.007105	<0.0003	0.000923	<0.000508	<6.8e-005	1.08 U
Horiz. Delineation	BY-AP-MW-25H	05/25/2022	<6.8e-005	<0.007105	<0.0003	0.000103 J	<0.000508	<6.8e-005	0.682 U

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- mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
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Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Upgradient	BY-UP-MW-1	05/31/2022	0	4.8	2.23	3.15	2.05	1.14	6.74	0.0898
Upgradient	BY-UP-MW-2	05/31/2022	0	0.0704	2.48	3.92	2.25	1.24	8.39	0.127
Upgradient	BY-UP-MW-3	05/31/2022	0	0.027 J	2.05	4.02	3.11	1.95	8.6	0.0446
Upgradient	BY-UP-MW-4	05/31/2022	0	0.222	2.2	4.12	2.69	2.02	8.82	0.233
Downgradient	BY-AP-MW-1	05/24/2022	0	155	13.1	10.9	24.4	43.9	23.3	0.0257
Downgradient	BY-AP-MW-10	05/24/2022	0	68	17.6	12.1	26.2	63.9	25.9	<0.00609
Downgradient	BY-AP-MW-11	05/23/2022	0	80	13.8	7.55	61	26	16.2	0.0586
Downgradient	BY-AP-MW-12	05/23/2022	0	74	15.3	7.48	44.8	20.6	16	0.19
Downgradient	BY-AP-MW-13	05/24/2022	0	27.1	6.94	7.28	53.9	19.2	15.6	0.116
Downgradient	BY-AP-MW-14	05/25/2022	0	35.3	6.72	9.37	80.4	11.4	20.1	0.195
Downgradient	BY-AP-MW-15	05/25/2022	0	105	5.31	6.03	36	6.41	12.9	<0.00609
Downgradient	BY-AP-MW-16	05/25/2022	0	94.6	7.61	11.2	24.6	13.9	24	0.0137
Downgradient	BY-AP-MW-2	05/24/2022	0	0.305	1.62	7.65	4.38	2.45	16.4	0.0125
Downgradient	BY-AP-MW-3	05/25/2022	0	0.00821 J	1.11	6.22	7.98	1.29	13.3	0.013
Downgradient	BY-AP-MW-4	05/25/2022	0	0.124	1.38	6.79	6.87	1.69	14.5	0.0313
Downgradient	BY-AP-MW-5	05/25/2022	0	84.9	5.5	12.2	19.8	14.6	26.1	0.00862 J
Downgradient	BY-AP-MW-6	05/25/2022	0	0.00905 J	1.2	6.62	6.62	1.62	14.2	0.00926 J
Downgradient	BY-AP-MW-7	05/24/2022	0	19.8	8.61	6.54	23.1	10.5	14	0.00839 J
Downgradient	BY-AP-MW-8	05/24/2022	0	74	10	15.3	19.4	31.5	32.7	0.00884 J
Downgradient	BY-AP-MW-9	05/24/2022	0	81.4	11.6	11.5	19.6	38.3	24.6	<0.00609

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**Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022**

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	Carbon, Total Organic mg/L	Chloride mg/L
Upgradient	BY-UP-MW-1	05/31/2022	0.154	0.444 J	<0.2	8.56	-10000	8.56	1.58 J	1.93
Upgradient	BY-UP-MW-2	05/31/2022	0.0241	0.905	1.84	0.44	-10000	-10000	1.14 J	2.17
Upgradient	BY-UP-MW-3	05/31/2022	0.0196	0.987	2.11	1.24	-10000	1.24	<1	3.39
Upgradient	BY-UP-MW-4	05/31/2022	0.0173	1.05	2.55	0.44	-10000	-10000	<1	3.31
Downgradient	BY-AP-MW-1	05/24/2022	0.946	2.25	0.331	371	-10000	371	15.6	27.6
Downgradient	BY-AP-MW-10	05/24/2022	1.82	1.46	0.257 J	337	-10000	337	12.4	30.8
Downgradient	BY-AP-MW-11	05/23/2022	0.625	9.56	0.279 J	318	-10000	318	28.6	25.1
Downgradient	BY-AP-MW-12	05/23/2022	0.849	2.76	0.212 J	274	-10000	274	20.1	26.2
Downgradient	BY-AP-MW-13	05/24/2022	0.451	2.52	<0.2	166	-10000	166	24	43.5
Downgradient	BY-AP-MW-14	05/25/2022	0.316	2.54	<0.2	196	-10000	196	17	45.3
Downgradient	BY-AP-MW-15	05/25/2022	0.741	4.23	0.283 J	101	-10000	101	4.99	80.7
Downgradient	BY-AP-MW-16	05/25/2022	0.845	2.11	0.282 J	219	-10000	219	10.5	20
Downgradient	BY-AP-MW-2	05/24/2022	0.272	0.969	<0.2	12	-10000	12	<1	9.21
Downgradient	BY-AP-MW-3	05/25/2022	0.00891	1.24	<0.2	2.52	-10000	2.52	<1	15.2
Downgradient	BY-AP-MW-4	05/25/2022	0.0207	1.44	<0.2	1.76	-10000	1.76	<1	16.1
Downgradient	BY-AP-MW-5	05/25/2022	0.67	1.46	0.23 J	193	-10000	193	14.5	20
Downgradient	BY-AP-MW-6	05/25/2022	0.00532	0.987	<0.2	16	-10000	16	<1	6.63
Downgradient	BY-AP-MW-7	05/24/2022	0.42	1.34	<0.2	124	-10000	124	5.15	13.2
Downgradient	BY-AP-MW-8	05/24/2022	1.78	0.802	0.243 J	238	-10000	238	13.4	27.2
Downgradient	BY-AP-MW-9	05/24/2022	2.16	1.03	0.3	255	-10000	255	12.3	17.3

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**Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022**

General Chemistry and MNA Parameters			
Hydraulic Location	Well	Sample Date	Sulfate mg/L
Upgradient	BY-UP-MW-1	05/31/2022	12.8
Upgradient	BY-UP-MW-2	05/31/2022	8.09
Upgradient	BY-UP-MW-3	05/31/2022	7.02
Upgradient	BY-UP-MW-4	05/31/2022	7.94
Downgradient	BY-AP-MW-1	05/24/2022	8.45
Downgradient	BY-AP-MW-10	05/24/2022	5.93
Downgradient	BY-AP-MW-11	05/23/2022	29.3
Downgradient	BY-AP-MW-12	05/23/2022	13
Downgradient	BY-AP-MW-13	05/24/2022	38.3
Downgradient	BY-AP-MW-14	05/25/2022	105
Downgradient	BY-AP-MW-15	05/25/2022	1.8 J
Downgradient	BY-AP-MW-16	05/25/2022	6.29
Downgradient	BY-AP-MW-2	05/24/2022	0.615 J
Downgradient	BY-AP-MW-3	05/25/2022	1.41 J
Downgradient	BY-AP-MW-4	05/25/2022	1.97 J
Downgradient	BY-AP-MW-5	05/25/2022	5.53
Downgradient	BY-AP-MW-6	05/25/2022	1.27 J
Downgradient	BY-AP-MW-7	05/24/2022	7.14
Downgradient	BY-AP-MW-8	05/24/2022	9.75
Downgradient	BY-AP-MW-9	05/24/2022	5.76

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Vert. Delineation	BY-AP-MW-10V	05/24/2022	0	106	11.4	13.9	22.7	65	29.7	0.00682 J
Vert. Delineation	BY-AP-MW-12V	05/23/2022	0	86.6	14.7	6.58	42	20.6	14.1	0.00923 J
Vert. Delineation	BY-AP-MW-13V	05/25/2022	0	50.7	6.72	6.78	72.6	12	14.5	0.0133
Vert. Delineation	BY-AP-MW-14V	05/24/2022	0	25.5	3.56	6.68	174	7.03	14.3	0.0154
Vert. Delineation	BY-AP-MW-15V	05/24/2022	0	53.7	5.58	8.04	77.9	8.1	17.2	0.0497
Vert. Delineation	BY-AP-MW-16V	05/25/2022	0	4.18	1.77	6.54	57	1.8	14	0.0132
Vert. Delineation	BY-AP-MW-17V	05/25/2022	0	0.608	35.1	5.7	407	49.6	12.2	0.0639
Vert. Delineation	BY-AP-MW-1V	05/24/2022	0	0.646	2.25	7.08	65.4	3.55	15.2	0.0214
Vert. Delineation	BY-AP-MW-20V	05/24/2022	0	80.5	8.64	6.41	44.4	14.4	13.7	0.0357
Vert. Delineation	BY-AP-MW-23V	05/25/2022	0	0.605	0.527	5.94	139	0.899	12.7	0.0466
Vert. Delineation	BY-AP-MW-25V	05/25/2022	0	0.0431	0.353 J	6.33	4.55	0.573	13.5	0.0129
Vert. Delineation	BY-AP-MW-5V	05/25/2022	0	0.543	1.97	6.46	18.1	2.62	13.8	0.00715 J
Vert. Delineation	BY-AP-MW-7V	05/24/2022	0	19.3	4.88	8.68	76.8	8.84	18.6	0.0309
Vert. Delineation	BY-AP-MW-8V	05/23/2022	0	73.1	14	7.13	36.3	24.4	15.3	0.0084 J
Horiz. Delineation	BY-AP-MW-17H	05/25/2022	0	78.2	5.3	7.31	16.5	11.6	15.6	0.0401
Horiz. Delineation	BY-AP-MW-18H	05/23/2022	0	84.1	10.7	10.3	17.2	25.5	22	0.0211
Horiz. Delineation	BY-AP-MW-19H	05/24/2022	0	13.4	3.82	8.9	11.4	18.6	19	0.0482
Horiz. Delineation	BY-AP-MW-20H	05/23/2022	0	55.8	17.9	7.78	96.4	28.6	16.6	0.0264
Horiz. Delineation	BY-AP-MW-22H	05/24/2022	0	69.9	13.4	9.11	77.2	14.4	19.5	0.0206
Horiz. Delineation	BY-AP-MW-23H	05/25/2022	0	56.4	7.3	16	18.9	24.5	34.2	0.0145

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	Carbon, Total Organic mg/L	Chloride mg/L
Vert. Delineation	BY-AP-MW-10V	05/24/2022	0.812	2.12	0.271 J	351	-10000	351	12	19.4
Vert. Delineation	BY-AP-MW-12V	05/23/2022	1.18	2.57	0.259 J	295	-10000	295	15	25.6
Vert. Delineation	BY-AP-MW-13V	05/25/2022	0.794	9.48	<0.2	174	-10000	174	20.4	59.3
Vert. Delineation	BY-AP-MW-14V	05/24/2022	0.349	7.91	<0.2	171	-10000	171	4.37	184
Vert. Delineation	BY-AP-MW-15V	05/24/2022	1.13	3.25	0.255 J	33.4	-10000	33.4	1.37 J	191
Vert. Delineation	BY-AP-MW-16V	05/25/2022	0.15	2	<0.2	22.6	-10000	22.6	1.64 J	56.6
Vert. Delineation	BY-AP-MW-17V	05/25/2022	2.34	6.7	<0.2	91.8	-10000	91.7	<1	649
Vert. Delineation	BY-AP-MW-1V	05/24/2022	0.178	2.47	<0.2	21.8	-10000	21.8	1.04 J	95.1
Vert. Delineation	BY-AP-MW-20V	05/24/2022	1.92	2.29	0.216 J	208	-10000	208	8.66	35.4
Vert. Delineation	BY-AP-MW-23V	05/25/2022	0.0258	1.5	<0.2	168	2.01	166	1.11 J	106
Vert. Delineation	BY-AP-MW-25V	05/25/2022	0.00466	0.73	<0.2	8.04	-10000	8.02	<1	3.22
Vert. Delineation	BY-AP-MW-5V	05/25/2022	0.0325	1.04	<0.2	28.1	-10000	28	<1	22.6
Vert. Delineation	BY-AP-MW-7V	05/24/2022	0.245	1.99	<0.2	160	-10000	160	4.26	40.4
Vert. Delineation	BY-AP-MW-8V	05/23/2022	0.762	2.59	0.298 J	267	-10000	267	16.2	22.1
Horiz. Delineation	BY-AP-MW-17H	05/25/2022	0.357	1.37	0.251 J	143	-10000	143	5.77	16
Horiz. Delineation	BY-AP-MW-18H	05/23/2022	1.29	1.28	0.579	213	-10000	213	14.4	18.9
Horiz. Delineation	BY-AP-MW-19H	05/24/2022	1.11	1.19	<0.2	78	-10000	78	3.99	10.4
Horiz. Delineation	BY-AP-MW-20H	05/23/2022	0.507	3.44	0.231 J	377	-10000	377	28.3	44.1
Horiz. Delineation	BY-AP-MW-22H	05/24/2022	0.552	2.06	0.243 J	246	-10000	246	17.5	57.1
Horiz. Delineation	BY-AP-MW-23H	05/25/2022	0.988	1.06	0.246 J	194	-10000	194	5.68	6.63

Notes:

- "J" indicates the result was detected above the MDL but below the PQL
- "<" indicates the result was not detected above the MDL and is considered a non-detect.
- U - 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.
- DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
- mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
- Shaded cells indicate result greater than GWPS, but does not necessarily indicate an SSL.

Analytical Results Summary Plant Barry Ash Pond 05/23/2022 - 05/31/2022

General Chemistry and MNA Parameters			
Hydraulic Location	Well	Sample Date	Sulfate mg/L
Vert. Delineation	BY-AP-MW-10V	05/24/2022	5.73
Vert. Delineation	BY-AP-MW-12V	05/23/2022	6.64
Vert. Delineation	BY-AP-MW-13V	05/25/2022	122
Vert. Delineation	BY-AP-MW-14V	05/24/2022	13.6
Vert. Delineation	BY-AP-MW-15V	05/24/2022	1.77 J
Vert. Delineation	BY-AP-MW-16V	05/25/2022	35.1
Vert. Delineation	BY-AP-MW-17V	05/25/2022	49.1
Vert. Delineation	BY-AP-MW-1V	05/24/2022	21.1
Vert. Delineation	BY-AP-MW-20V	05/24/2022	3.79
Vert. Delineation	BY-AP-MW-23V	05/25/2022	4.25
Vert. Delineation	BY-AP-MW-25V	05/25/2022	2.13
Vert. Delineation	BY-AP-MW-5V	05/25/2022	2.91
Vert. Delineation	BY-AP-MW-7V	05/24/2022	6.06
Vert. Delineation	BY-AP-MW-8V	05/23/2022	8.35
Horiz. Delineation	BY-AP-MW-17H	05/25/2022	3.58
Horiz. Delineation	BY-AP-MW-18H	05/23/2022	9.46
Horiz. Delineation	BY-AP-MW-19H	05/24/2022	34.7
Horiz. Delineation	BY-AP-MW-20H	05/23/2022	95.1
Horiz. Delineation	BY-AP-MW-22H	05/24/2022	103
Horiz. Delineation	BY-AP-MW-23H	05/25/2022	4.01

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - 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.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. Shaded cells indicate result greater than GWPS, but does not necessarily indicate an SSL.

Table 6. First Semi-Annual Monitoring Event

**Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022**

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L	Aluminum mg/L
Horiz. Delineation	BY-AP-MW-24H	05/24/2022	0	113	16.7	11.1	71.9	17.9	23.8	0.0262
Horiz. Delineation	BY-AP-MW-25H	05/25/2022	0	0.0796	0.787	7.42	5.34	0.949	15.9	0.0135

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - 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.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. Shaded cells indicate result greater than GWPS, but does not necessarily indicate an SSL.

Table 6. First Semi-Annual Monitoring Event

**Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022**

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	Carbon, Total Organic mg/L	Chloride mg/L
Horiz. Delineation	BY-AP-MW-24H	05/24/2022	0.22	2.55	0.287 J	334	-10000	334	25.8	50.8
Horiz. Delineation	BY-AP-MW-25H	05/25/2022	0.00351	0.958	<0.2	6.88	-10000	6.88	<1	5.32

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - 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.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. Shaded cells indicate result greater than GWPS, but does not necessarily indicate an SSL.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Barry Ash Pond
05/23/2022 - 05/31/2022

General Chemistry and MNA Parameters			
Hydraulic Location	Well	Sample Date	Sulfate mg/L
Horiz. Delineation	BY-AP-MW-24H	05/24/2022	24.3
Horiz. Delineation	BY-AP-MW-25H	05/25/2022	4.24

Notes:

1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - 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.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocuries per liter.
6. Shaded cells indicate result greater than GWPS, but does not necessarily indicate an SSL.

Appendix A



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-1																				
		03/02/2016	04/19/2016	06/08/2016	08/31/2016	10/19/2016	01/31/2017	03/21/2017	05/02/2017	06/06/2017	09/13/2017	01/24/2018	05/01/2018	11/28/2018	05/29/2019	10/01/2019	03/30/2020	09/01/2020	05/12/2021	05/18/2021	11/01/2021	05/24/2022
Appendix III																						
Boron	mg/L	2.03	2.2	1.61	1.55	1.59	1.84	--	1.73	1.56	1.87	--	1.81	1.8	1.75	1.91	1.77	2.11	--	1.99	2.02	2.08
Calcium	mg/L	46.5	49	33.5	34.2	35.1	38.5	--	35.1	32.4	40.5	--	39.7	35.8	33.4	36.7	33.7	40.5	--	39.5	38.4	43.9
Chloride	mg/L	2.18	9.01	21	21	21.4	--	25	26	27	24	--	25	26	27.6	24.6	24.9	25.7	--	25.1	31.3	27.6
Fluoride	mg/L	0.03 J	0.052 J	0.069 J	0.043 J	<0.01	--	0.04 J	0.05 J	0.049 J	0.06 J	0.05 J	0.05 J	<0.032	0.0858 J	0.0744 J	0.0726 J	0.194	--	0.0884 J	0.181	<0.06
pH_Field	SU	5.78	5.8	5.83	5.85	5.87	5.83	5.83	5.73	5.83	5.91	5.9	5.83	5.82	5.82	5.47	5.79	5.89	--	5.86	6.01	5.44
Sulfate	mg/L	0.31 J	0.335 J	0.556 J	<0.3	<0.3	--	<1.4	6	<1.4	4.7 J	--	<1.4	4.1 J	5.75	7.82	28.4	23.1	--	16.5	10.9	8.45
TDS	mg/L	426	442	461	456	444	422	--	442	433	456	--	416	408	403	430	419	454	--	450	480	409
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000687 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.076	0.0973	0.0605	0.0687	0.0701	0.0669	--	0.0672	0.0527	--	0.07	0.0777	0.0677	0.0555	0.0635	0.0557	0.0811	--	0.0687	0.0694	0.0767
Barium	mg/L	0.219	0.201	0.274	0.296	0.281	0.211	--	0.29	0.25	--	0.289	0.28	0.271	0.29	0.293	0.279	0.33	--	0.339	0.322	0.328
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00591 J	0.0077 J	0.00264 J	0.00246 J	0.00248 J	0.00556 J	--	0.00269 J	0.00295 J	--	0.00278 J	0.00435 J	0.0036 J	0.00223 J	0.00236 J	0.00415 J	0.00242 J	--	0.00294	0.00246	0.0025
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.000996	0.000914	0.00109
Combined Radium 226 + 228	pCi/L	1 U	3.0268	1.59	2.19	--	1.23	--	1.62	1.24	--	1.96 U	1.6	1.48	2.25	2.84	2.31	1.3	0.639 U	2.99	2.22	2.12
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.000106 J	9.01e-005 J	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-UP-MW-1																				
		02/23/2016	04/19/2016	06/06/2016	08/30/2016	10/18/2016	01/31/2017	03/20/2017	05/02/2017	06/06/2017	09/13/2017	01/23/2018	05/02/2018	11/27/2018	05/29/2019	10/02/2019	03/31/2020	09/09/2020	05/12/2021	10/19/2021	05/31/2022	
Appendix III																						
Boron	mg/L	0.0212 J	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	0.0362 J	0.11	0.188	0.097 J	0.157	0.0999 J	0.0841 J	0.0708 J	0.0567 J	
Calcium	mg/L	1.28	1.19	1.19	1.11	1.04	1.19	--	1.05	0.978	1.14	--	1.64	2.01	1.85	1.55	1.96	1.43	1.34	1.17	1.13	
Chloride	mg/L	3.59	2.89	3.12	3.91	3.9	--	3.5	3.5	3.1	4	--	9.9	4.7	5.48	3.65	3.17	2.92	2.18	2.37	1.93	
Fluoride	mg/L	0.03 J	0.023 J	0.062 J	0.053 J	0.042 J	--	<0.032	0.04 J	<0.032	0.04 J	<0.032	0.04 J	<0.032	0.0502 J	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	
pH_Field	SU	4.62	4.74	4.65	4.64	4.74	4.54	4.67	4.79	4.76	4.81	4.79	4.62	4.73	4.65	4.57	4.64	4.65	4.74	4.67	3.89	
Sulfate	mg/L	8.59	8.27	8.66	9.74	10.2	--	8.3	6.6	7.6	8.4	--	5.9	22	23.3	17.5	24.3	16.5	16.3	15.5	12.8	
TDS	mg/L	26.7	--	32.7	33.3	27.3	32	--	31.3	35.3	36.7	--	34	50.7	58	46	53.3	42	40.7	40	32	
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000925 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<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	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000336	0.000346	0.000168 J	
Barium	mg/L	0.117	0.099	0.107	0.106	0.102	0.0944	--	0.0868	0.0799	--	0.0884	0.137	0.157	0.166	0.129	0.176	0.124	0.123	0.103	0.101	
Beryllium	mg/L	<0.0006	<0.0006	0.000612 J	<0.0006	<0.0006	<0.0006	--	0.00069 J	<0.0006	--	<0.0006	<0.0006	0.000856 J	<0.0006	<0.0006	<0.0006	<0.0006	0.000694 J	<0.000406	<0.000406	
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000296 J	0.000301 J	0.000231 J	
Cobalt	mg/L	0.0035 J	0.0038 J	0.00427 J	0.00348 J	0.00338 J	0.00308 J	--	0.00314 J	0.0036 J	--	0.00586 J	0.00702 J	0.0157	0.0109	0.0129	0.0123	0.00697	0.00611	0.00517	0.00484	
Combined Radium 226 + 228	pCi/L	2.8971 U	1 U	0.841	1.74	1.47	0.952	--	0.768	1.04	--	0.513 U	0.916	1.37	1.57	0.905	1.77	1.77	0.639 U	1.77	1.34	
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	9.79e-005 J	0.000115 J	8.38e-005 J	
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<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	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-2																				
		03/02/2016	04/19/2016	06/08/2016	08/31/2016	10/19/2016	01/31/2017	03/21/2017	05/02/2017	06/06/2017	09/12/2017	01/24/2018	05/01/2018	11/27/2018	05/29/2019	10/01/2019	03/31/2020	08/31/2020	05/11/2021	05/18/2021	11/01/2021	05/24/2022
Appendix III																						
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	--	<0.03	<0.03	<0.03
Calcium	mg/L	3.86	3.22	3.17	3.07	2.91	2.94	--	2.82	2.79	2.88	--	2.82	2.8	2.82	2.94	2.95	3	--	3.17	3.13	2.45
Chloride	mg/L	6.08	6.2	6.2	6.51	6.85	--	7.2	8.3	8.5	8.6	--	7.6	8.8	8.31	8.19	8.48	8.3	--	7.89	8.16	9.21
Fluoride	mg/L	0.04 J	0.038 J	0.067 J	0.05 J	<0.01	--	<0.032	0.04 J	0.04 J	0.037 J	<0.032	<0.032	<0.032	<0.05	<0.05	<0.06	<0.06	--	<0.06	<0.06	<0.06
pH_Field	SU	6.08	5.92	5.9	5.87	5.82	5.87	5.85	5.61	5.82	5.61	5.83	5.8	5.71	5.7	4.97	5.71	5.57	--	5.83	5.2	4.78
Sulfate	mg/L	3.3	2.68	1.1	<0.3	<0.3	--	<1.4	5	<1.4	<1.4	--	<1.4	<1.4	0.885 J	<0.5	1.69	0.576 J	--	<0.5	1.56	0.615 J
TDS	mg/L	42	51.3	46.7	32.7	37.3	47.3	--	44	48	40.7	--	42.7	48	47.3	44.7	42	45.3	--	48.7	52	40.7
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000739 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00263 J	0.00247 J	0.0023 J	0.00237 J	0.00241 J	0.00185 J	--	0.00194 J	0.00175 J	--	0.00158 J	0.00166 J	0.00144 J	0.00132 J	0.0014 J	0.00149 J	0.00176 J	--	0.00159	0.00191	0.00114
Barium	mg/L	0.0285	0.0268	0.0248	0.026	0.0247	0.0228	--	0.0257	0.0219	--	0.0229	0.0279	0.0249	0.0232	0.0241	0.0264	0.0275	--	0.0259	0.0247	0.0251
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.000394 J	0.000288 J	<0.000203
Cobalt	mg/L	0.00842 J	0.008 J	0.00796 J	0.00752 J	0.00778 J	0.00647 J	--	0.00686 J	0.00694 J	--	0.00592 J	0.00693 J	0.0066	0.00745	0.00696	0.00716	0.00751	--	0.00746	0.00706	0.00582
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.121 U	0.348 U	0.48	0.00333 U	--	0.4 U	0.083 U	--	0.404 U	0.457	0.359 U	1.18	0.284 U	0.699	0.0265 U	0.945 U	0.72 U	0.523 U	0.732 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<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	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-UP-MW-2																			
		02/23/2016	04/19/2016	06/07/2016	08/30/2016	10/18/2016	01/31/2017	03/20/2017	05/02/2017	06/06/2017	09/13/2017	01/23/2018	05/01/2018	11/27/2018	05/29/2019	10/02/2019	03/31/2020	09/09/2020	05/11/2021	10/19/2021	05/31/2022
Appendix III																					
Boron	mg/L	0.0252 J	<0.02	0.0202 J	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	0.0207 J	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	1.11	1.09	1.16	1.08	1.03	1.23	--	1.28	1.25	1.6	--	1.58	1.49	1.59	1.7	1.43	1.5	1.39	1.32	1.24
Chloride	mg/L	3.99	4.08	4.28	4.26	4.26	--	4.1	5	3.9	4.3	--	3.7	3.2	2.93	2.75	2.72	2.32	2.16	2.08	2.17
Fluoride	mg/L	0.02 J	0.021 J	0.06 J	0.05 J	0.04 J	--	<0.032	0.04 J	0.04 J	0.043 J	0.04 J	0.04 J	<0.032	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	4.79	4.84	4.81	4.76	4.84	4.6	4.71	4.8	4.72	4.71	4.67	4.61	4.72	4.58	4.43	4.6	4.67	4.29	4.6	3.31
Sulfate	mg/L	7.2	7.22	7.92	8.17	7.99	--	6.1	5	5.3	4.9 J	--	4.2 J	3.7 J	5.94	6.04	6.83	6.08	7.92	7.48	8.09
TDS	mg/L	30.7	--	35.3	27.3	--	32.7	--	30.7	34.7	39.3	--	42	31.3	40	41.3	40	40.7	35.3	36	30.7
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000898 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<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	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000136 J	0.000122 J	<8.1e-005
Barium	mg/L	0.111	0.0875	0.0979	0.108	0.103	0.109	--	0.125	0.108	--	0.153	0.167	0.158	0.172	0.183	0.171	0.172	0.165	0.145	0.153
Beryllium	mg/L	<0.0006	<0.0006	0.00093 J	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	0.000801 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	0.000413 J
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	0.00596 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00136	0.00135	0.0012
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	0.0021 J	<0.002	0.00209 J	0.00248 J	0.00244 J	0.00224 J	0.00219 J	0.00194	0.00192	0.00187
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.652	0.411 U	1	0.398 U	--	0.66	0.639	--	0.669 U	1.06	0.636	0.579 U	1.33	0.814	0.653 U	0.945 U	1.85	1.38
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000118 J	0.0001 J	7.81e-005 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000602 J	<0.000508	0.000633 J
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-3																				
		03/02/2016	04/19/2016	06/07/2016	08/31/2016	10/19/2016	01/31/2017	03/21/2017	05/02/2017	06/06/2017	09/12/2017	01/24/2018	05/01/2018	11/27/2018	05/29/2019	10/01/2019	03/31/2020	09/01/2020	05/11/2021	05/18/2021	11/01/2021	05/25/2022
Appendix III																						
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	--	<0.03	<0.03	<0.03
Calcium	mg/L	1.11	1.01	1.06	0.978	0.906	1.04	--	0.969	0.902	0.988	--	1.07	0.999	1.09	1.08	1.1	1.08	--	1.12	1.09	1.29
Chloride	mg/L	8.04	7.6	7.7	7.7	7.73	--	7.2	8.6	8.3	8.5	--	7.6	8.4	9.01	8.05	9.07	8.97	--	9.52	9.76	15.2
Fluoride	mg/L	0.01 J	0.014 J	0.049 J	0.034 J	0.023 J	--	<0.032	<0.032	0.1	<0.032	<0.032	<0.032	<0.05	<0.05	<0.06	<0.06	--	<0.06	<0.06	<0.06	
pH_Field	SU	5.14	5.06	5.13	5.11	5.05	5.14	5.13	4.85	5.15	4.96	5.22	5.11	5.05	5.05	4.37	5.08	4.24	--	4.93	4.94	4.64
Sulfate	mg/L	0.79 J	0.674 J	1	0.702 J	0.739 J	--	<1.4	5	5	<1.4	--	<1.4	<1.4	0.747 J	0.61 J	1.02	0.705 J	--	0.883 J	1.01	1.41 J
TDS	mg/L	27.3	33.3	44	29.3	29.3	36.7	--	28	36.7	35.3	--	34.7	41.3	40	36.7	37.3	39.3	--	38	35.3	50.7
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	0.000606 J	<0.0006	<0.0006	0.000637 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<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	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<6.8e-005	<6.8e-005	<8.1e-005
Barium	mg/L	0.0306	0.0292	0.0318	0.0324	0.0313	0.0306	--	0.0332	0.0275	--	0.0317	0.0356	0.0339	0.037	0.0356	0.0393	0.038	--	0.0406	0.0371	0.0515
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.000919 J	0.000932 J	0.00104
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.000196 J	0.000156 J	0.000284
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.455	0.329 U	0.536	0.496	--	0.149 U	0.191 U	--	0.543 U	0.372 U	0.591	2.31	1.52	0.478 U	0.158 U	0.521 U	0.749 U	0.688 U	1.72
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<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	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<6.8e-005	<6.8e-005	<0.00102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-UP-MW-3																				
		02/23/2016	04/19/2016	06/07/2016	08/30/2016	10/18/2016	01/31/2017	03/20/2017	05/02/2017	06/06/2017	09/13/2017	01/23/2018	05/01/2018	11/27/2018	05/29/2019	10/02/2019	03/31/2020	09/09/2020	05/11/2021	10/18/2021	05/31/2022	
Appendix III																						
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	
Calcium	mg/L	1.77	1.68	1.68	1.62	1.53	1.65	--	1.58	1.55	1.71	--	1.76	1.69	1.74	1.86	1.92	1.97	2.06	2.1	1.95	
Chloride	mg/L	3.68	3.72	3.66	3.7	3.77	--	3.7	4.6	3.4	3.9	--	4.1	3.5	3.58	3.64	3.47	3.47	3.42	3.41	3.39	
Fluoride	mg/L	0.02 J	0.016 J	0.052 J	0.038 J	0.03 J	--	<0.032	0.1	<0.032	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	
pH_Field	SU	4.96	4.94	4.96	4.92	4.98	4.74	4.9	4.98	4.94	4.93	4.91	4.87	4.94	4.8	4.52	4.4	4.76	4.53	4.55	3.54	
Sulfate	mg/L	7.44	7.66	8.16	8.43	8.47	--	7.4	6.3	7.1	7.3	--	6.9	6.5	7.81	7.62	7.98	7.13	7.73	7.36	7.18	
TDS	mg/L	40	32	38.7	31.3	26.7	30	--	30.7	32.7	38	--	35.3	36	37.3	36.7	39.3	42.7	44	36	31.3	
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000911 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<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	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	8.69e-005 J	<8.1e-005
Barium	mg/L	0.0862	0.0718	0.0754	0.0768	0.0727	0.0698	--	0.0723	0.07	--	0.0747	0.0877	0.0804	0.0831	0.089	0.0927	0.0919	0.0981	0.0935	0.0993	
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	7.25e-005 J	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	0.00229 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00146	0.00135	0.00129	
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00142	0.00146	0.00154	
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.342 U	0.702	0.791	0.0613 U	--	0.974	0.748	--	0.558 U	0.296 U	0.357 U	0.275 U	0.458 U	0.941	1.05	0.521 U	1.75	1.67	
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<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	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<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	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-4																				
		03/01/2016	04/19/2016	06/07/2016	08/30/2016	10/19/2016	01/31/2017	03/21/2017	05/02/2017	06/06/2017	09/12/2017	01/24/2018	05/01/2018	11/27/2018	05/29/2019	10/01/2019	03/31/2020	09/01/2020	05/11/2021	05/18/2021	11/01/2021	05/25/2022
Appendix III																						
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	--	<0.03	<0.03	<0.03
Calcium	mg/L	1.07	0.969	1.08	0.952	1.17	0.946	--	0.826	0.834	0.884	--	0.921	1.01	0.622	0.645	0.898	0.566	--	0.974	0.816	1.54
Chloride	mg/L	7.74	7.66	11.3	10.8	11.1	--	11	12	12	11	--	9.2	10	8.52	7.35	9.54	7.82	--	9.53	7.99	16.1
Fluoride	mg/L	0.02 J	0.016 J	0.047 J	0.035 J	0.025 J	--	<0.032	<0.032	0.1	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.06	<0.06	--	<0.06	<0.06	<0.06
pH_Field	SU	5.19	5.06	4.7	4.77	4.67	4.42	4.45	4.46	4.89	4.71	5.03	4.44	4.78	4.65	4.28	4.69	4.23	--	4.17	5.18	4.6
Sulfate	mg/L	2.58	2.3	2.58	2.81	5.06	--	3.4 J	2.7 J	1.5 J	1.9 J	--	1.4 J	2.3 J	2.83	2.09	4.12	1.83	--	4.43	3.34	1.97 J
TDS	mg/L	27.3	38	48.7	32.7	36	40.7	--	30.7	41.3	34.7	--	39.3	32	36	32	42.7	36	--	47.3	32	48.7
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	0.000869 J	<0.0006	<0.0006	0.00086 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<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	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.000125 J	0.000203	8.52e-005 J
Barium	mg/L	0.018	0.0166	0.0271	0.0312	0.0443	0.0231	--	0.0241	0.0276	--	0.0293	0.0205	0.0321	0.0213	0.0207	0.0193	0.0131	--	0.0225	0.0217	0.0381
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	0.00071 J	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.000406	<0.000406	0.000656 J
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.000544 J	0.000668 J	0.000372 J
Cobalt	mg/L	<0.002	<0.002	0.00424 J	0.00262 J	0.00469 J	0.0127	--	0.00891 J	0.00217 J	--	<0.002	0.0126	0.00363 J	0.00576	<0.002	0.0205	0.00657	--	0.018	0.00478	0.00431
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.287 U	0.585	1.85	0.25 U	--	0.391 U	0.183 U	--	0.622 U	0.0917 U	0.695	0.947	0.7	0.323 U	0.39 U	0.969 U	0.734 U	0.888 U	0.821 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.00013 J	6.92e-005 J	0.000176 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-UP-MW-4																			
		02/23/2016	04/19/2016	06/06/2016	08/30/2016	10/18/2016	01/31/2017	03/20/2017	05/02/2017	06/06/2017	09/12/2017	01/23/2018	05/01/2018	11/26/2018	05/28/2019	10/02/2019	03/31/2020	09/08/2020	05/11/2021	10/18/2021	05/31/2022
Appendix III																					
Boron	mg/L	0.0257 J	<0.02	<0.02	<0.02	0.022 J	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	1.42	1.31	1.35	1.31	1.22	1.36	--	1.24	1.28	1.47	--	1.47	1.52	1.6	1.7	1.78	1.94	1.93	2.01	2.03
Chloride	mg/L	3.5	3.63	3.6	3.54	3.68	--	4.6	3.9	3.4	4.3	--	3.8	3.6	3.6	3.5	3.34	3.29	3.33	3.32	3.31
Fluoride	mg/L	0.02 J	0.015 J	0.05 J	0.036 J	0.025 J	--	<0.032	0.1	<0.032	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	4.74	4.86	4.88	4.91	4.95	4.71	4.83	4.93	4.9	4.82	4.85	4.8	4.88	4.73	4.67	4.51	4.75	4.67	4.38	3.97
Sulfate	mg/L	7.04	6.74	7.04	7.57	6.62	--	7	5.6	6.6	7.2	--	5.9	5.1	7.1	6.88	10.8	6.52	6.8	6.58	7.94
TDS	mg/L	--	--	28.7	25.3	--	26	--	--	42.7	26.7	--	34.7	32.7	31.3	36	36.7	39.3	46.7	36	36.7
Appendix IV																					
Antimony	mg/L	0.000606 J	<0.0006	<0.0006	<0.0006	<0.0006	0.000928 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<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	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.0017 J	<0.001	0.000217	0.000193 J	<8.1e-005
Barium	mg/L	0.0973	0.0802	0.0862	0.0841	0.0715	0.0825	--	0.0777	0.078	--	0.0825	0.102	0.0994	0.102	0.111	0.129	0.125	0.125	0.124	0.129
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	0.00604 J	<0.002	0.00159	0.00146	0.00156
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00137	0.00139	0.00138
Combined Radium 226 + 228	pCi/L	2.1138	1 U	0.757	0.992	0.905	1.08	--	1.18	1.1	--	1.32 U	1.19	0.863	0.474 U	0.624 U	1.09	1.27	0.969 U	2.19	1.47
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.00126 J	<0.001	0.000159 J	0.00012 J	0.000173 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-5																		
		03/01/2016	04/20/2016	06/07/2016	08/30/2016	10/18/2016	01/31/2017	03/22/2017	05/03/2017	06/07/2017	09/14/2017	01/24/2018	05/02/2018	11/27/2018	05/29/2019	10/01/2019	03/31/2020	09/01/2020	11/02/2021	05/25/2022
Appendix III																				
Boron	mg/L	0.0462 J	0.0719 J	0.0591 J	0.0675 J	0.0699 J	0.0518 J	--	0.0737 J	0.0518 J	0.0825 J	--	0.0603 J	0.0613 J	0.0946 J	0.103	0.0782 J	0.115	0.0755 J	0.0565 J
Calcium	mg/L	15	14.3	14.8	13.7	13.3	13.7	--	14.3	14.7	15.1	--	14.5	13.7	14.5	13.8	14.4	13.6	16.2	14.6
Chloride	mg/L	19.7	18.9	18.5	17.9	18.2	--	22	22	21	21	--	20	21	19.7	19.8	19.8	19.1	21	20
Fluoride	mg/L	0.04 J	0.043 J	0.075 J	0.057 J	0.049 J	--	0.04 J	0.05 J	0.05 J	0.06 J	0.05 J	0.05 J	<0.032	0.0923 J	0.0557 J	0.0735 J	0.0921 J	0.0964 J	<0.06
pH_Field	SU	5.99	5.96	6.03	6	5.99	5.96	6.01	5.99	6.01	6	5.98	5.99	6.01	5.93	5.47	6.01	5.93	6.36	5.99
Sulfate	mg/L	<0.3	<0.3	0.583 J	<0.3	<0.3	--	<1.4	<1.4	5	<1.4	--	<1.4	2.7 J	5.51	7.4	23.7	11	15	5.53
TDS	mg/L	273	269	272	244	238	266	--	259	255	276	--	247	248	259	243	243	253	297	252
Appendix IV																				
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000765 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000508	<0.000508
Arsenic	mg/L	0.0277	0.0307	0.0308	0.033	0.0296	0.0264	--	0.0309	0.0283	--	0.0282	0.0315	0.0283	0.0301	0.0307	0.0329	0.0372	0.0357	0.0334
Barium	mg/L	0.136	0.132	0.141	0.136	0.125	0.125	--	0.146	0.126	--	0.127	0.154	0.139	0.146	0.138	0.15	0.154	0.159	0.155
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<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	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00101 J	0.00103
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00197	0.00184
Combined Radium 226 + 228	pCi/L	1.67764 U	3.0801	1.5	1.17	1.93	1	--	1.48	0.915	--	1.74 U	0.58	1.43	2.16	2.14	0.754	1.1	2.06	1.71
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<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	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<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	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000124 J	0.000234
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<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 Quantita



**APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond**

Analyte	Units	BY-AP-MW-6																			
		03/01/2016	04/19/2016	06/07/2016	08/30/2016	10/19/2016	01/31/2017	03/22/2017	05/03/2017	06/07/2017	09/14/2017	01/24/2018	05/02/2018	11/28/2018	05/29/2019	10/01/2019	03/31/2020	09/02/2020	05/17/2021	11/02/2021	05/25/2022
Appendix III																					
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	1.87	1.69	1.75	1.77	1.8	1.98	--	1.97	1.98	2.14	--	2.13	1.91	1.72	1.92	1.68	1.8	1.93	1.97	1.62
Chloride	mg/L	5.77	5.57	5.52	5.5	5.55	--	6	6.4	5.9	6.5	--	5.5	6.2	6.15	5.99	5.94	5.94	6.26	6.4	6.63
Fluoride	mg/L	<0.01	0.016 J	0.048 J	0.034 J	0.023 J	--	0.1	0.1	0.1	<0.032	<0.032	<0.032	<0.032	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	5.59	5.55	5.43	5.39	5.31	5.26	5.32	5.35	5.32	5.29	5.32	5.33	5.46	5.31	4.7	5.22	5.16	5.21	5.59	4.57
Sulfate	mg/L	0.36 J	0.435 J	1.22	1.08	1.01	--	<1.4	1.4 J	1.5 J	1.8 J	--	<1.4	<1.4	1.17	1.04	1.21	1.02	0.981 J	1.37	1.27 J
TDS	mg/L	45.3	46	46	30	37.3	43.3	--	44.7	45.3	48.7	--	44	50.7	48.7	38	42	37.3	46.7	38	40.7
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000852 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00142 J	0.00138 J	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000103 J	9.83e-005 J	<8.1e-005
Barium	mg/L	0.0278	0.0242	0.0223	0.0242	0.024	0.0248	--	0.0268	0.0256	--	0.0254	0.0276	0.0231	0.0244	0.0257	0.0244	0.0282	0.0305	0.0286	0.0268
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	7.34e-005 J	0.000197 J
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000313 J	0.000232 J	0.000245 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000678	0.000601	0.000938
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.353 U	0.428 U	0.449 U	-0.0173 U	--	0.447	0.572	--	1.09 U	0.187 U	0.478 U	-0.276 U	0.742	0.291 U	0.241 U	1.84	0.773 U	1.06 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00185 J	0.00545	0.00276 J	0.00171 J	0.00162	0.00336	0.0112
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000117 J	0.00011 J	0.000319
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-7																			
		03/01/2016	04/20/2016	06/07/2016	08/31/2016	10/19/2016	01/31/2017	03/22/2017	05/03/2017	06/07/2017	09/14/2017	01/24/2018	05/02/2018	11/28/2018	05/29/2019	09/30/2019	03/30/2020	09/02/2020	05/18/2021	10/27/2021	05/24/2022
Appendix III																					
Boron	mg/L	0.0546 J	0.0472 J	0.0417 J	0.036 J	0.0386 J	0.0343 J	--	0.037 J	0.0227 J	0.0471 J	--	0.0313 J	0.0311 J	0.042 J	0.0418 J	0.0369 J	0.042 J	0.037 J	0.0427 J	0.0369 J
Calcium	mg/L	7.65	7.54	7.71	8.1	8.59	8.78	--	8.85	8.99	9.64	--	9.14	9.66	8.88	9.8	10.1	10.4	10.2	10	10.7
Chloride	mg/L	11.2	10.8	10.8	10.8	10.8	--	13	14	14	13	--	13	13	13.3	13.1	13.3	12.9	14.2	15.3	13.2
Fluoride	mg/L	0.06 J	0.078 J	0.101 J	0.086 J	0.075 J	--	0.06 J	0.08 J	0.08 J	0.07 J	0.09 J	0.08 J	0.07 J	0.0937 J	0.0925 J	0.0933 J	0.109	0.11	0.0823 J	0.0724 J
pH_Field	SU	6.36	6.31	6.3	6.31	6.23	6.26	6.32	6.29	6.27	6.25	6.35	6.29	6.33	6.18	6.36	6.32	6.25	6.4	6.35	6.32
Sulfate	mg/L	0.3 J	0.514 J	0.971 J	0.445 J	0.366 J	--	<1.4	<1.4	5	<1.4	--	<1.4	<1.4	2.77	2.51	4.78	3.59	4.6	5.17	7.14
TDS	mg/L	129	128	140	112	134	134	--	127	134	141	--	133	138	132	137	135	129	175	123	148
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00107 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0166	0.02	0.0223	0.0231	0.0244	0.0197	--	0.0212	0.0203	--	0.0214	0.0218	0.0209	0.0178	0.0217	0.0215	0.0234	0.0215	0.0236	0.0195
Barium	mg/L	0.0519	0.0517	0.0577	0.0614	0.0618	0.0576	--	0.0601	0.054	--	0.0568	0.063	0.0654	0.059	0.0648	0.059	0.0745	0.07	0.0664	0.0715
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	--	<0.002	<0.002	--	<0.002	0.00328 J	<0.002	<0.002	<0.002	<0.002	<0.002	0.00709	0.00309	0.000295 J
Cobalt	mg/L	0.011	0.0148	0.0172	0.0175	0.0189	0.0165	--	0.0172	0.0173	--	0.0158	0.0169	0.0178	0.0197	0.0186	0.0172	0.0197	0.0189	0.0206	0.0237
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.555 U	0.284 U	0.557 U	0.0949 U	--	0.53	-0.231 U	--	0.691 U	0.535	0.62	0.244 U	0.388 U	0.744	0.567	0.597 U	1.46 U	1.05 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<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	<0.01	--	<0.01	<0.01	--	<0.01	0.0108 J	<0.01	<0.01	<0.01	0.0102 J	<0.01	0.0882	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000214	0.000182 J	0.000176 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-8																			
		03/01/2016	04/20/2016	06/07/2016	08/30/2016	10/18/2016	01/31/2017	03/22/2017	05/03/2017	06/07/2017	09/14/2017	01/24/2018	05/02/2018	11/27/2018	05/29/2019	09/30/2019	03/30/2020	09/02/2020	05/11/2021	10/26/2021	05/24/2022
Appendix III																					
Boron	mg/L	1.72	1.7	1.57	1.67	1.4	1.46	--	1.45	1.41	1.16	--	1.12	1.31	1.44	1.38	1.12	1.26	0.971	0.933	1.11
Calcium	mg/L	36.1	34.5	34.7	34.1	33.2	32.3	--	34.1	34.7	34.4	--	32.3	32.5	31.9	33	32.2	31.5	33	33.5	31.5
Chloride	mg/L	24.5	22.5	21.6	21.6	20.2	--	24	25	24	24	--	23	27	27.4	25.5	22.6	22.2	21.9	21.7	27.2
Fluoride	mg/L	0.03 J	0.043 J	0.069 J	0.052 J	0.042 J	--	0.1	0.05 J	0.05 J	0.05 J	0.04 J	0.04 J	<0.032	0.0958 J	0.0559 J	0.0701 J	<0.06	0.094 J	<0.06	0.0713 J
pH_Field	SU	6.21	6.22	6.26	6.21	6.21	6.17	6.22	6.22	6.21	6.18	6.16	6.17	6.18	6.11	6.19	6.2	5.89	6.25	6.26	5.6
Sulfate	mg/L	<0.3	<0.3	0.504 J	<0.3	<0.3	--	<1.4	2.7 J	5	<1.4	--	<1.4	<1.4	6.01	5.29	33.1	15.8	35.4	25.7	9.75
TDS	mg/L	309	324	314	308	295	303	--	300	284	325	--	306	303	291	293	310	298	318	332	303
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00074 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.036	0.0399	0.0401	0.0387	0.0394	0.0408	--	0.0416	0.0395	--	0.0536	0.0572	0.0536	0.0482	0.0514	0.0589	0.0629	0.0659	0.0668	0.0583
Barium	mg/L	0.142	0.143	0.145	0.147	0.14	0.134	--	0.145	0.128	--	0.129	0.149	0.143	0.138	0.138	0.141	0.151	0.147	0.136	0.148
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00156	0.00165	0.00128
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000778	0.000788	0.00071
Combined Radium 226 + 228	pCi/L	1 U	2.0115 U	0.853	0.669	1.32	0.801	--	0.648	0.408 U	--	0.706 U	0.572	0.687	0.627 U	0.321 U	0.6	3.95	0.648 U	1.61	0.733 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<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	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000321	0.000193 J	0.000258
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-9																			
		03/01/2016	04/20/2016	06/08/2016	08/31/2016	10/19/2016	02/01/2017	03/22/2017	05/03/2017	06/07/2017	09/14/2017	01/23/2018	05/02/2018	11/28/2018	05/30/2019	09/30/2019	03/31/2020	09/02/2020	05/18/2021	10/27/2021	05/24/2022
Appendix III																					
Boron	mg/L	1.79	2.01	2.23	2.14	2.13	2.17	--	2.28	2.25	2.41	--	2.34	2.23	2.44	2.34	2.27	2.05	2.08	2.04	2.01
Calcium	mg/L	40.3	38.2	39.2	38.2	38.7	39.2	--	39.1	40.3	40.7	--	40	39.7	38.3	39.9	40.1	38	40.5	40.3	39.6
Chloride	mg/L	20.4	22.7	25.3	24.4	23	--	26	26	27	24	--	22	23	27.3	21.7	20.6	18.5	18.3	19.1	17.3
Fluoride	mg/L	0.04 J	0.052 J	0.077 J	0.056 J	0.045 J	--	0.05 J	0.06 J	0.06 J	0.07 J	0.06 J	0.05 J	0.04 J	0.0745 J	0.0679 J	0.0655 J	0.0804 J	0.0709 J	0.0803 J	<0.06
pH_Field	SU	6.26	6.26	6.25	6.29	6.22	6.24	6.28	6.17	6.24	6.24	6.3	6.31	6.32	6.14	6.07	6.31	5.97	6.3	6.13	6.03
Sulfate	mg/L	<0.3	<0.3	0.51 J	<0.3	<0.3	--	<1.4	2.7 J	5	<1.4	--	<1.4	1.4 J	4.69	3.77	43.5	21.9	27.7	6.33	5.76
TDS	mg/L	314	338	288	334	333	330	--	338	300	350	--	333	330	316	319	330	301	314	302	268
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000738 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0322	0.0354	0.0385	0.0404	0.0412	0.0374	--	0.0444	0.0423	--	0.0435	0.0437	0.0422	0.0383	0.0391	0.0393	0.0432	0.0435	0.0468	0.0414
Barium	mg/L	0.114	0.114	0.128	0.123	0.118	0.104	--	0.126	0.111	--	0.115	0.125	0.119	0.119	0.117	0.119	0.124	0.125	0.117	0.122
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00078 J	0.00087 J	0.000701 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000725	0.000702	0.000695
Combined Radium 226 + 228	pCi/L	1.5514 U	1 U	0.837	0.917	1.41	0.785	--	1.33	0.758	--	1.06 U	0.983	0.747	1.08	0.58	0.82	2.25	0.98 U	1.07 U	2.11
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<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	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00022	0.000214	0.000206
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



**APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond**

Analyte	Units	BY-AP-MW-10																			
		03/01/2016	04/20/2016	06/08/2016	08/31/2016	10/19/2016	02/01/2017	03/22/2017	05/03/2017	06/07/2017	09/14/2017	01/23/2018	05/02/2018	11/28/2018	05/30/2019	09/30/2019	03/31/2020	09/01/2020	05/11/2021	10/27/2021	05/24/2022
Appendix III																					
Boron	mg/L	1.39	1.51	1.62	1.73	1.77	1.42	--	1.52	1.52	1.96	--	2	2	2.11	2.02	2.12	2.02	1.99	2.39	2.34
Calcium	mg/L	50.6	49.1	48.7	57.9	52.2	47.6	--	51.3	51.4	54.9	--	53.3	54.2	60.5	63.1	63.6	57.2	62.7	64.2	62.6
Chloride	mg/L	19.6	18.8	18.6	18.5	18.7	--	21	22	22	22	--	23	25	25.9	25.7	26.1	25	27.3	27.2	30.8
Fluoride	mg/L	0.02 J	0.034 J	0.061 J	0.04 J	0.03 J	--	<0.032	0.04 J	0.04 J	0.04 J	<0.032	<0.032	<0.032	0.0573 J	<0.05	<0.06	0.0794 J	0.105	<0.06	<0.06
pH_Field	SU	6.33	6.31	6.34	6.35	6.35	6.27	6.29	6.23	6.27	6.27	6.32	6.36	6.32	6.23	6.11	6.37	6.33	6.4	5.91	5.81
Sulfate	mg/L	0.34 J	<0.3	0.538 J	<0.3	<0.3	--	<1.4	4.1 J	5	<1.4	--	<1.4	<1.4	3.76	2.77	20.1	15.6	13.2	5.72	14.7
TDS	mg/L	326	366	314	368	381	342	--	369	340	391	--	343	378	377	361	387	392	391	373	357
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000743 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0264	0.0303	0.0306	0.0304	0.0314	0.0274	--	0.03	0.0303	--	0.0362	0.0433	0.0536	0.0671	0.0704	0.0702	0.0763	0.0762	0.0705	0.078
Barium	mg/L	0.0634	0.0622	0.0642	0.063	0.0577	0.0607	--	0.0665	0.0632	--	0.0673	0.0752	0.066	0.063	0.0669	0.0727	0.078	0.0757	0.0638	0.0646
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000685 J	0.000724 J	0.000522 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000636	0.000645	0.000543
Combined Radium 226 + 228	pCi/L	1 U	1 U	1.06	0.871	1.9	1	--	1.07	0.254 U	--	0.795 U	0.405	0.609	0.0949 U	0.965	1.14	1.68	1.12 U	1.2 U	1.36 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-11																			
		03/01/2016	04/20/2016	06/08/2016	08/31/2016	10/19/2016	02/01/2017	03/22/2017	05/03/2017	06/07/2017	09/13/2017	01/23/2018	05/02/2018	11/28/2018	05/29/2019	09/30/2019	03/31/2020	09/01/2020	05/19/2021	11/02/2021	05/23/2022
Appendix III																					
Boron	mg/L	0.0482 J	0.059 J	0.0568 J	0.0651 J	0.06 J	0.0638 J	--	0.0655 J	0.0468 J	0.0751 J	--	0.0545 J	0.0545 J	0.082 J	0.103	0.0815 J	0.104	0.0856 J	0.0691 J	0.056 J
Calcium	mg/L	35.3	28.9	27.6	25.4	25.7	25.6	--	24	25.2	25.5	--	25.2	24.6	23.9	24.6	25.1	23.9	41.5	25.8	26.6
Chloride	mg/L	21.7	20.7	20.4	20.3	20.3	--	27	27	24	26	--	23	25	27.8	25	24.1	23.2	23.1	25.1	25.1
Fluoride	mg/L	0.06 J	0.073 J	0.085 J	0.064 J	0.05 J	--	0.05 J	0.06 J	0.06 J	0.07 J	0.06 J	0.06 J	0.05 J	0.0759 J	0.0733 J	0.078 J	0.0841 J	0.0994 J	0.101	0.0709 J
pH_Field	SU	6.34	6.31	6.33	6.29	6.26	6.22	6.22	6.15	6.21	6.26	6.28	6.33	6.28	6.24	5.85	6.26	5.87	6.33	5.84	6.32
Sulfate	mg/L	1.02	1.1	0.701 J	<0.3	<0.3	--	2.1 J	3.6 J	5	<1.4	--	<1.4	<1.4	24.1	37.4	57.5	42.8	16.5	133	29.3
TDS	mg/L	395	376	324	367	367	391	--	373	367	378	--	330	357	367	399	393	399	422	390	404
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000812 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.01	0.0127	0.0136	0.0149	0.0149	0.0151	--	0.0155	0.0145	--	0.0154	0.0158	0.014	0.0132	0.0145	0.0158	0.0165	0.0166	0.0161	0.0149
Barium	mg/L	0.122	0.11	0.105	0.102	0.0953	0.0917	--	0.0951	0.0864	--	0.0868	0.0816	0.0796	0.0653	0.0759	0.0842	0.0923	0.112	0.0894	0.0691
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00213 J	0.00214 J	0.00205 J	0.00221 J	0.00213 J	0.00228 J	--	0.00229 J	0.00233 J	--	0.00248 J	0.00273 J	0.0023 J	0.00211 J	0.00228 J	0.00358 J	0.00259 J	0.00301	0.00348	0.00255
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00257	0.00118	0.00121
Combined Radium 226 + 228	pCi/L	1 U	0.667	0.704	0.726	0.737	0.766	--	0.515	1.04	--	1.17 U	0.505	0.232 U	0.726	0.489 U	0.462 U	0.752	1.15	0.504 U	0.452 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000102 J	0.000126 J	9.32e-005 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	0.0384 J	0.0262	0.0321	0.0228	0.022	<0.01	0.00754 J	<0.007105	0.0269
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00652	0.00161	0.00149
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-12																					
		03/02/2016	04/20/2016	06/07/2016	06/08/2016	08/31/2016	10/19/2016	02/01/2017	03/22/2017	05/03/2017	06/07/2017	09/13/2017	01/23/2018	05/02/2018	11/28/2018	05/29/2019	10/01/2019	03/31/2020	09/01/2020	05/18/2021	11/01/2021	05/23/2022	
Appendix III																							
Boron	mg/L	0.0502 J	0.0672 J	--	0.0659 J	0.065 J	0.0721 J	0.06 J	--	0.0768 J	0.0625 J	0.0926 J	--	0.064 J	0.064 J	0.0952 J	0.0967 J	0.0856 J	0.115	0.0927 J	0.0769 J	0.0653 J	
Calcium	mg/L	21	20.1	--	20.2	19.9	20.4	20.9	--	20.9	21.2	22.1	--	22.2	22.1	21.4	23.1	22.4	22.2	23.1	21.8	20.6	
Chloride	mg/L	22.2	21.7	--	22	22.3	20.8	--	23	25	23	23	--	21	23	24.1	26.1	23.9	23.4	25.4	27.4	26.2	
Fluoride	mg/L	0.04 J	0.059 J	--	0.08 J	0.059 J	0.045 J	--	0.04 J	0.06 J	0.06 J	0.07 J	0.05 J	0.06 J	0.04 J	0.0677 J	0.0682 J	0.0755 J	0.0845 J	0.0614 J	0.0928 J	0.0873 J	
pH_Field	SU	6.16	6.17	--	6.25	6.23	6.2	6.08	6.12	6.12	6.13	6.19	6.17	6.15	6.11	6.13	6	6.21	6.19	5.58	5.75	6.12	
Sulfate	mg/L	<0.3	<0.3	--	0.511 J	<0.3	<0.3	--	<1.4	2.1 J	5	<1.4	--	<1.4	<1.4	7.04	35.3	35.8	32.1	25.1	27	13	
TDS	mg/L	351	353	--	330	354	354	360	--	341	337	359	--	310	336	321	344	331	356	332	349	345	
Appendix IV																							
Antimony	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	0.000838 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	
Arsenic	mg/L	0.0215	0.0214	--	0.0221	0.0223	0.0227	0.0215	--	0.0227	0.0211	--	0.0227	0.0239	0.0216	0.0215	0.0221	0.0246	0.0246	0.0237	0.0245	0.0249	
Barium	mg/L	0.0815	0.0692	--	0.0763	0.0741	0.0727	0.0701	--	0.078	0.0682	--	0.0744	0.0814	0.0788	0.0769	0.0795	0.0851	0.0827	0.0902	0.0823	0.0802	
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	
Cadmium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	
Chromium	mg/L	0.0042 J	0.0034 J	--	0.00308 J	0.0032 J	0.0035 J	0.00371 J	--	0.00369 J	0.00372 J	--	0.00605 J	0.00351 J	0.00353 J	0.00333 J	0.00325 J	0.0056 J	0.00332 J	0.00377	0.00423	0.00374	
Cobalt	mg/L	0.00235 J	0.00212 J	--	0.00276 J	0.00261 J	0.00256 J	0.00231 J	--	0.00279 J	0.00262 J	--	0.00248 J	0.00271 J	0.00274 J	0.00358 J	0.00303 J	0.00364 J	0.0031 J	0.00336	0.0037	0.00428	
Combined Radium 226 + 228	pCi/L	1 U	1 U	1.08	--	0.528	0.81	1.11	--	0.639	0.705	--	1.1 U	1.11	0.846	2.06	0.984	1.26	1.2	1.11	1.79	1.4	
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000326	0.000292	0.000179 J
Lithium	mg/L	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000947	0.000985	0.000899
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-13																					
		03/02/2016	04/20/2016	06/07/2016	06/08/2016	08/31/2016	10/19/2016	01/31/2017	03/22/2017	05/03/2017	06/07/2017	09/13/2017	01/22/2018	05/02/2018	11/28/2018	05/29/2019	10/01/2019	03/31/2020	09/01/2020	05/19/2021	10/26/2021	05/24/2022	
Appendix III																							
Boron	mg/L	0.0328 J	0.0434 J	--	0.0391 J	0.0401 J	0.0427 J	0.034 J	--	0.0416 J	0.0277 J	0.044 J	--	0.0393 J	0.0417 J	0.0528 J	0.0604 J	0.0505 J	0.0642 J	0.0604 J	0.0511 J	0.0453 J	
Calcium	mg/L	16.7	13.1	--	11.7	11.3	11.8	12.5	--	12	12.8	13.3	--	13.8	15.2	12.8	13.4	13.2	12.3	12.9	12.3	19	
Chloride	mg/L	47.3	40.5	--	37.2	38.2	39.4	--	49	48	49	42	--	47	43	44	39	44.9	39.1	46.8	38.4	43.5	
Fluoride	mg/L	0.05 J	0.064 J	--	0.082 J	0.062 J	0.049 J	--	0.05 J	0.06 J	0.07 J	0.07 J	0.06 J	0.07 J	0.05 J	0.0679 J	0.0661 J	0.0665 J	0.0757 J	0.0748 J	0.0641 J	0.0769 J	
pH_Field	SU	6.1	6.14	--	6.11	6.1	6.1	6.07	6.07	6.1	6.07	6.12	6.12	6.13	6.04	6.01	6.02	5.98	5.82	5.79	5.69	5.5	
Sulfate	mg/L	<0.3	<0.3	--	0.496 J	<0.3	<0.3	--	6.9	6.6	6	2.2 J	--	4.1 J	4.9 J	49.5	47.7	23.2	14.2	50.4	21	38.3	
TDS	mg/L	319	305	--	287	295	305	325	--	306	320	332	--	320	304	307	296	290	285	300	280	259	
Appendix IV																							
Antimony	mg/L	<0.0006	<0.0006	--	0.00111 J	<0.0006	<0.0006	0.000834 J	--	<0.0006	0.000857 J	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	
Arsenic	mg/L	0.0115	0.0123	--	0.0121	0.0127	0.0131	0.0131	--	0.014	0.0141	--	0.0149	0.0175	0.0141	0.0138	0.0144	0.0154	0.0148	0.014	0.013	0.013	
Barium	mg/L	0.0947	0.0758	--	0.071	0.0722	0.0707	0.0686	--	0.0756	0.0695	--	0.0688	0.0806	0.0697	0.0704	0.0686	0.0728	0.0722	0.0817	0.0667	0.0723	
Beryllium	mg/L	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	0.00103 J	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	
Cadmium	mg/L	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	0.00077 J	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00656 J	0.00661 J	--	0.0067 J	0.00693 J	0.00732 J	0.00699 J	--	0.00712 J	0.00752 J	--	0.00729 J	0.00642 J	0.0068 J	0.00727 J	0.00733 J	0.00955 J	0.00888 J	0.00692	0.00755	0.00634	
Cobalt	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00113	0.00122	0.00184	
Combined Radium 226 + 228	pCi/L	1 U	0.398	0.812	--	0.46 U	0.601	1.1	--	0.832	0.752	--	0.898 U	0.752	0.523	1.01	1.07	0.725	0.698	1.15	1.74	0.915 U	
Lead	mg/L	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<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	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000437	0.000432	0.00356
Selenium	mg/L	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	0.000878 J	--	<0.0002	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-14																			
		03/02/2016	04/20/2016	06/08/2016	08/30/2016	10/18/2016	01/31/2017	03/22/2017	05/02/2017	06/06/2017	09/13/2017	01/23/2018	05/02/2018	11/27/2018	05/29/2019	10/01/2019	03/31/2020	09/02/2020	05/25/2021	10/27/2021	05/25/2022
Appendix III																					
Boron	mg/L	0.0395 J	0.0549 J	0.0593 J	0.0534 J	0.0597 J	0.0479 J	--	0.0587 J	0.0428 J	0.0647 J	--	0.0484 J	0.0493 J	0.0682 J	0.0701 J	0.0655 J	0.0789 J	0.074 J	0.0677 J	0.0649 J
Calcium	mg/L	9.53	9.55	13.1	12.1	11.4	10.8	--	11.9	12.2	13.9	--	10.6	10.8	11.2	11.4	9.04	10.8	11.2	11.4	11
Chloride	mg/L	36.6	35.5	43.8	41.6	39.5	--	46	42	44	43	--	39	43	50.1	44.8	44.7	47.2	52.1	42.9	45.3
Fluoride	mg/L	0.07 J	0.076 J	0.105 J	0.083 J	0.067 J	--	0.06 J	0.08 J	0.077 J	0.07 J	0.08 J	0.08 J	0.06 J	0.0781 J	0.0885 J	0.0867 J	0.0957 J	0.0957 J	0.0651 J	0.0733 J
pH_Field	SU	6.08	6.04	6.13	6.08	6.13	6.06	6.09	5.94	6.1	6.11	6.12	6.13	6.07	6.07	6.01	5.76	5.8	5.82	6.41	6.14
Sulfate	mg/L	<0.3	<0.3	0.514 J	<0.3	<0.3	--	<1.4	1.8 J	<1.4	<1.4	--	1.6 J	<1.4	67.6	61.6	34.7	18.5	59.2	98.5	105
TDS	mg/L	266	311	353	328	310	312	--	300	335	339	--	301	295	318	317	317	327	318	327	328
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.00086 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0101	0.0119	0.0119	0.0127	0.0136	0.0124	--	0.0131	0.0129	--	0.0148	0.0156	0.0145	0.014	0.0152	0.0177	0.0174	0.0172	0.0174	0.0183
Barium	mg/L	0.0491	0.049	0.0627	0.0635	0.0603	0.0533	--	0.0616	0.0585	--	0.0608	0.0614	0.0589	0.0617	0.0605	0.0619	0.0687	0.0745	0.0651	0.0692
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00552 J	0.00572 J	0.00492 J	0.00534 J	0.00556 J	0.00514 J	--	0.00524 J	0.00541 J	--	0.00573 J	0.00534 J	0.00523 J	0.00455 J	0.00508 J	0.00463 J	0.00482 J	0.00365	0.00401	0.00315
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00124	0.00125	0.00117
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.631	0.693	0.626	0.0723 U	--	0.363 U	0.198 U	--	0.294 U	0.522	0.576	0.437 U	1.11	0.941	2.12	0.978 U	0.587 U	1.25
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	7.64e-005 J	8.69e-005 J	0.000102 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000701	0.00053	0.000508
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-15																				
		03/02/2016	04/19/2016	06/08/2016	08/31/2016	10/19/2016	01/31/2017	03/21/2017	05/02/2017	06/06/2017	09/13/2017	01/22/2018	05/01/2018	11/27/2018	05/29/2019	10/01/2019	04/01/2020	09/02/2020	05/11/2021	10/26/2021	05/25/2022	
Appendix III																						
Boron	mg/L	0.0447 J	0.0645 J	0.0592 J	0.0632 J	0.0637 J	0.0536 J	--	0.0775 J	0.0535 J	0.0937 J	--	0.0683 J	0.0715 J	0.116	0.116	0.1	0.148	0.109	0.0953 J	0.0826 J	
Calcium	mg/L	6.61	5.97	6.36	6.28	6.57	6.77	--	6.94	6.88	7.43	--	7.42	7.58	7.22	6.9	7.32	7.04	6.98	6.46	6.35	
Chloride	mg/L	20.9	19.8	24	28	21.3	--	34	33	35	36	--	42	43	47.2	56.3	54.7	47	80	85.4	79.7	
Fluoride	mg/L	0.18 J	0.21 J	0.223 J	0.196 J	0.166 J	--	0.18	0.18	0.18	0.2	0.19	0.19	0.18	0.168	0.185	0.187	0.18	0.214	0.171	0.168	
pH_Field	SU	6.61	6.75	6.63	6.71	6.66	6.73	6.62	6.49	6.7	6.66	6.73	6.62	6.58	6.63	6.2	6.72	6.57	6.76	6.7	6.68	
Sulfate	mg/L	<0.3	<0.3	0.489 J	<0.3	<0.3	--	<1.4	5	<1.4	<1.4	--	<1.4	<1.4	3.27	1.72	7.5	7.61	7.54	26.4	1.8 J	
TDS	mg/L	182	151	168	188	180	166	--	183	187	202	--	197	190	198	236	231	208	279	269	255	
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000746 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	
Arsenic	mg/L	0.0128	0.0157	0.0168	0.0168	0.0178	0.0164	--	0.0172	0.0158	--	0.0173	0.0181	0.0158	0.0148	0.017	0.0183	0.0206	0.0184	0.0186	0.0183	
Barium	mg/L	0.0468	0.043	0.0465	0.0464	0.0481	0.0427	--	0.0473	0.0437	--	0.0501	0.0575	0.0557	0.0562	0.0628	0.0697	0.0736	0.0762	0.0784	0.0835	
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000581 J	0.00052 J	0.000489 J	
Cobalt	mg/L	0.0279	0.0269	0.0293	0.0272	0.0285	0.025	--	0.0274	0.0285	--	0.0273	0.0298	0.0311	0.0343	0.0336	0.0344	0.0385	0.0349	0.0347	0.0377	
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.557	0.765	0.654	0.402 U	--	0.578	0.128 U	--	0.768 U	0.651	0.764	0.433	0.988	0.527	1.87	0.684 U	1.95	1.3	
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	8.21e-005 J	
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	0.0169 J	0.0254	0.0248	0.0174 J	<0.01	0.00788 J	0.0117 J	0.0116 J	
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	
Molybdenum	mg/L	0.00238 J	0.00203 J	<0.002	<0.002	<0.002	<0.002	--	0.00201 J	<0.002	--	0.00211 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00209 J	0.00171	0.00206	0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-16																			
		03/02/2016	04/19/2016	06/08/2016	08/31/2016	10/19/2016	01/31/2017	03/21/2017	05/02/2017	06/06/2017	09/13/2017	01/23/2018	05/01/2018	11/27/2018	05/29/2019	10/01/2019	03/31/2020	09/02/2020	05/19/2021	11/01/2021	05/25/2022
Appendix III																					
Boron	mg/L	1.47	1.53	1.7	1.68	1.53	1.51	--	1.64	1.57	2.18	--	1.57	1.58	1.7	2.05	1.74	1.9	1.74	2.18	1.98
Calcium	mg/L	14.6	13.3	13.2	11.8	12.9	13.5	--	13.5	13.6	11.8	--	14	13.3	13.4	11.7	14.2	13.1	14.2	13.4	13.9
Chloride	mg/L	16.6	15.7	15.1	15.9	15.3	--	19	19	19	21	--	18	20	20	20.3	20.8	20.8	21.4	22.3	20
Fluoride	mg/L	0.04 J	0.05 J	0.073 J	0.051 J	<0.01	--	0.04 J	0.05 J	0.053 J	0.06 J	0.05 J	0.05 J	<0.032	0.0683 J	0.0774 J	0.0602 J	<0.06	0.0793 J	0.0887 J	<0.06
pH_Field	SU	5.79	5.78	5.8	5.83	5.81	5.84	5.79	5.68	5.8	5.86	5.86	5.85	5.76	5.76	5.23	5.75	5.47	5.8	5.36	5.74
Sulfate	mg/L	<0.3	<0.3	0.514 J	<0.3	<0.3	--	<1.4	5	<1.4	2.6 J	--	<1.4	<1.4	6.72	3.4	17.5	13.3	3.11	11.9	6.29
TDS	mg/L	263	259	285	279	264	270	--	259	278	333	--	274	250	264	295	276	279	274	324	299
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000769 J	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0102	0.0103	0.0105	0.0117	0.0108	0.0102	--	0.0102	0.00982	--	0.0151	0.0114	0.0108	0.0106	0.0138	0.012	0.0137	0.0118	0.0151	0.0144
Barium	mg/L	0.0921	0.0775	0.0798	0.0801	0.0766	0.075	--	0.0761	0.07	--	0.0779	0.0877	0.0792	0.081	0.0803	0.091	0.0954	0.102	0.0988	0.0961
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<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	0.00215 J	<0.002	<0.002	--	<0.002	<0.002	--	0.00253 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00162	0.0018	0.00135
Cobalt	mg/L	0.0212	0.018	0.0176	0.0134	0.0193	0.017	--	0.0166	0.0172	--	0.00621 J	0.0189	0.0182	0.0206	0.0107	0.0199	0.0192	0.0182	0.0139	0.0155
Combined Radium 226 + 228	pCi/L	1 U	1 U	0.344 U	0.582	0.448	0.653	--	0.698	0.548	--	0.98 U	0.623	0.744	2.51	0.443 U	0.341 U	2.25	0.321 U	1.28	0.927 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000191 J	<6.8e-005	9.73e-005 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<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	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000136 J	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<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	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-1V							BY-AP-MW-5V						BY-AP-MW-7V							
		01/08/2019	10/02/2019	03/30/2020	09/01/2020	05/18/2021	11/01/2021	05/24/2022	01/08/2019	10/02/2019	03/31/2020	09/01/2020	11/02/2021	05/25/2022	01/09/2019	10/01/2019	12/02/2019	03/30/2020	09/02/2020	05/18/2021	10/27/2021	05/24/2022
Appendix III																						
Boron	mg/L	0.0205 J	<0.03	0.0347 J	0.0368 J	0.0334 J	<0.03	0.0337 J	0.029 J	0.0336 J	0.0339 J	0.0414 J	<0.03	<0.03	0.0615 J	0.0546 J	--	0.0555 J	0.0565 J	0.0599 J	0.0546 J	0.162
Calcium	mg/L	15.7	3.16	3.23	3.43	3.79	3.68	3.65	3.7	2.43	1.88	2.13	2.11	2.58	37	18.7	--	20	13.9	14.1	17.2	7.22
Chloride	mg/L	42	60.7	69.1	69	79.5	79.4	95.1	20.9	25.8	25.8	30.6	30.5	22.6	16.9	13.2	--	15.5	14.2	19	18.9	40.4
Fluoride	mg/L	0.0548 J	0.0595 J	<0.06	<0.06	<0.06	<0.06	<0.06	<0.05	0.0777 J	<0.06	0.0807 J	0.0627 J	<0.06	0.139	0.0871 J	--	0.127	0.126	0.112	0.0795 J	0.0869 J
pH_Field	SU	6.38	5.27	5.65	5.62	5.55	5.76	4.9	6.07	5.9	6.05	5.7	6.35	5.88	7.12	6.67	6.56	6.69	6.49	6.53	6.78	6.92
Sulfate	mg/L	20.9	10.5	11.1	13	16	20.2	21.1	1.75	5.8	0.98 J	1.47	1.34	2.91	3.69	2	--	9.65	6.7	5.53	5.31	6.06
TDS	mg/L	192	154	160	175	189	190	176	76.7	98	81.3	94	77.3	75.3	240	182	--	204	168	192	169	228
Appendix IV																						
Antimony	mg/L	0.00125 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.00207 J	<0.0008	<0.0008	<0.0008	<0.000508	<0.000508	0.000861 J	<0.0008	--	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00109 J	0.00157 J	0.00152 J	0.00179 J	0.00144	0.000856	0.000696	<0.001	<0.001	<0.001	<0.001	0.00101	<8.1e-005	<0.001	0.00278 J	--	0.005	0.0024 J	0.00242	0.0027	0.00212
Barium	mg/L	0.0826	0.0611	0.062	0.0795	0.0861	0.0731	0.0863	0.0372	0.0338	0.0313	0.0399	0.0368	0.0578	0.112	0.0541	--	0.0519	0.0648	0.0805	0.0684	0.0803
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<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	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<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	0.000447 J	0.000454 J	0.000384 J	<0.002	<0.002	<0.002	<0.002	0.000991 J	0.000476 J	<0.002	<0.002	--	<0.002	<0.002	0.000463 J	0.000515 J	0.000226 J
Cobalt	mg/L	0.00911	0.00289 J	<0.002	0.00407 J	0.00483	0.00578	0.00765	<0.002	<0.002	<0.002	<0.002	0.000132 J	0.00106	<0.002	<0.002	--	<0.002	<0.002	0.000139 J	0.000134 J	0.00011 J
Combined Radium 226 + 228	pCi/L	1.06	1.03	0.579	0.948	0.814 U	1.3 U	2	0.298 U	0.206 U	0.024 U	0.741	0.158 U	1.03 U	0.527	1.01	--	0.604	1.12	0.199 U	0.914 U	0.619 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<0.001	<0.001	--	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0219	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	0.0662	<0.01	<0.01	<0.01	<0.01	<0.007105	0.00746 J	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<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	<0.002	0.00018 J	0.00013 J	<0.000102	<0.002	<0.002	<0.002	<0.002	8.05e-005 J	<0.000102	0.00511 J	<0.002	--	<0.002	<0.002	0.00021	0.000456	0.00074
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000508	<0.000508	<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	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-8V							BY-AP-MW-10V							BY-AP-MW-12V						
		01/09/2019	10/01/2019	03/30/2020	09/02/2020	05/18/2021	10/26/2021	05/23/2022	01/08/2019	10/01/2019	03/31/2020	09/01/2020	05/18/2021	10/27/2021	05/24/2022	01/08/2019	10/02/2019	03/31/2020	09/01/2020	05/18/2021	11/01/2021	05/23/2022
Appendix III																						
Boron	mg/L	0.164	0.241	0.247	0.26	0.247	0.216	0.254	0.677	1.03	1.04	1.06	0.971	0.993	0.938	0.0939 J	0.134	0.101	0.149	0.118	0.0962 J	0.0765 J
Calcium	mg/L	27.2	24.2	24.5	23.3	26.4	25.7	24.3	57.2	61.2	66.6	57.3	64	61.6	64.2	33.8	21.8	21.3	21	22.1	21.4	20.6
Chloride	mg/L	21.9	22.6	22.7	22.6	22.7	23.9	22.1	21.3	20	20.7	22.9	21	21	19.4	23.1	28	25	26.4	25.5	26.1	25.6
Fluoride	mg/L	0.0831 J	0.0832 J	0.0935 J	0.098 J	0.0958 J	0.107	0.108 J	0.123	0.0517 J	<0.06	0.0695 J	<0.06	<0.06	<0.06	0.0729 J	0.12	0.0828 J	0.0947 J	0.0783 J	0.123	<0.06
pH_Field	SU	6.38	6.16	6.2	5.79	6.33	6.26	6.08	6.5	6.05	6.38	6.34	6.34	6.1	5.77	6.48	5.9	6.33	6.2	5.92	6.09	6.22
Sulfate	mg/L	1.74	7	75.8	24	19.6	58.2	8.35	93.7	5.19	20.3	30.1	24.9	6.04	5.73	10.3	7.18	61.1	47.5	32.8	10.9	6.64
TDS	mg/L	276	324	328	318	331	350	331	462	393	413	403	401	400	403	348	321	328	338	329	352	352
Appendix IV																						
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.000965 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.00117 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00121 J	0.00243 J	0.00275 J	0.00346 J	0.00398	0.0048	0.00414	<0.001	<0.001	<0.001	<0.001	0.000356	0.000331	0.00032	0.0112	0.022	0.025	0.0257	0.0251	0.0256	0.0257
Barium	mg/L	0.337	0.264	0.264	0.289	0.299	0.282	0.282	0.149	0.163	0.184	0.203	0.212	0.182	0.194	0.144	0.101	0.0939	0.102	0.111	0.103	0.101
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<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	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<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	0.00129	0.00124	0.00124	<0.002	<0.002	<0.002	<0.002	0.000684 J	0.000677 J	0.000493 J	0.0021 J	<0.002	<0.002	<0.002	0.00112	0.000862 J	0.000813 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	0.000882	0.000879	0.000921	<0.002	<0.002	<0.002	<0.002	0.000648	0.000613	0.000618	<0.002	<0.002	<0.002	<0.002	0.00237	0.00231	0.00263
Combined Radium 226 + 228	pCi/L	1.69	1.66	0.787	2.89	0.975 U	1.61	1.13	1.35	1.99	0.957	0.625 U	1.66	1.44 U	1.2	1.04	0.896	0.923	1.03	1.31	0.814 U	0.962 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	8.16e-005 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0217	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	0.0313	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	0.0148 J	<0.01	<0.01	<0.01	<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	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00243 J	<0.002	<0.002	<0.002	0.000363	0.000276	0.000286	0.00335 J	<0.002	<0.002	<0.002	0.000148 J	0.000143 J	0.000148 J	0.00303 J	<0.002	<0.002	<0.002	0.00106	0.00118	0.00112
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<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	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-13V					BY-AP-MW-14V					BY-AP-MW-15V					BY-AP-MW-16V						
		06/17/2020	09/02/2020	05/19/2021	10/26/2021	05/25/2022	06/17/2020	09/02/2020	05/25/2021	10/26/2021	05/24/2022	07/31/2019	10/01/2019	05/12/2020	09/01/2020	05/25/2021	10/26/2021	05/24/2022	06/16/2020	09/02/2020	05/19/2021	10/26/2021	05/25/2022
Appendix III																							
Boron	mg/L	0.0847 J	0.112	0.0976 J	0.0888 J	0.0867 J	0.426	0.407	0.43	0.393	0.376	0.0439 J	0.0824 J	0.0559 J	0.0907 J	0.0617 J	0.0498 J	0.0376 J	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	20.2	12.3	12.7	11.3	11.9	5.32	4.7	4.66	5.28	6.83	9.32	8.41	8.01	6.9	8.47	8.13	8.26	2.15	2.02	2.26	1.96	1.79
Chloride	mg/L	77	51.7	64.4	47.7	59.3	240	178	210	191	184	157	195	190	170	180	183	191	77.4	75.6	81.2	68.3	56.6
Fluoride	mg/L	0.103	0.0864 J	0.0884 J	0.096 J	<0.06	0.343	0.359	0.378	0.384	0.291	0.0515 J	0.0931 J	0.0946 J	0.0624 J	<0.06	<0.06	<0.06	0.0744 J	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	6.25	6.23	6.2	6.81	6.3	7.27	7.02	7.2	6.91	6.71	5.37	5.68	5.68	5.91	5.6	5.93	5.7	5.2	5.23	5.24	5.26	5.26
Sulfate	mg/L	101	30.6	39.7	47.3	122	28	63.6	39.5	75.1	13.6	2.65	0.854 J	1.61	2.21	1.19	0.966 J	2.35	41.5	40	40.9	38.1	35.1
TDS	mg/L	449	361	362	355	343	546	498	520	474	508	337	321	327	318	335	358	348	238	219	213	195	188
Appendix IV																							
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.00094 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00321 J	0.00708	0.00877	0.0103	0.0106	0.00208 J	0.00433 J	0.00324	0.0041	0.00532	0.0174	0.0243	0.0206	0.0401	0.0233	0.0242	0.0255	0.00135 J	0.0012 J	0.00123	0.00105	0.00126
Barium	mg/L	0.106	0.109	0.114	0.0827	0.0852	0.0809	0.0766	0.0729	0.0653	0.067	0.144	0.13	0.155	0.134	0.184	0.149	0.156	0.0658	0.0733	0.0743	0.0589	0.0569
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	0.000201 J	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00537 J	0.00525 J	0.00416	0.00606	0.00488	<0.002	<0.002	0.00113	0.00098 J	0.000605 J	<0.002	<0.002	<0.002	<0.002	0.000258 J	0.000385 J	0.000207 J	0.00222 J	<0.002	0.000385 J	0.000402 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	0.000827	0.00114	0.00127	<0.002	0.00444 J	0.00271	0.00419	0.00353	0.0632	0.0629	0.0719	0.0665	0.0694	0.0756	0.0788	0.0144	0.0163	0.0153	0.0159	0.0139
Combined Radium 226 + 228	pCi/L	1.22	2.49	0.783 U	1.6	0.951 U	0.726	1.54	0.859 U	1.34 U	1.26	1.09	1.51	1.67	1.28	1.72	2.53	1.85	0.642	1.15	0.496 U	0.773 U	1.03 U
Lead	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	7.24e-005 J	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	0.000111 J	<0.001	<0.001	<6.8e-005	<6.8e-005	0.000127 J
Lithium	mg/L	<0.01	<0.01	<0.007105	0.0484	0.0318	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<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	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00237 J	<0.002	0.000642	0.00135	0.000703	0.00451 J	0.00229 J	0.00135	0.0012	0.00275	<0.002	<0.002	<0.002	<0.002	0.000106 J	0.000109 J	<0.000102	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	8.49e-005 J	7.4e-005 J	0.00014 J	<0.0002	<0.0002	9.13e-005 J	0.000103 J	8.86e-005 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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-17V					BY-AP-MW-20V					BY-AP-MW-23V					BY-AP-MW-25V				
		06/16/2020	09/01/2020	05/18/2021	10/25/2021	05/25/2022	06/17/2020	09/01/2020	05/19/2021	11/01/2021	05/24/2022	06/16/2020	09/01/2020	05/17/2021	10/26/2021	05/25/2022	06/17/2020	09/02/2020	05/24/2021	11/02/2021	05/25/2022
Appendix III																					
Boron	mg/L	0.176	0.124	0.124	0.113	0.177	0.118	0.134	0.119	0.11	0.095 J	0.325	0.307	0.32	0.306	0.308	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	65.3	20.5	15	6.58	50.2	17.9	14.7	15.3	15.1	14.6	1.25	1.27	1.33	0.837	0.873	0.842	0.547	0.554	0.567	0.573
Chloride	mg/L	734	273	225	111	649	29.2	27.1	32.4	29.6	35.4	120	117	134	124	106	4.04	3.85	3.48	3.42	3.22
Fluoride	mg/L	0.0994 J	0.144	0.16	0.172	0.0799 J	0.155	0.106	0.123	0.14	0.0852 J	0.393	0.401	0.379	0.445	0.385	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	6.43	6.49	6.55	6.53	6.34	6.26	6.03	6.44	6	6.28	8.08	7.98	7.87	8.31	7.44	5.27	5.32	5.24	5.13	5.45
Sulfate	mg/L	57.4	26.6	17.4	11	49.1	10.1	38.3	1.93	5.66	3.66	28.6	9.25	6.92	4.23	4.25	2.39	2.26	2.59	2.08	2.13
TDS	mg/L	1460	576	438	280	1270	301	308	271	282	296	479	391	386	362	359	37.3	34	26.7	36	29.3
Appendix IV																					
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0117	0.00472 J	0.00546	0.00162	0.00192	0.00584	0.00845	0.0148	0.0182	0.0193	0.00193 J	<0.001	0.00119	0.00119	0.00158	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005
Barium	mg/L	0.62	0.277	0.255	0.0928	0.683	0.152	0.115	0.107	0.0883	0.0907	0.02	0.00933 J	0.0094	0.00766	0.00729	0.0132	0.0111	0.00981	0.00907	0.00947
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00475 J	<0.002	0.000973 J	0.000619 J	0.000477 J	<0.002	<0.002	0.000669 J	0.000606 J	0.00053 J	0.0221	0.00284 J	0.00163	0.000605 J	0.000455 J	<0.002	<0.002	0.00119	0.0013	0.00126
Cobalt	mg/L	0.0858	0.022	0.0197	0.00915	0.0717	0.00593	0.012	0.0173	0.0236	0.0264	0.00302 J	<0.002	0.000217	<6.8e-005	<6.8e-005	0.0026 J	<0.002	0.000422	0.000366	0.00026
Combined Radium 226 + 228	pCi/L	2.17	1.9	1.05 U	1.04 U	5.37	0.767	1.43	1.43	1.48	0.97 U	0.752 U	0.323 U	0.374 U	0.285 U	0.285 U	0.479	0.596	0.531 U	1.05 U	0.527 U
Lead	mg/L	<0.001	<0.001	0.000137 J	<6.8e-005	7.37e-005 J	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	0.00222 J	<0.001	0.000216	9.98e-005 J	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<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	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	0.000571	0.000877	0.000428	<0.002	<0.002	0.00155	0.00181	0.0015	<0.002	<0.002	0.00147	0.00124	0.00151	<0.002	<0.002	9.23e-005 J	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	9.64e-005 J	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<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 Quantita



**APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond**

Analyte	Units	BY-AP-MW-17H							BY-AP-MW-18H							BY-AP-MW-19H						
		07/31/2019	10/02/2019	04/01/2020	09/01/2020	05/17/2021	10/25/2021	05/25/2022	03/20/2019	10/01/2019	04/01/2020	09/01/2020	05/19/2021	10/25/2021	05/23/2022	07/31/2019	10/01/2019	05/12/2020	09/01/2020	05/25/2021	10/25/2021	05/24/2022
Appendix III																						
Boron	mg/L	0.0782 J	0.129	0.073 J	0.146	0.0911 J	0.0885 J	0.0597 J	0.924	1.05	0.435	0.855	0.866	0.931	0.91	0.848	0.931	1.22	0.895	0.252	0.142	0.159
Calcium	mg/L	19.1	13.2	27	10.8	12.8	10.5	11.6	28.2	27.2	23.1	25.6	27.1	27.1	25.3	31.8	31.1	34.2	31.6	23.9	18.3	19.2
Chloride	mg/L	18	17.7	17.2	18.2	17.1	19.2	16	17.6	20.1	12.2	19.8	19.3	20.5	18.9	16.4	16.8	17.9	17.6	10.7	10.1	10.4
Fluoride	mg/L	0.178	0.254	0.151	0.196	0.148	0.182	0.138	0.126	0.071 J	0.0722 J	0.0784 J	0.0886 J	0.0728 J	0.0857 J	0.089 J	0.0712 J	0.0732 J	0.0752 J	0.0673 J	<0.06	<0.06
pH_Field	SU	6.64	6.58	6.52	6.56	6.35	6.48	6.21	6.19	6.26	6.48	6.15	6.23	6.76	6.24	6.21	6.33	6.09	6.31	6.1	6.13	5.8
Sulfate	mg/L	23	10.6	19.4	7.61	10.2	24.5	3.58	12.7	8.49	24.2	30.6	7.48	55	9.46	11.3	5.9	22.9	16.9	26.6	28.7	34.7
TDS	mg/L	212	203	243	236	201	225	194	308	283	210	281	293	302	292	312	316	321	294	162	123	133
Appendix IV																						
Antimony	mg/L	0.000878 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.0011 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.00137 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0221	0.0251	0.0208	0.0371	0.0329	0.0364	0.03	0.00835	0.0137	0.00937	0.015	0.0147	0.0155	0.0142	<0.001	<0.001	<0.001	0.00101 J	0.0015	0.00134	0.00104
Barium	mg/L	0.138	0.117	0.194	0.114	0.125	0.0974	0.125	0.154	0.126	0.109	0.123	0.147	0.12	0.128	0.137	0.113	0.167	0.159	0.104	0.0738	0.0819
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<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	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<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	0.000627 J	0.00071 J	0.000324 J	0.00243 J	<0.002	<0.002	<0.002	0.00132	0.00135	0.00133	<0.002	<0.002	<0.002	<0.002	0.000391 J	0.00044 J	0.000454 J
Cobalt	mg/L	<0.002	0.0033 J	<0.002	0.00258 J	0.0013	0.00371	0.0014	<0.002	<0.002	0.013	<0.002	0.00109	0.00101	0.00108	<0.002	<0.002	<0.002	<0.002	0.00294	0.00501	0.00513
Combined Radium 226 + 228	pCi/L	0.621	1.14	0.797	0.44 U	1.64	1.57	1.71	0.473	0.6	1.05	0.684	0.971 U	1.2	1.03 U	0.272 U	0.817	0.691	0.675	1.04 U	1.03 U	1.06 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	9.09e-005 J	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<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	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<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	<0.0003	<0.0003	<0.0003	<0.0003	<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	<0.002	0.000469	0.000779	0.000454	<0.002	<0.002	<0.002	<0.002	0.00025	0.000249	0.000361	<0.002	<0.002	<0.002	<0.002	0.000124 J	8.42e-005 J	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	0.000636 J
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-20H							BY-AP-MW-22H							BY-AP-MW-23H						
		07/31/2019	10/01/2019	04/01/2020	09/01/2020	05/19/2021	10/26/2021	05/23/2022	07/31/2019	10/01/2019	05/12/2020	09/01/2020	05/25/2021	10/26/2021	05/24/2022	07/31/2019	10/01/2019	04/01/2020	09/01/2020	05/24/2021	10/26/2021	05/25/2022
Appendix III																						
Boron	mg/L	0.0707 J	0.101	0.046 J	0.106	0.0909 J	0.0784 J	0.0647 J	0.0643 J	0.105	0.0807 J	0.115	0.0889 J	0.0725 J	0.0562 J	0.0531 J	0.0856 J	<0.03	0.0943 J	0.0785 J	0.0709 J	0.0467 J
Calcium	mg/L	30.3	29.4	26	28.8	30.9	30.2	28.4	15	15.5	15	14.8	15.2	15.1	14.5	25.8	27.2	15.8	35.8	27.1	29.4	24.5
Chloride	mg/L	33.4	44.7	23.1	34.6	36.2	34	44.1	60.3	70	58.3	59.9	65.4	54.5	57.1	8.03	6.7	4.46	6.96	6.33	5.64	6.63
Fluoride	mg/L	0.0934 J	0.0838 J	0.0793 J	0.0954 J	0.0852 J	0.114	0.124 J	0.257	0.268	0.323	0.301	0.282	0.323	0.318	0.0766 J	0.0804 J	0.0607 J	0.0919 J	0.0734 J	0.0709 J	<0.06
pH_Field	SU	6.22	6.24	6.45	6.15	6.17	6.49	6.15	6.54	6.6	6.55	6.48	6.44	6.86	6.57	6.08	6.03	6.44	6.14	6.19	6.54	5.92
Sulfate	mg/L	83.2	28.9	18.7	43.5	59.5	73.2	95.1	171	17.2	59.5	93.2	72.3	140	103	18.4	4.89	18.1	24.5	3.99	29.5	4.01
TDS	mg/L	481	470	319	479	479	493	462	345	346	337	362	378	362	372	241	261	105	271	244	252	236
Appendix IV																						
Antimony	mg/L	0.00113 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.00117 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	0.000964 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0112	0.013	0.00508	0.0172	0.0132	0.0133	0.0134	0.0225	0.0225	0.0199	0.0217	0.0191	0.0202	0.0185	0.0132	0.013	0.00689	0.0226	0.0133	0.00807	0.00478
Barium	mg/L	0.0928	0.0913	0.119	0.11	0.111	0.0936	0.0963	0.185	0.213	0.222	0.234	0.261	0.202	0.215	0.162	0.175	0.0629	0.182	0.208	0.188	0.174
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<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	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00209 J	0.0025 J	<0.002	0.00283 J	0.00284	0.00261	0.00233	<0.002	<0.002	<0.002	<0.002	0.000667 J	0.000618 J	0.000516 J	<0.002	<0.002	<0.002	<0.002	0.000814 J	0.000696 J	0.000514 J
Cobalt	mg/L	0.00433 J	0.00431 J	0.00541	0.0046 J	0.00426	0.00447	0.00426	0.00233 J	0.00268 J	0.00281 J	0.00294 J	0.00264	0.00285	0.00276	0.0031 J	0.00201 J	0.0206	0.0273	0.00682	0.00495	0.002
Combined Radium 226 + 228	pCi/L	0.268 U	1.22	0.968	0.39 U	1.03 U	1.28 U	0.657 U	0.448	0.508	0.61	0.419 U	1.26	1.52	0.656 U	0.331 U	1.05	0.618	0.224 U	1.1 U	1.13 U	0.674 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	0.000224	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<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	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<0.01	<0.01	<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	<0.0003	<0.0003	<0.0003	<0.0003	<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	<0.002	0.000503	0.000482	0.000399	0.00426 J	<0.002	<0.002	<0.002	0.00137	0.00136	0.00145	<0.002	<0.002	<0.002	<0.002	0.00069	0.00035	0.000157 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	0.000538 J	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<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	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<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 Quantita



APPENDIX A. ANALYTICAL DATA SUMMARY
Plant Barry Ash Pond

Analyte	Units	BY-AP-MW-24H							BY-AP-MW-25H				
		01/08/2019	10/02/2019	03/31/2020	09/02/2020	05/25/2021	10/26/2021	05/24/2022	06/17/2020	09/02/2020	05/24/2021	11/02/2021	05/25/2022
Appendix III													
Boron	mg/L	0.213	0.344	0.325	0.382	0.37	0.354	0.347	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	38	18.4	18.1	17.6	18.6	18.4	17.5	0.793	0.875	0.905	1.05	0.949
Chloride	mg/L	44.6	53	47.5	43.7	46	41.6	50.8	4.81	4.62	4.72	5.07	5.32
Fluoride	mg/L	0.147	0.183	0.148	0.158	0.156	0.158	0.149	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	SU	6.51	6.21	6.23	6.01	6.16	6.2	6.22	5.27	5.39	4.12	5.01	5.23
Sulfate	mg/L	31.2	92.3	84.5	59.7	17	122	92.3	6.1	4.39	4.94	4.28	4.24
TDS	mg/L	504	430	418	471	420	448	383	44	36	39.3	34.7	37.3
Appendix IV													
Antimony	mg/L	0.00116 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0306	0.0673	0.0729	0.0783	0.0693	0.0752	0.0712	<0.001	<0.001	8.73e-005 J	0.000162 J	0.000157 J
Barium	mg/L	0.294	0.229	0.243	0.26	0.26	0.238	0.245	0.0189	0.0204	0.0206	0.0203	0.0178
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.000878 J	0.00104	0.000809 J	<0.002	<0.002	0.00117	0.000976 J	0.00103
Cobalt	mg/L	0.00243 J	0.00513	0.00528	0.0061	0.00542	0.00591	0.00571	<0.002	0.00246 J	0.00156	0.00146	0.00132
Combined Radium 226 + 228	pCi/L	1.49	1.24	0.577	1.5 U	0.695 U	0.987 U	1.08 U	0.554	0.0187 U	0.545 U	0.707 U	0.682 U
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0183 J	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	<0.01	<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	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00399 J	<0.002	<0.002	<0.002	0.000869	0.000964	0.00118	<0.002	<0.002	0.000102 J	0.00014 J	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<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 Quantita

Appendix B

Appendix B.
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)										
		2/29/2016	4/18/2016	6/7/2016	8/30/2016	10/17/2016	1/31/2017	3/20/2017	5/1/2017	6/5/2017	9/12/2017	1/22/2018
BY-AP-MW-1	25.80	8.19	7.23	4.52	4.12	2.86	6.90	4.27	4.49	5.11	3.46	3.67
BY-AP-MW-2	23.89	7.59	6.58	3.51	3.03	2.61	5.79	2.99	3.95	4.13	2.49	2.47
BY-AP-MW-3	26.61	7.53	6.53	3.35	2.84	2.43	5.73	2.85	3.81	4.00	2.31	2.31
BY-AP-MW-4	26.97	7.41	6.36	3.12	2.68	2.10	5.56	2.62	3.54	3.73	2.88	2.58
BY-AP-MW-5	28.93	7.39	6.24	2.78	2.46	1.80	5.35	2.44	3.27	3.43	1.58	1.78
BY-AP-MW-6	26.69	7.48	6.34	2.87	2.46	1.66	5.36	2.33	3.20	3.36	1.36	1.63
BY-AP-MW-7	25.94	7.86	6.51	2.74	2.52	1.52	5.52	2.28	3.15	3.40	1.25	1.81
BY-AP-MW-8	28.45	7.90	6.36	2.48	2.34	1.19	5.35	2.06	2.91	3.16	0.92	1.32
BY-AP-MW-9	24.39	7.64	6.16	2.54	2.17	1.08	5.09	1.85	2.77	3.00	0.74	1.09
BY-AP-MW-10	26.89	7.77	6.29	2.74	1.35	1.19	5.19	2.01	2.88	3.14	0.88	1.26
BY-AP-MW-11	26.08	7.82	6.36	2.89	2.48	1.34	5.28	2.23	3.00	3.25	1.04	1.52
BY-AP-MW-12	23.88	7.43	6.00	2.56	2.16	1.07	4.93	1.91	2.67	2.93	0.73	1.19
BY-AP-MW-13	24.22	7.49	6.06	2.67	2.28	1.14	4.98	1.99	2.74	3.01	0.81	1.17
BY-AP-MW-14	11.74	6.89	5.49	2.66	1.72	0.73	4.49	1.44	2.29	2.54	0.36	0.61
BY-AP-MW-15	23.89	7.21	5.88	2.61	2.20	1.34	4.94	1.93	2.82	3.04	0.99	1.72
BY-AP-MW-16	25.01	7.344	6.174	2.944	2.524	2.044	5.31	2.38	3.4	3.52	1.76	1.93
BY-AP-MW-1V	26.23	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-5V	28.94	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-7V	25.54	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-8V	28.25	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-10V	25.39	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-12V	25.51	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-13V	24.65	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-14V	24.72	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-15V	7.03	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-15VM	23.51	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-16V	23.65	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-17H	19.83	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-17V	20.40	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-18H	10.30	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-19H	9.40	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-20H	9.40	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-20V	24.91	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-22H	7.85	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-23H	10.63	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-23V	15.33	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-24H	26.28	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-25H	23.82	--	--	--	--	--	--	--	--	--	--	--
BY-AP-MW-25VM	23.81	--	--	--	--	--	--	--	--	--	--	--

Notes:

1. ft. AMSL - feet above mean sea level
2. -- Not Measured

Appendix B.
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)										
		2/22/2016	4/18/2016	6/7/2016	8/29/2016	10/17/2016	1/30/2017	3/20/2017	5/1/2017	6/5/2017	9/12/2017	1/21/2018
BY-GSA-MW-1³	20.66	7.73	7.92	5.81	5.13	4.59	6.94	5.42	5.51	6.64	5.45	4.75
BY-GSA-MW-2³	19.95	7.55	7.77	5.75	5.04	4.50	6.82	5.30	5.48	6.45	5.30	4.68
BY-GSA-MW-3³	23.24	8.19	8.45	6.52	5.78	5.19	7.55	6.04	6.16	7.39	6.16	5.46
BY-GSA-MW-4³	29.12	7.83	8.13	6.21	5.47	4.93	7.25	5.71	5.98	6.87	5.74	5.18

Notes:

1. ft. AMSL - feet above mean sea level
2. -- Not Measured
3. BY-GSA-MW-1 - BY-GSA-MW-4 designated as upgradient Ash Pond well locations.

**Appendix B.
Historical Groundwater Elevations Summary**

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)												
		4/30/2018	8/27/2018	11/26/2018	3/20/2019	5/28/2019	9/30/2019	3/30/2020	5/12/2020	6/15/2020	8/31/2020	5/24/2021	10/18/2021	5/23/2022
BY-AP-MW-1	25.80	6.52	4.19	5.1	7.53	4.33	3.4	6.97	4.38	5.02	5.02	5.28	5.06	4.57
BY-AP-MW-2	23.89	5.84	2.95	4.26	6.99	3.55	2.74	6.53	3.55	3.81	3.84	3.96	3.63	3.57
BY-AP-MW-3	26.61	5.78	2.83	4.09	6.86	3.41	2.6	6.46	3.39	3.70	3.84	3.84	3.47	3.59
BY-AP-MW-4	26.97	5.62	2.62	3.84	6.63	3.14	2.33	6.21	3.06	3.39	3.60	3.57	3.15	3.31
BY-AP-MW-5	28.93	5.49	2.48	3.53	6.43	2.89	2.08	5.9	2.66	3.00	3.29	--	2.81	2.84
BY-AP-MW-6	26.69	5.58	2.33	3.6	6.45	2.66	1.91	6.1	2.51	2.85	3.30	3.04	2.64	2.60
BY-AP-MW-7	25.94	5.82	2.29	3.51	6.60	2.47	1.69	6.25	2.31	2.90	3.35	2.53	2.21	2.35
BY-AP-MW-8	28.45	5.56	2.14	3.17	6.37	2.17	1.32	5.89	1.53	2.41	3.21	2.35	4.96	2.16
BY-AP-MW-9	24.39	5.33	1.90	3.15	6.17	1.96	1.26	5.83	1.47	2.36	2.97	-7.64	2.05	2.24
BY-AP-MW-10	26.89	5.47	2.07	3.09	6.26	2.12	1.34	4.96	1.58	2.46	3.11	2.17	1.89	1.95
BY-AP-MW-11	26.08	5.60	2.26	3.2	6.41	2.32	1.54	5.94	1.64	2.50	3.16	2.41	2.06	2.69
BY-AP-MW-12	23.88	5.23	1.99	2.86	5.98	1.97	1.26	6.02	1.52	2.31	2.95	2.48	2.13	2.63
BY-AP-MW-13	24.22	5.28	2.10	2.94	6.09	2.11	1.42	5.83	1.68	2.43	3.11	2.64	2.29	2.84
BY-AP-MW-14	11.74	4.66	1.49	2.51	5.49	1.6	0.89	5.04	0.97	1.77	1.96	1.89	1.56	1.71
BY-AP-MW-15	23.89	5.14	1.98	3.07	6.13	2.23	1.58	5.77	1.93	2.57	3.12	2.74	2.45	2.57
BY-AP-MW-16	25.01	5.4	2.4	3.7	6.47	2.82	2.2	6.08	2.35	3.83	3.45	3.22	2.92	3.06
BY-AP-MW-1V	26.23	--	--	--	6.90	--	2.65	7.34	3.69	3.61	3.72	3.72	3.43	3.40
BY-AP-MW-5V	28.94	--	--	--	6.43	--	2.1	5.88	2.63	3.00	3.32	--	2.79	2.83
BY-AP-MW-7V	25.54	--	--	--	6.54	--	1.66	6.03	2.15	2.68	3.13	2.51	2.21	2.34
BY-AP-MW-8V	28.25	--	--	--	6.18	--	1.23	5.74	1.44	2.23	2.82	2.41	2.07	2.38
BY-AP-MW-10V	25.39	--	--	--	6.09	--	1.21	5.65	1.23	2.17	2.78	2.21	1.93	2.20
BY-AP-MW-12V	25.51	--	--	--	8.15	--	3.46	7.83	3.53	4.33	5.00	4.53	4.19	4.63
BY-AP-MW-13V	24.65	--	--	--	--	--	--	--	1.48	2.23	2.93	2.47	2.57	2.62
BY-AP-MW-14V	24.72	--	--	--	--	--	--	--	2.13	2.26	2.88	2.41	2.09	2.22
BY-AP-MW-15V	7.03	--	--	--	--	--	1.97	--	2.17	2.71	3.23	2.83	2.52	2.55
BY-AP-MW-15VM	23.51	--	--	--	--	--	--	--	4.15	3.95	3.90	3.98	3.45	4.36
BY-AP-MW-16V	23.65	--	--	--	--	--	--	--	2.97	3.15	3.47	3.26	2.94	2.94
BY-AP-MW-17H	19.83	--	--	--	--	--	1.51	5.88	1.47	2.36	2.93	2.37	2.14	2.02
BY-AP-MW-17V	20.40	--	--	--	--	--	--	--	1.51	2.11	3.01	2.44	2.20	2.09
BY-AP-MW-18H	10.30	--	--	--	6.33	--	1.34	5.88	1.87	2.03	3.00	2.40	2.05	2.61
BY-AP-MW-19H	9.40	--	--	--	--	--	1.42	5.85	2.02	2.07	3.04	2.45	2.14	2.50
BY-AP-MW-20H	9.40	--	--	--	--	--	1.55	5.79	1.55	2.31	2.97	2.51	2.13	2.57
BY-AP-MW-20V	24.91	--	--	--	--	--	--	--	1.4	2.19	2.87	2.39	2.04	2.56
BY-AP-MW-22H	7.85	--	--	--	--	--	1.85	--	2.17	2.75	3.09	2.80	2.46	2.40
BY-AP-MW-23H	10.63	--	--	--	--	--	1.67	5.98	1.55	2.48	3.07	2.44	2.14	2.75
BY-AP-MW-23V	15.33	--	--	--	--	--	--	--	1.5	2.09	2.98	2.34	2.15	2.65
BY-AP-MW-24H	26.28	--	--	--	6.31	--	1.86	5.82	1.4	2.74	3.16	2.92	2.60	2.60
BY-AP-MW-25H	23.82	--	--	--	--	--	--	--	3.49	3.53	3.37	3.63	3.29	2.31
BY-AP-MW-25VM	23.81	--	--	--	--	--	--	--	3.22	3.42	3.38	3.58	3.19	3.22

Notes:

1. ft. AMSL - feet above mean sea level
2. -- Not Measured

**Appendix B.
Historical Groundwater Elevations Summary**

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)												
		4/30/2018	8/27/2018	11/26/2018	3/20/2019	5/28/2019	10/2/2019	3/30/2020	9/8/2020	5/24/2021	10/18/2021	5/23/2022		
BY-GSA-MW-1³	20.66	6.83	5.22	5.84	--	6.60	4.78	8.38	5.31	7.13	6.64	6.17		
BY-GSA-MW-2³	19.95	6.66	5.06	5.73	--	6.32	4.71	8.05	5.16	6.80	6.4	6.03		
BY-GSA-MW-3³	23.24	7.19	5.76	6.40	--	7.02	5.37	8.54	5.83	7.49	7.19	6.75		
BY-GSA-MW-4³	29.12	6.99	5.47	6.13	--	6.57	5.16	8.20	5.53	6.99	6.68	6.37		

Notes:

1. ft. AMSL - feet above mean sea level
2. -- Not Measured
3. BY-GSA-MW-1 - BY-GSA-MW-4 designated as upgradient Ash Pond well locations.

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 Barry Pooled Upgradient

2022 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).

Field readings for pH were qualified for wells MW-1, MW-2, MW-3 and MW-4 due to pH readings falling outside of the bracketed calibration range. The below qualifier was used:

- E – Estimated reported value exceeded calibration range

Rainy conditions were present when pumping and sampling well MW-4.

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.

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 Barry Ash Pond

2022 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).

Strong winds caused dusty conditions when sampling well MW-3.

Rain was present when pumping and sampling wells MW-19H, MW-15V, MW-7, MW-7V, MW-9, MW-14, MW-14V, MW-15 and MW-23V.

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.

**Groundwater Field Parameters
Plant Barry Pooled Upgradient Wells**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-1	Conductivity	5/31/2022 13:01	58.03	uS/cm
MW-1	DO	5/31/2022 13:01	0.44	mg/L
MW-1	Depth to Water Detail	5/31/2022 13:01	13.92	ft
MW-1	Oxidation Reduction Potention	5/31/2022 13:01	181.73	mv
MW-1	pH	5/31/2022 13:01	4.26	SU
MW-1	Temperature	5/31/2022 13:01	20.95	C
MW-1	Turbidity	5/31/2022 13:01	2.43	NTU
MW-1	Conductivity	5/31/2022 13:06	57.52	uS/cm
MW-1	DO	5/31/2022 13:06	0.38	mg/L
MW-1	Depth to Water Detail	5/31/2022 13:06	13.92	ft
MW-1	Oxidation Reduction Potention	5/31/2022 13:06	186.18	mv
MW-1	pH	5/31/2022 13:06	4.12	SU
MW-1	Temperature	5/31/2022 13:06	20.84	C
MW-1	Turbidity	5/31/2022 13:06	1.33	NTU
MW-1	Conductivity	5/31/2022 13:11	56.99	uS/cm
MW-1	DO	5/31/2022 13:11	0.37	mg/L
MW-1	Depth to Water Detail	5/31/2022 13:11	13.92	ft
MW-1	Oxidation Reduction Potention	5/31/2022 13:11	195.4	mv
MW-1	pH	5/31/2022 13:11	3.86	SU
MW-1	Temperature	5/31/2022 13:11	20.98	C
MW-1	Turbidity	5/31/2022 13:11	1.27	NTU
MW-1	Conductivity	5/31/2022 13:16	57	uS/cm
MW-1	DO	5/31/2022 13:16	0.35	mg/L
MW-1	Depth to Water Detail	5/31/2022 13:16	13.92	ft
MW-1	Oxidation Reduction Potention	5/31/2022 13:16	193.75	mv
MW-1	pH	5/31/2022 13:16	3.88	SU
MW-1	Temperature	5/31/2022 13:16	20.79	C
MW-1	Turbidity	5/31/2022 13:16	1.64	NTU
MW-1	Conductivity	5/31/2022 13:21	57.06	uS/cm
MW-1	DO	5/31/2022 13:21	0.34	mg/L
MW-1	Depth to Water Detail	5/31/2022 13:21	13.92	ft
MW-1	Oxidation Reduction Potention	5/31/2022 13:21	193.96	mv
MW-1	pH	5/31/2022 13:21	3.89	SU
MW-1	Sulfide	5/31/2022 13:21	0	mg/L
MW-1	Temperature	5/31/2022 13:21	20.77	C
MW-1	Turbidity	5/31/2022 13:21	2	NTU

MW-2	Conductivity	5/31/2022 14:00	51.15	uS/cm
MW-2	DO	5/31/2022 14:00	6.6	mg/L
MW-2	Depth to Water Detail	5/31/2022 14:00	13.35	ft
MW-2	Oxidation Reduction Potention	5/31/2022 14:00	183.27	mv
MW-2	pH	5/31/2022 14:00	3.95	SU
MW-2	Temperature	5/31/2022 14:00	20.02	C
MW-2	Turbidity	5/31/2022 14:00	9.16	NTU
MW-2	Conductivity	5/31/2022 14:05	50.67	uS/cm
MW-2	DO	5/31/2022 14:05	6.45	mg/L
MW-2	Depth to Water Detail	5/31/2022 14:05	13.35	ft
MW-2	Oxidation Reduction Potention	5/31/2022 14:05	202.11	mv
MW-2	pH	5/31/2022 14:05	3.67	SU
MW-2	Temperature	5/31/2022 14:05	20.01	C
MW-2	Turbidity	5/31/2022 14:05	11.13	NTU
MW-2	Conductivity	5/31/2022 14:10	50.35	uS/cm
MW-2	DO	5/31/2022 14:10	6.29	mg/L
MW-2	Depth to Water Detail	5/31/2022 14:10	13.35	ft
MW-2	Oxidation Reduction Potention	5/31/2022 14:10	215.94	mv
MW-2	pH	5/31/2022 14:10	3.48	SU
MW-2	Temperature	5/31/2022 14:10	20.16	C
MW-2	Turbidity	5/31/2022 14:10	6.79	NTU
MW-2	Conductivity	5/31/2022 14:15	50.27	uS/cm
MW-2	DO	5/31/2022 14:15	6.29	mg/L
MW-2	Depth to Water Detail	5/31/2022 14:15	13.35	ft
MW-2	Oxidation Reduction Potention	5/31/2022 14:15	222.65	mv
MW-2	pH	5/31/2022 14:15	3.39	SU
MW-2	Temperature	5/31/2022 14:15	20.24	C
MW-2	Turbidity	5/31/2022 14:15	6.82	NTU
MW-2	Conductivity	5/31/2022 14:20	50.14	uS/cm
MW-2	DO	5/31/2022 14:20	6.28	mg/L
MW-2	Depth to Water Detail	5/31/2022 14:20	13.35	ft
MW-2	Oxidation Reduction Potention	5/31/2022 14:20	225.28	mv
MW-2	pH	5/31/2022 14:20	3.32	SU
MW-2	Temperature	5/31/2022 14:20	20.23	C
MW-2	Turbidity	5/31/2022 14:20	5.15	NTU
MW-2	Conductivity	5/31/2022 14:25	50.04	uS/cm
MW-2	DO	5/31/2022 14:25	6.27	mg/L
MW-2	Depth to Water Detail	5/31/2022 14:25	13.35	ft
MW-2	Oxidation Reduction Potention	5/31/2022 14:25	226.41	mv
MW-2	pH	5/31/2022 14:25	3.31	SU
MW-2	Sulfide	5/31/2022 14:25	0	mg/L
MW-2	Temperature	5/31/2022 14:25	20	C
MW-2	Turbidity	5/31/2022 14:25	4.82	NTU

MW-3	Conductivity	5/31/2022 15:04	49.81	uS/cm
MW-3	DO	5/31/2022 15:04	5.89	mg/L
MW-3	Depth to Water Detail	5/31/2022 15:04	15.93	ft
MW-3	Oxidation Reduction Potention	5/31/2022 15:04	180.26	mv
MW-3	pH	5/31/2022 15:04	4.04	SU
MW-3	Temperature	5/31/2022 15:04	20.62	C
MW-3	Turbidity	5/31/2022 15:04	5.91	NTU
MW-3	Conductivity	5/31/2022 15:09	49.95	uS/cm
MW-3	DO	5/31/2022 15:09	5.79	mg/L
MW-3	Depth to Water Detail	5/31/2022 15:09	15.93	ft
MW-3	Oxidation Reduction Potention	5/31/2022 15:09	206.7	mv
MW-3	pH	5/31/2022 15:09	3.67	SU
MW-3	Temperature	5/31/2022 15:09	20.24	C
MW-3	Turbidity	5/31/2022 15:09	5.43	NTU
MW-3	Conductivity	5/31/2022 15:14	49.71	uS/cm
MW-3	DO	5/31/2022 15:14	5.84	mg/L
MW-3	Depth to Water Detail	5/31/2022 15:14	15.93	ft
MW-3	Oxidation Reduction Potention	5/31/2022 15:14	216.27	mv
MW-3	pH	5/31/2022 15:14	3.6	SU
MW-3	Temperature	5/31/2022 15:14	20.11	C
MW-3	Turbidity	5/31/2022 15:14	3.35	NTU
MW-3	Conductivity	5/31/2022 15:19	49.57	uS/cm
MW-3	DO	5/31/2022 15:19	5.82	mg/L
MW-3	Depth to Water Detail	5/31/2022 15:19	15.93	ft
MW-3	Oxidation Reduction Potention	5/31/2022 15:19	223.76	mv
MW-3	pH	5/31/2022 15:19	3.54	SU
MW-3	Sulfide	5/31/2022 15:19	0	mg/L
MW-3	Temperature	5/31/2022 15:19	20.09	C
MW-3	Turbidity	5/31/2022 15:19	3.1	NTU

MW-4	Conductivity	5/31/2022 16:01	53.79	uS/cm
MW-4	DO	5/31/2022 16:01	6.49	mg/L
MW-4	Depth to Water Detail	5/31/2022 16:01	22.08	ft
MW-4	Oxidation Reduction Potention	5/31/2022 16:01	189.08	mv
MW-4	pH	5/31/2022 16:01	4.38	SU
MW-4	Temperature	5/31/2022 16:01	23.14	C
MW-4	Turbidity	5/31/2022 16:01	10.27	NTU
MW-4	Conductivity	5/31/2022 16:06	53.31	uS/cm
MW-4	DO	5/31/2022 16:06	6.48	mg/L
MW-4	Depth to Water Detail	5/31/2022 16:06	22.08	ft
MW-4	Oxidation Reduction Potention	5/31/2022 16:06	200.15	mv
MW-4	pH	5/31/2022 16:06	4.24	SU
MW-4	Temperature	5/31/2022 16:06	22.79	C
MW-4	Turbidity	5/31/2022 16:06	7.81	NTU
MW-4	Conductivity	5/31/2022 16:11	52.86	uS/cm
MW-4	DO	5/31/2022 16:11	6.5	mg/L
MW-4	Depth to Water Detail	5/31/2022 16:11	22.08	ft
MW-4	Oxidation Reduction Potention	5/31/2022 16:11	209.5	mv
MW-4	pH	5/31/2022 16:11	4.11	SU
MW-4	Temperature	5/31/2022 16:11	22.47	C
MW-4	Turbidity	5/31/2022 16:11	7.58	NTU
MW-4	Conductivity	5/31/2022 16:16	53.05	uS/cm
MW-4	DO	5/31/2022 16:16	6.49	mg/L
MW-4	Depth to Water Detail	5/31/2022 16:16	22.08	ft
MW-4	Oxidation Reduction Potention	5/31/2022 16:16	216.73	mv
MW-4	pH	5/31/2022 16:16	4.03	SU
MW-4	Temperature	5/31/2022 16:16	22.41	C
MW-4	Turbidity	5/31/2022 16:16	7.68	NTU
MW-4	Conductivity	5/31/2022 16:21	52.45	uS/cm
MW-4	DO	5/31/2022 16:21	6.48	mg/L
MW-4	Depth to Water Detail	5/31/2022 16:21	22.08	ft
MW-4	Oxidation Reduction Potention	5/31/2022 16:21	223.18	mv
MW-4	pH	5/31/2022 16:21	3.97	SU
MW-4	Sulfide	5/31/2022 16:21	0	mg/L
MW-4	Temperature	5/31/2022 16:21	22.67	C
MW-4	Turbidity	5/31/2022 16:21	8.23	NTU

**Groundwater Field Parameters
Plant Barry Ash Pond**

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
BY-AP-MW-3	Conductivity	5/25/2022 14:37	49.5	uS/cm
BY-AP-MW-3	DO	5/25/2022 14:37	1.38	mg/L
BY-AP-MW-3	Depth to Water Detail	5/25/2022 14:37	22.39	ft
BY-AP-MW-3	Oxidation Reduction Potention	5/25/2022 14:37	128.56	mv
BY-AP-MW-3	pH	5/25/2022 14:37	4.37	SU
BY-AP-MW-3	Temperature	5/25/2022 14:37	21.64	C
BY-AP-MW-3	Turbidity	5/25/2022 14:37	1.32	NTU
BY-AP-MW-3	Conductivity	5/25/2022 14:42	56.82	uS/cm
BY-AP-MW-3	DO	5/25/2022 14:42	1.43	mg/L
BY-AP-MW-3	Depth to Water Detail	5/25/2022 14:42	22.39	ft
BY-AP-MW-3	Oxidation Reduction Potention	5/25/2022 14:42	127.2	mv
BY-AP-MW-3	pH	5/25/2022 14:42	4.49	SU
BY-AP-MW-3	Temperature	5/25/2022 14:42	21.67	C
BY-AP-MW-3	Turbidity	5/25/2022 14:42	1.16	NTU
BY-AP-MW-3	Conductivity	5/25/2022 14:47	60.25	uS/cm
BY-AP-MW-3	DO	5/25/2022 14:47	1.51	mg/L
BY-AP-MW-3	Depth to Water Detail	5/25/2022 14:47	22.39	ft
BY-AP-MW-3	Oxidation Reduction Potention	5/25/2022 14:47	124.66	mv
BY-AP-MW-3	pH	5/25/2022 14:47	4.61	SU
BY-AP-MW-3	Temperature	5/25/2022 14:47	21.59	C
BY-AP-MW-3	Turbidity	5/25/2022 14:47	0.94	NTU
BY-AP-MW-3	Conductivity	5/25/2022 14:52	62.71	uS/cm
BY-AP-MW-3	DO	5/25/2022 14:52	1.54	mg/L
BY-AP-MW-3	Depth to Water Detail	5/25/2022 14:52	22.39	ft
BY-AP-MW-3	Oxidation Reduction Potention	5/25/2022 14:52	127.33	mv
BY-AP-MW-3	pH	5/25/2022 14:52	4.6	SU
BY-AP-MW-3	Temperature	5/25/2022 14:52	21.61	C
BY-AP-MW-3	Turbidity	5/25/2022 14:52	0.69	NTU
BY-AP-MW-3	Conductivity	5/25/2022 14:57	64.35	uS/cm
BY-AP-MW-3	DO	5/25/2022 14:57	1.58	mg/L
BY-AP-MW-3	Depth to Water Detail	5/25/2022 14:57	22.39	ft
BY-AP-MW-3	Oxidation Reduction Potention	5/25/2022 14:57	127.37	mv
BY-AP-MW-3	pH	5/25/2022 14:57	4.63	SU
BY-AP-MW-3	Temperature	5/25/2022 14:57	21.6	C
BY-AP-MW-3	Turbidity	5/25/2022 14:57	0.58	NTU
BY-AP-MW-3	Conductivity	5/25/2022 15:02	65.47	uS/cm
BY-AP-MW-3	DO	5/25/2022 15:02	1.61	mg/L
BY-AP-MW-3	Depth to Water Detail	5/25/2022 15:02	22.39	ft
BY-AP-MW-3	Oxidation Reduction Potention	5/25/2022 15:02	129.55	mv
BY-AP-MW-3	pH	5/25/2022 15:02	4.64	SU
BY-AP-MW-3	Sulfide	5/25/2022 15:02	0	mg/L
BY-AP-MW-3	Temperature	5/25/2022 15:02	21.52	C
BY-AP-MW-3	Turbidity	5/25/2022 15:02	0.66	NTU

BY-AP-MW-8	Conductivity	5/24/2022 10:31	507.15	uS/cm
BY-AP-MW-8	DO	5/24/2022 10:31	0.25	mg/L
BY-AP-MW-8	Depth to Water Detail	5/24/2022 10:31	23.18	ft
BY-AP-MW-8	Oxidation Reduction Potention	5/24/2022 10:31	0.57	mv
BY-AP-MW-8	pH	5/24/2022 10:31	5.54	SU
BY-AP-MW-8	Temperature	5/24/2022 10:31	21.66	C
BY-AP-MW-8	Turbidity	5/24/2022 10:31	2.81	NTU
BY-AP-MW-8	Conductivity	5/24/2022 10:36	507.6	uS/cm
BY-AP-MW-8	DO	5/24/2022 10:36	0.21	mg/L
BY-AP-MW-8	Depth to Water Detail	5/24/2022 10:36	23.18	ft
BY-AP-MW-8	Oxidation Reduction Potention	5/24/2022 10:36	-6.42	mv
BY-AP-MW-8	pH	5/24/2022 10:36	5.54	SU
BY-AP-MW-8	Temperature	5/24/2022 10:36	21.62	C
BY-AP-MW-8	Turbidity	5/24/2022 10:36	3.21	NTU
BY-AP-MW-8	Conductivity	5/24/2022 10:41	508.22	uS/cm
BY-AP-MW-8	DO	5/24/2022 10:41	0.2	mg/L
BY-AP-MW-8	Depth to Water Detail	5/24/2022 10:41	23.18	ft
BY-AP-MW-8	Oxidation Reduction Potention	5/24/2022 10:41	-11.69	mv
BY-AP-MW-8	pH	5/24/2022 10:41	5.56	SU
BY-AP-MW-8	Temperature	5/24/2022 10:41	21.6	C
BY-AP-MW-8	Turbidity	5/24/2022 10:41	3.06	NTU
BY-AP-MW-8	Conductivity	5/24/2022 10:46	508.1	uS/cm
BY-AP-MW-8	DO	5/24/2022 10:46	0.19	mg/L
BY-AP-MW-8	Depth to Water Detail	5/24/2022 10:46	23.18	ft
BY-AP-MW-8	Oxidation Reduction Potention	5/24/2022 10:46	-16.23	mv
BY-AP-MW-8	pH	5/24/2022 10:46	5.6	SU
BY-AP-MW-8	Sulfide	5/24/2022 10:46	0	mg/L
BY-AP-MW-8	Temperature	5/24/2022 10:46	21.81	C
BY-AP-MW-8	Turbidity	5/24/2022 10:46	3.51	NTU

BY-AP-MW-8V	Conductivity	5/23/2022 17:08	560.66	uS/cm
BY-AP-MW-8V	DO	5/23/2022 17:08	0.28	mg/L
BY-AP-MW-8V	Depth to Water Detail	5/23/2022 17:08	22.36	ft
BY-AP-MW-8V	Oxidation Reduction Potention	5/23/2022 17:08	-23.87	mv
BY-AP-MW-8V	pH	5/23/2022 17:08	5.95	SU
BY-AP-MW-8V	Temperature	5/23/2022 17:08	20.85	C
BY-AP-MW-8V	Turbidity	5/23/2022 17:08	1.07	NTU
BY-AP-MW-8V	Conductivity	5/23/2022 17:13	557.28	uS/cm
BY-AP-MW-8V	DO	5/23/2022 17:13	0.25	mg/L
BY-AP-MW-8V	Depth to Water Detail	5/23/2022 17:13	22.36	ft
BY-AP-MW-8V	Oxidation Reduction Potention	5/23/2022 17:13	-19.98	mv
BY-AP-MW-8V	pH	5/23/2022 17:13	5.96	SU
BY-AP-MW-8V	Temperature	5/23/2022 17:13	20.85	C
BY-AP-MW-8V	Turbidity	5/23/2022 17:13	1.21	NTU
BY-AP-MW-8V	Conductivity	5/23/2022 17:18	556.98	uS/cm
BY-AP-MW-8V	DO	5/23/2022 17:18	0.24	mg/L
BY-AP-MW-8V	Depth to Water Detail	5/23/2022 17:18	22.36	ft
BY-AP-MW-8V	Oxidation Reduction Potention	5/23/2022 17:18	-22.12	mv
BY-AP-MW-8V	pH	5/23/2022 17:18	6.02	SU
BY-AP-MW-8V	Temperature	5/23/2022 17:18	20.88	C
BY-AP-MW-8V	Turbidity	5/23/2022 17:18	1.37	NTU
BY-AP-MW-8V	Conductivity	5/23/2022 17:23	557.51	uS/cm
BY-AP-MW-8V	DO	5/23/2022 17:23	0.24	mg/L
BY-AP-MW-8V	Depth to Water Detail	5/23/2022 17:23	22.36	ft
BY-AP-MW-8V	Oxidation Reduction Potention	5/23/2022 17:23	-24.72	mv
BY-AP-MW-8V	pH	5/23/2022 17:23	6.08	SU
BY-AP-MW-8V	Sulfide	5/23/2022 17:23	0	mg/L
BY-AP-MW-8V	Temperature	5/23/2022 17:23	20.86	C
BY-AP-MW-8V	Turbidity	5/23/2022 17:23	1.61	NTU

BY-AP-MW-10	Conductivity	5/24/2022 12:28	682.36	uS/cm
BY-AP-MW-10	DO	5/24/2022 12:28	0.38	mg/L
BY-AP-MW-10	Depth to Water Detail	5/24/2022 12:28	22.1	ft
BY-AP-MW-10	Oxidation Reduction Potention	5/24/2022 12:28	0.34	mv
BY-AP-MW-10	pH	5/24/2022 12:28	5.7	SU
BY-AP-MW-10	Temperature	5/24/2022 12:28	21.45	C
BY-AP-MW-10	Turbidity	5/24/2022 12:28	6.35	NTU
BY-AP-MW-10	Conductivity	5/24/2022 12:33	680.88	uS/cm
BY-AP-MW-10	DO	5/24/2022 12:33	0.34	mg/L
BY-AP-MW-10	Depth to Water Detail	5/24/2022 12:33	22.1	ft
BY-AP-MW-10	Oxidation Reduction Potention	5/24/2022 12:33	-8.82	mv
BY-AP-MW-10	pH	5/24/2022 12:33	5.74	SU
BY-AP-MW-10	Temperature	5/24/2022 12:33	21.44	C
BY-AP-MW-10	Turbidity	5/24/2022 12:33	0.21	NTU
BY-AP-MW-10	Conductivity	5/24/2022 12:38	680.76	uS/cm
BY-AP-MW-10	DO	5/24/2022 12:38	0.33	mg/L
BY-AP-MW-10	Depth to Water Detail	5/24/2022 12:38	22.1	ft
BY-AP-MW-10	Oxidation Reduction Potention	5/24/2022 12:38	-13.61	mv
BY-AP-MW-10	pH	5/24/2022 12:38	5.78	SU
BY-AP-MW-10	Temperature	5/24/2022 12:38	21.34	C
BY-AP-MW-10	Turbidity	5/24/2022 12:38	0.85	NTU
BY-AP-MW-10	Conductivity	5/24/2022 12:43	680.19	uS/cm
BY-AP-MW-10	DO	5/24/2022 12:43	0.32	mg/L
BY-AP-MW-10	Depth to Water Detail	5/24/2022 12:43	22.1	ft
BY-AP-MW-10	Oxidation Reduction Potention	5/24/2022 12:43	-17.07	mv
BY-AP-MW-10	pH	5/24/2022 12:43	5.81	SU
BY-AP-MW-10	Sulfide	5/24/2022 12:43	0	mg/L
BY-AP-MW-10	Temperature	5/24/2022 12:43	21.37	C
BY-AP-MW-10	Turbidity	5/24/2022 12:43	0.2	NTU

BY-AP-MW-10V	Conductivity	5/24/2022 14:24	733.27	uS/cm
BY-AP-MW-10V	DO	5/24/2022 14:24	0.22	mg/L
BY-AP-MW-10V	Depth to Water Detail	5/24/2022 14:24	23.06	ft
BY-AP-MW-10V	Oxidation Reduction Potention	5/24/2022 14:24	-14.11	mv
BY-AP-MW-10V	pH	5/24/2022 14:24	5.71	SU
BY-AP-MW-10V	Temperature	5/24/2022 14:24	21.42	C
BY-AP-MW-10V	Turbidity	5/24/2022 14:24	2.01	NTU
BY-AP-MW-10V	Conductivity	5/24/2022 14:26	733.38	uS/cm
BY-AP-MW-10V	DO	5/24/2022 14:26	0.2	mg/L
BY-AP-MW-10V	Depth to Water Detail	5/24/2022 14:26	23.06	ft
BY-AP-MW-10V	Oxidation Reduction Potention	5/24/2022 14:26	-19.81	mv
BY-AP-MW-10V	pH	5/24/2022 14:26	5.7	SU
BY-AP-MW-10V	Temperature	5/24/2022 14:26	21.49	C
BY-AP-MW-10V	Turbidity	5/24/2022 14:26	1.96	NTU
BY-AP-MW-10V	Conductivity	5/24/2022 14:31	728.42	uS/cm
BY-AP-MW-10V	DO	5/24/2022 14:31	0.19	mg/L
BY-AP-MW-10V	Depth to Water Detail	5/24/2022 14:31	23.06	ft
BY-AP-MW-10V	Oxidation Reduction Potention	5/24/2022 14:31	-28.53	mv
BY-AP-MW-10V	pH	5/24/2022 14:31	5.69	SU
BY-AP-MW-10V	Temperature	5/24/2022 14:31	21.48	C
BY-AP-MW-10V	Turbidity	5/24/2022 14:31	2.22	NTU
BY-AP-MW-10V	Conductivity	5/24/2022 14:36	727.36	uS/cm
BY-AP-MW-10V	DO	5/24/2022 14:36	0.18	mg/L
BY-AP-MW-10V	Depth to Water Detail	5/24/2022 14:36	23.06	ft
BY-AP-MW-10V	Oxidation Reduction Potention	5/24/2022 14:36	-35.68	mv
BY-AP-MW-10V	pH	5/24/2022 14:36	5.72	SU
BY-AP-MW-10V	Temperature	5/24/2022 14:36	21.45	C
BY-AP-MW-10V	Turbidity	5/24/2022 14:36	1.6	NTU
BY-AP-MW-10V	Conductivity	5/24/2022 14:41	726.04	uS/cm
BY-AP-MW-10V	DO	5/24/2022 14:41	0.19	mg/L
BY-AP-MW-10V	Depth to Water Detail	5/24/2022 14:41	23.06	ft
BY-AP-MW-10V	Oxidation Reduction Potention	5/24/2022 14:41	-41.2	mv
BY-AP-MW-10V	pH	5/24/2022 14:41	5.77	SU
BY-AP-MW-10V	Sulfide	5/24/2022 14:41	0	mg/L
BY-AP-MW-10V	Temperature	5/24/2022 14:41	21.44	C
BY-AP-MW-10V	Turbidity	5/24/2022 14:41	1.76	NTU

BY-AP-MW-13	Conductivity	5/24/2022 15:22	461.36	uS/cm
BY-AP-MW-13	DO	5/24/2022 15:22	0.26	mg/L
BY-AP-MW-13	Depth to Water Detail	5/24/2022 15:22	21.39	ft
BY-AP-MW-13	Oxidation Reduction Potention	5/24/2022 15:22	43.58	mv
BY-AP-MW-13	pH	5/24/2022 15:22	5.24	SU
BY-AP-MW-13	Temperature	5/24/2022 15:22	20.99	C
BY-AP-MW-13	Turbidity	5/24/2022 15:22	10.95	NTU
BY-AP-MW-13	Conductivity	5/24/2022 15:27	454.89	uS/cm
BY-AP-MW-13	DO	5/24/2022 15:27	0.23	mg/L
BY-AP-MW-13	Depth to Water Detail	5/24/2022 15:27	21.39	ft
BY-AP-MW-13	Oxidation Reduction Potention	5/24/2022 15:27	44.97	mv
BY-AP-MW-13	pH	5/24/2022 15:27	5.28	SU
BY-AP-MW-13	Temperature	5/24/2022 15:27	21.01	C
BY-AP-MW-13	Turbidity	5/24/2022 15:27	9.02	NTU
BY-AP-MW-13	Conductivity	5/24/2022 15:32	451.86	uS/cm
BY-AP-MW-13	DO	5/24/2022 15:32	0.24	mg/L
BY-AP-MW-13	Depth to Water Detail	5/24/2022 15:32	21.39	ft
BY-AP-MW-13	Oxidation Reduction Potention	5/24/2022 15:32	43.53	mv
BY-AP-MW-13	pH	5/24/2022 15:32	5.33	SU
BY-AP-MW-13	Temperature	5/24/2022 15:32	20.88	C
BY-AP-MW-13	Turbidity	5/24/2022 15:32	7.94	NTU
BY-AP-MW-13	Conductivity	5/24/2022 15:37	449.3	uS/cm
BY-AP-MW-13	DO	5/24/2022 15:37	0.23	mg/L
BY-AP-MW-13	Depth to Water Detail	5/24/2022 15:37	21.39	ft
BY-AP-MW-13	Oxidation Reduction Potention	5/24/2022 15:37	41.91	mv
BY-AP-MW-13	pH	5/24/2022 15:37	5.39	SU
BY-AP-MW-13	Temperature	5/24/2022 15:37	20.76	C
BY-AP-MW-13	Turbidity	5/24/2022 15:37	6.45	NTU
BY-AP-MW-13	Conductivity	5/24/2022 15:42	447.43	uS/cm
BY-AP-MW-13	DO	5/24/2022 15:42	0.23	mg/L
BY-AP-MW-13	Depth to Water Detail	5/24/2022 15:42	21.39	ft
BY-AP-MW-13	Oxidation Reduction Potention	5/24/2022 15:42	40.11	mv
BY-AP-MW-13	pH	5/24/2022 15:42	5.44	SU
BY-AP-MW-13	Temperature	5/24/2022 15:42	20.82	C
BY-AP-MW-13	Turbidity	5/24/2022 15:42	5.51	NTU
BY-AP-MW-13	Conductivity	5/24/2022 15:47	446.28	uS/cm
BY-AP-MW-13	DO	5/24/2022 15:47	0.22	mg/L
BY-AP-MW-13	Depth to Water Detail	5/24/2022 15:47	21.39	ft
BY-AP-MW-13	Oxidation Reduction Potention	5/24/2022 15:47	38.41	mv
BY-AP-MW-13	pH	5/24/2022 15:47	5.48	SU
BY-AP-MW-13	Temperature	5/24/2022 15:47	20.83	C
BY-AP-MW-13	Turbidity	5/24/2022 15:47	5.15	NTU
BY-AP-MW-13	Conductivity	5/24/2022 15:52	445.45	uS/cm
BY-AP-MW-13	DO	5/24/2022 15:52	0.23	mg/L
BY-AP-MW-13	Depth to Water Detail	5/24/2022 15:52	21.39	ft
BY-AP-MW-13	Oxidation Reduction Potention	5/24/2022 15:52	36.78	mv
BY-AP-MW-13	pH	5/24/2022 15:52	5.5	SU
BY-AP-MW-13	Sulfide	5/24/2022 15:52	0	mg/L
BY-AP-MW-13	Temperature	5/24/2022 15:52	20.79	C
BY-AP-MW-13	Turbidity	5/24/2022 15:52	4.94	NTU

BY-AP-MW-17H	Conductivity	5/25/2022 11:05	390.74	uS/cm
BY-AP-MW-17H	DO	5/25/2022 11:05	0.34	mg/L
BY-AP-MW-17H	Depth to Water Detail	5/25/2022 11:05	17.14	ft
BY-AP-MW-17H	Oxidation Reduction Potention	5/25/2022 11:05	46.02	mv
BY-AP-MW-17H	pH	5/25/2022 11:05	6.02	SU
BY-AP-MW-17H	Temperature	5/25/2022 11:05	21.64	C
BY-AP-MW-17H	Turbidity	5/25/2022 11:05	3.85	NTU
BY-AP-MW-17H	Conductivity	5/25/2022 11:10	390.86	uS/cm
BY-AP-MW-17H	DO	5/25/2022 11:10	0.31	mg/L
BY-AP-MW-17H	Depth to Water Detail	5/25/2022 11:10	17.14	ft
BY-AP-MW-17H	Oxidation Reduction Potention	5/25/2022 11:10	15.83	mv
BY-AP-MW-17H	pH	5/25/2022 11:10	6.11	SU
BY-AP-MW-17H	Temperature	5/25/2022 11:10	21.62	C
BY-AP-MW-17H	Turbidity	5/25/2022 11:10	3.11	NTU
BY-AP-MW-17H	Conductivity	5/25/2022 11:15	389.74	uS/cm
BY-AP-MW-17H	DO	5/25/2022 11:15	0.3	mg/L
BY-AP-MW-17H	Depth to Water Detail	5/25/2022 11:15	17.14	ft
BY-AP-MW-17H	Oxidation Reduction Potention	5/25/2022 11:15	-4.07	mv
BY-AP-MW-17H	pH	5/25/2022 11:15	6.16	SU
BY-AP-MW-17H	Temperature	5/25/2022 11:15	21.67	C
BY-AP-MW-17H	Turbidity	5/25/2022 11:15	2.91	NTU
BY-AP-MW-17H	Conductivity	5/25/2022 11:20	388.95	uS/cm
BY-AP-MW-17H	DO	5/25/2022 11:20	0.29	mg/L
BY-AP-MW-17H	Depth to Water Detail	5/25/2022 11:20	17.14	ft
BY-AP-MW-17H	Oxidation Reduction Potention	5/25/2022 11:20	-16.59	mv
BY-AP-MW-17H	pH	5/25/2022 11:20	6.21	SU
BY-AP-MW-17H	Sulfide	5/25/2022 11:20	0	mg/L
BY-AP-MW-17H	Temperature	5/25/2022 11:20	21.46	C
BY-AP-MW-17H	Turbidity	5/25/2022 11:20	2.84	NTU

BY-AP-MW-17V	Conductivity	5/25/2022 10:16	2097.06	uS/cm
BY-AP-MW-17V	DO	5/25/2022 10:16	0.45	mg/L
BY-AP-MW-17V	Depth to Water Detail	5/25/2022 10:16	17.53	ft
BY-AP-MW-17V	Oxidation Reduction Potention	5/25/2022 10:16	132.02	mv
BY-AP-MW-17V	pH	5/25/2022 10:16	6.4	SU
BY-AP-MW-17V	Temperature	5/25/2022 10:16	21.63	C
BY-AP-MW-17V	Turbidity	5/25/2022 10:16	7.57	NTU
BY-AP-MW-17V	Conductivity	5/25/2022 10:21	2160.09	uS/cm
BY-AP-MW-17V	DO	5/25/2022 10:21	0.42	mg/L
BY-AP-MW-17V	Depth to Water Detail	5/25/2022 10:21	17.53	ft
BY-AP-MW-17V	Oxidation Reduction Potention	5/25/2022 10:21	128.17	mv
BY-AP-MW-17V	pH	5/25/2022 10:21	6.38	SU
BY-AP-MW-17V	Temperature	5/25/2022 10:21	21.69	C
BY-AP-MW-17V	Turbidity	5/25/2022 10:21	1.61	NTU
BY-AP-MW-17V	Conductivity	5/25/2022 10:26	2222.08	uS/cm
BY-AP-MW-17V	DO	5/25/2022 10:26	0.4	mg/L
BY-AP-MW-17V	Depth to Water Detail	5/25/2022 10:26	17.53	ft
BY-AP-MW-17V	Oxidation Reduction Potention	5/25/2022 10:26	124.38	mv
BY-AP-MW-17V	pH	5/25/2022 10:26	6.37	SU
BY-AP-MW-17V	Temperature	5/25/2022 10:26	21.73	C
BY-AP-MW-17V	Turbidity	5/25/2022 10:26	1.49	NTU
BY-AP-MW-17V	Conductivity	5/25/2022 10:31	2293.2	uS/cm
BY-AP-MW-17V	DO	5/25/2022 10:31	0.39	mg/L
BY-AP-MW-17V	Depth to Water Detail	5/25/2022 10:31	17.53	ft
BY-AP-MW-17V	Oxidation Reduction Potention	5/25/2022 10:31	120.38	mv
BY-AP-MW-17V	pH	5/25/2022 10:31	6.36	SU
BY-AP-MW-17V	Temperature	5/25/2022 10:31	21.81	C
BY-AP-MW-17V	Turbidity	5/25/2022 10:31	1.58	NTU
BY-AP-MW-17V	Conductivity	5/25/2022 10:36	2332.61	uS/cm
BY-AP-MW-17V	DO	5/25/2022 10:36	0.39	mg/L
BY-AP-MW-17V	Depth to Water Detail	5/25/2022 10:36	17.53	ft
BY-AP-MW-17V	Oxidation Reduction Potention	5/25/2022 10:36	116.46	mv
BY-AP-MW-17V	pH	5/25/2022 10:36	6.34	SU
BY-AP-MW-17V	Sulfide	5/25/2022 10:36	0	mg/L
BY-AP-MW-17V	Temperature	5/25/2022 10:36	21.85	C
BY-AP-MW-17V	Turbidity	5/25/2022 10:36	1.38	NTU

BY-AP-MW-20H	Conductivity	5/23/2022 15:30	777.18	uS/cm
BY-AP-MW-20H	DO	5/23/2022 15:30	0.16	mg/L
BY-AP-MW-20H	Depth to Water Detail	5/23/2022 15:30	6.9	ft
BY-AP-MW-20H	Oxidation Reduction Potention	5/23/2022 15:30	-50.64	mv
BY-AP-MW-20H	pH	5/23/2022 15:30	6.01	SU
BY-AP-MW-20H	Temperature	5/23/2022 15:30	20	C
BY-AP-MW-20H	Turbidity	5/23/2022 15:30	4.81	NTU
BY-AP-MW-20H	Conductivity	5/23/2022 15:35	780.55	uS/cm
BY-AP-MW-20H	DO	5/23/2022 15:35	0.14	mg/L
BY-AP-MW-20H	Depth to Water Detail	5/23/2022 15:35	6.9	ft
BY-AP-MW-20H	Oxidation Reduction Potention	5/23/2022 15:35	-50.56	mv
BY-AP-MW-20H	pH	5/23/2022 15:35	6.03	SU
BY-AP-MW-20H	Temperature	5/23/2022 15:35	19.98	C
BY-AP-MW-20H	Turbidity	5/23/2022 15:35	2.17	NTU
BY-AP-MW-20H	Conductivity	5/23/2022 15:40	781.72	uS/cm
BY-AP-MW-20H	DO	5/23/2022 15:40	0.12	mg/L
BY-AP-MW-20H	Depth to Water Detail	5/23/2022 15:40	6.9	ft
BY-AP-MW-20H	Oxidation Reduction Potention	5/23/2022 15:40	-54.17	mv
BY-AP-MW-20H	pH	5/23/2022 15:40	6.11	SU
BY-AP-MW-20H	Temperature	5/23/2022 15:40	19.97	C
BY-AP-MW-20H	Turbidity	5/23/2022 15:40	1.88	NTU
BY-AP-MW-20H	Conductivity	5/23/2022 15:45	784.43	uS/cm
BY-AP-MW-20H	DO	5/23/2022 15:45	0.12	mg/L
BY-AP-MW-20H	Depth to Water Detail	5/23/2022 15:45	6.9	ft
BY-AP-MW-20H	Oxidation Reduction Potention	5/23/2022 15:45	-56.87	mv
BY-AP-MW-20H	pH	5/23/2022 15:45	6.15	SU
BY-AP-MW-20H	Sulfide	5/23/2022 15:45	0	mg/L
BY-AP-MW-20H	Temperature	5/23/2022 15:45	19.98	C
BY-AP-MW-20H	Turbidity	5/23/2022 15:45	1.75	NTU

BY-AP-MW-22H	Conductivity	5/24/2022 8:56	658.54	uS/cm
BY-AP-MW-22H	DO	5/24/2022 8:56	0.23	mg/L
BY-AP-MW-22H	Depth to Water Detail	5/24/2022 8:56	6.04	ft
BY-AP-MW-22H	Oxidation Reduction Potention	5/24/2022 8:56	-57.07	mv
BY-AP-MW-22H	pH	5/24/2022 8:56	6.4	SU
BY-AP-MW-22H	Temperature	5/24/2022 8:56	20.27	C
BY-AP-MW-22H	Turbidity	5/24/2022 8:56	8.4	NTU
BY-AP-MW-22H	Conductivity	5/24/2022 9:01	661.62	uS/cm
BY-AP-MW-22H	DO	5/24/2022 9:01	0.19	mg/L
BY-AP-MW-22H	Depth to Water Detail	5/24/2022 9:01	6.04	ft
BY-AP-MW-22H	Oxidation Reduction Potention	5/24/2022 9:01	-60.21	mv
BY-AP-MW-22H	pH	5/24/2022 9:01	6.45	SU
BY-AP-MW-22H	Temperature	5/24/2022 9:01	20.27	C
BY-AP-MW-22H	Turbidity	5/24/2022 9:01	3.29	NTU
BY-AP-MW-22H	Conductivity	5/24/2022 9:06	669.21	uS/cm
BY-AP-MW-22H	DO	5/24/2022 9:06	0.17	mg/L
BY-AP-MW-22H	Depth to Water Detail	5/24/2022 9:06	6.04	ft
BY-AP-MW-22H	Oxidation Reduction Potention	5/24/2022 9:06	-67.03	mv
BY-AP-MW-22H	pH	5/24/2022 9:06	6.54	SU
BY-AP-MW-22H	Temperature	5/24/2022 9:06	20.28	C
BY-AP-MW-22H	Turbidity	5/24/2022 9:06	2.96	NTU
BY-AP-MW-22H	Conductivity	5/24/2022 9:11	669.92	uS/cm
BY-AP-MW-22H	DO	5/24/2022 9:11	0.17	mg/L
BY-AP-MW-22H	Depth to Water Detail	5/24/2022 9:11	6.04	ft
BY-AP-MW-22H	Oxidation Reduction Potention	5/24/2022 9:11	-70.67	mv
BY-AP-MW-22H	pH	5/24/2022 9:11	6.57	SU
BY-AP-MW-22H	Sulfide	5/24/2022 9:11	0	mg/L
BY-AP-MW-22H	Temperature	5/24/2022 9:11	20.28	C
BY-AP-MW-22H	Turbidity	5/24/2022 9:11	2.32	NTU

BY-AP-MW-23H	Conductivity	5/25/2022 13:25	469.22	uS/cm
BY-AP-MW-23H	DO	5/25/2022 13:25	0.31	mg/L
BY-AP-MW-23H	Depth to Water Detail	5/25/2022 13:25	7.91	ft
BY-AP-MW-23H	Oxidation Reduction Potention	5/25/2022 13:25	21.15	mv
BY-AP-MW-23H	pH	5/25/2022 13:25	5.78	SU
BY-AP-MW-23H	Temperature	5/25/2022 13:25	20.08	C
BY-AP-MW-23H	Turbidity	5/25/2022 13:25	2.58	NTU
BY-AP-MW-23H	Conductivity	5/25/2022 13:30	460.99	uS/cm
BY-AP-MW-23H	DO	5/25/2022 13:30	0.26	mg/L
BY-AP-MW-23H	Depth to Water Detail	5/25/2022 13:30	7.91	ft
BY-AP-MW-23H	Oxidation Reduction Potention	5/25/2022 13:30	18.83	mv
BY-AP-MW-23H	pH	5/25/2022 13:30	5.74	SU
BY-AP-MW-23H	Temperature	5/25/2022 13:30	20.07	C
BY-AP-MW-23H	Turbidity	5/25/2022 13:30	2.66	NTU
BY-AP-MW-23H	Conductivity	5/25/2022 13:35	446.96	uS/cm
BY-AP-MW-23H	DO	5/25/2022 13:35	0.24	mg/L
BY-AP-MW-23H	Depth to Water Detail	5/25/2022 13:35	7.91	ft
BY-AP-MW-23H	Oxidation Reduction Potention	5/25/2022 13:35	12.76	mv
BY-AP-MW-23H	pH	5/25/2022 13:35	5.78	SU
BY-AP-MW-23H	Temperature	5/25/2022 13:35	20.09	C
BY-AP-MW-23H	Turbidity	5/25/2022 13:35	1.95	NTU
BY-AP-MW-23H	Conductivity	5/25/2022 13:40	425.4	uS/cm
BY-AP-MW-23H	DO	5/25/2022 13:40	0.23	mg/L
BY-AP-MW-23H	Depth to Water Detail	5/25/2022 13:40	7.91	ft
BY-AP-MW-23H	Oxidation Reduction Potention	5/25/2022 13:40	6.78	mv
BY-AP-MW-23H	pH	5/25/2022 13:40	5.81	SU
BY-AP-MW-23H	Temperature	5/25/2022 13:40	20.15	C
BY-AP-MW-23H	Turbidity	5/25/2022 13:40	2.72	NTU
BY-AP-MW-23H	Conductivity	5/25/2022 13:45	429.7	uS/cm
BY-AP-MW-23H	DO	5/25/2022 13:45	0.22	mg/L
BY-AP-MW-23H	Depth to Water Detail	5/25/2022 13:45	7.91	ft
BY-AP-MW-23H	Oxidation Reduction Potention	5/25/2022 13:45	2.27	mv
BY-AP-MW-23H	pH	5/25/2022 13:45	5.87	SU
BY-AP-MW-23H	Temperature	5/25/2022 13:45	20.15	C
BY-AP-MW-23H	Turbidity	5/25/2022 13:45	2.36	NTU
BY-AP-MW-23H	Conductivity	5/25/2022 13:50	411.87	uS/cm
BY-AP-MW-23H	DO	5/25/2022 13:50	0.22	mg/L
BY-AP-MW-23H	Depth to Water Detail	5/25/2022 13:50	7.91	ft
BY-AP-MW-23H	Oxidation Reduction Potention	5/25/2022 13:50	-1.91	mv
BY-AP-MW-23H	pH	5/25/2022 13:50	5.92	SU
BY-AP-MW-23H	Sulfide	5/25/2022 13:50	0	mg/L
BY-AP-MW-23H	Temperature	5/25/2022 13:50	20.16	C
BY-AP-MW-23H	Turbidity	5/25/2022 13:50	1.45	NTU

BY-AP-MW-23V	Conductivity	5/25/2022 12:27	625.35	uS/cm
BY-AP-MW-23V	DO	5/25/2022 12:27	0.52	mg/L
BY-AP-MW-23V	Depth to Water Detail	5/25/2022 12:27	12.47	ft
BY-AP-MW-23V	Oxidation Reduction Potention	5/25/2022 12:27	42.94	mv
BY-AP-MW-23V	pH	5/25/2022 12:27	6.85	SU
BY-AP-MW-23V	Temperature	5/25/2022 12:27	20.61	C
BY-AP-MW-23V	Turbidity	5/25/2022 12:27	4.93	NTU
BY-AP-MW-23V	Conductivity	5/25/2022 12:32	633.32	uS/cm
BY-AP-MW-23V	DO	5/25/2022 12:32	0.47	mg/L
BY-AP-MW-23V	Depth to Water Detail	5/25/2022 12:32	12.47	ft
BY-AP-MW-23V	Oxidation Reduction Potention	5/25/2022 12:32	20.6	mv
BY-AP-MW-23V	pH	5/25/2022 12:32	7.11	SU
BY-AP-MW-23V	Temperature	5/25/2022 12:32	20.63	C
BY-AP-MW-23V	Turbidity	5/25/2022 12:32	1.91	NTU
BY-AP-MW-23V	Conductivity	5/25/2022 12:37	635.02	uS/cm
BY-AP-MW-23V	DO	5/25/2022 12:37	0.46	mg/L
BY-AP-MW-23V	Depth to Water Detail	5/25/2022 12:37	12.47	ft
BY-AP-MW-23V	Oxidation Reduction Potention	5/25/2022 12:37	-1.37	mv
BY-AP-MW-23V	pH	5/25/2022 12:37	7.25	SU
BY-AP-MW-23V	Temperature	5/25/2022 12:37	20.61	C
BY-AP-MW-23V	Turbidity	5/25/2022 12:37	2.06	NTU
BY-AP-MW-23V	Conductivity	5/25/2022 12:42	635.81	uS/cm
BY-AP-MW-23V	DO	5/25/2022 12:42	0.45	mg/L
BY-AP-MW-23V	Depth to Water Detail	5/25/2022 12:42	12.47	ft
BY-AP-MW-23V	Oxidation Reduction Potention	5/25/2022 12:42	-20.8	mv
BY-AP-MW-23V	pH	5/25/2022 12:42	7.36	SU
BY-AP-MW-23V	Temperature	5/25/2022 12:42	20.56	C
BY-AP-MW-23V	Turbidity	5/25/2022 12:42	2.15	NTU
BY-AP-MW-23V	Conductivity	5/25/2022 12:47	636.87	uS/cm
BY-AP-MW-23V	DO	5/25/2022 12:47	0.44	mg/L
BY-AP-MW-23V	Depth to Water Detail	5/25/2022 12:47	12.47	ft
BY-AP-MW-23V	Oxidation Reduction Potention	5/25/2022 12:47	-36.42	mv
BY-AP-MW-23V	pH	5/25/2022 12:47	7.44	SU
BY-AP-MW-23V	Sulfide	5/25/2022 12:47	0	mg/L
BY-AP-MW-23V	Temperature	5/25/2022 12:47	20.55	C
BY-AP-MW-23V	Turbidity	5/25/2022 12:47	2.11	NTU

BY-AP-MW-4	Conductivity	5/25/2022 15:18	73.31	uS/cm
BY-AP-MW-4	DO	5/25/2022 15:18	1.39	mg/L
BY-AP-MW-4	Depth to Water Detail	5/25/2022 15:18	23.06	ft
BY-AP-MW-4	Oxidation Reduction Potention	5/25/2022 15:18	192.54	mv
BY-AP-MW-4	pH	5/25/2022 15:18	4.45	SU
BY-AP-MW-4	Temperature	5/25/2022 15:18	22.62	C
BY-AP-MW-4	Turbidity	5/25/2022 15:18	1.54	NTU
BY-AP-MW-4	Conductivity	5/25/2022 15:23	72.88	uS/cm
BY-AP-MW-4	DO	5/25/2022 15:23	1.3	mg/L
BY-AP-MW-4	Depth to Water Detail	5/25/2022 15:23	23.06	ft
BY-AP-MW-4	Oxidation Reduction Potention	5/25/2022 15:23	206.52	mv
BY-AP-MW-4	pH	5/25/2022 15:23	4.53	SU
BY-AP-MW-4	Temperature	5/25/2022 15:23	22.51	C
BY-AP-MW-4	Turbidity	5/25/2022 15:23	1.52	NTU
BY-AP-MW-4	Conductivity	5/25/2022 15:28	73.22	uS/cm
BY-AP-MW-4	DO	5/25/2022 15:28	1.32	mg/L
BY-AP-MW-4	Depth to Water Detail	5/25/2022 15:28	23.06	ft
BY-AP-MW-4	Oxidation Reduction Potention	5/25/2022 15:28	218.48	mv
BY-AP-MW-4	pH	5/25/2022 15:28	4.56	SU
BY-AP-MW-4	Temperature	5/25/2022 15:28	22.64	C
BY-AP-MW-4	Turbidity	5/25/2022 15:28	1.48	NTU
BY-AP-MW-4	Conductivity	5/25/2022 15:33	72.52	uS/cm
BY-AP-MW-4	DO	5/25/2022 15:33	1.3	mg/L
BY-AP-MW-4	Depth to Water Detail	5/25/2022 15:33	23.06	ft
BY-AP-MW-4	Oxidation Reduction Potention	5/25/2022 15:33	226.63	mv
BY-AP-MW-4	pH	5/25/2022 15:33	4.6	SU
BY-AP-MW-4	Sulfide	5/25/2022 15:33	0	mg/L
BY-AP-MW-4	Temperature	5/25/2022 15:33	22.57	C
BY-AP-MW-4	Turbidity	5/25/2022 15:33	1.54	NTU

BY-AP-MW-16	Conductivity	5/25/2022 14:36	469.13	uS/cm
BY-AP-MW-16	DO	5/25/2022 14:36	0.08	mg/L
BY-AP-MW-16	Depth to Water Detail	5/25/2022 14:36	21.32	ft
BY-AP-MW-16	Oxidation Reduction Potention	5/25/2022 14:36	5.15	mv
BY-AP-MW-16	pH	5/25/2022 14:36	5.7	SU
BY-AP-MW-16	Temperature	5/25/2022 14:36	22.17	C
BY-AP-MW-16	Turbidity	5/25/2022 14:36	2.82	NTU
BY-AP-MW-16	Conductivity	5/25/2022 14:41	475.8	uS/cm
BY-AP-MW-16	DO	5/25/2022 14:41	0.09	mg/L
BY-AP-MW-16	Depth to Water Detail	5/25/2022 14:41	21.32	ft
BY-AP-MW-16	Oxidation Reduction Potention	5/25/2022 14:41	0.78	mv
BY-AP-MW-16	pH	5/25/2022 14:41	5.73	SU
BY-AP-MW-16	Temperature	5/25/2022 14:41	22.23	C
BY-AP-MW-16	Turbidity	5/25/2022 14:41	1.75	NTU
BY-AP-MW-16	Conductivity	5/25/2022 14:46	478.13	uS/cm
BY-AP-MW-16	DO	5/25/2022 14:46	0.09	mg/L
BY-AP-MW-16	Depth to Water Detail	5/25/2022 14:46	21.32	ft
BY-AP-MW-16	Oxidation Reduction Potention	5/25/2022 14:46	-1.73	mv
BY-AP-MW-16	pH	5/25/2022 14:46	5.73	SU
BY-AP-MW-16	Temperature	5/25/2022 14:46	22.15	C
BY-AP-MW-16	Turbidity	5/25/2022 14:46	1.63	NTU
BY-AP-MW-16	Conductivity	5/25/2022 14:51	474.44	uS/cm
BY-AP-MW-16	DO	5/25/2022 14:51	0.09	mg/L
BY-AP-MW-16	Depth to Water Detail	5/25/2022 14:51	21.32	ft
BY-AP-MW-16	Oxidation Reduction Potention	5/25/2022 14:51	-3.49	mv
BY-AP-MW-16	pH	5/25/2022 14:51	5.74	SU
BY-AP-MW-16	Sulfide	5/25/2022 14:51	0	mg/L
BY-AP-MW-16	Temperature	5/25/2022 14:51	22.27	C
BY-AP-MW-16	Turbidity	5/25/2022 14:51	1.8	NTU

BY-AP-MW-16V	Conductivity	5/25/2022 13:48	316.69	uS/cm
BY-AP-MW-16V	DO	5/25/2022 13:48	0.45	mg/L
BY-AP-MW-16V	Depth to Water Detail	5/25/2022 13:48	19.98	ft
BY-AP-MW-16V	Oxidation Reduction Potention	5/25/2022 13:48	115.47	mv
BY-AP-MW-16V	pH	5/25/2022 13:48	5.18	SU
BY-AP-MW-16V	Temperature	5/25/2022 13:48	22.11	C
BY-AP-MW-16V	Turbidity	5/25/2022 13:48	3.45	NTU
BY-AP-MW-16V	Conductivity	5/25/2022 13:53	308.91	uS/cm
BY-AP-MW-16V	DO	5/25/2022 13:53	0.4	mg/L
BY-AP-MW-16V	Depth to Water Detail	5/25/2022 13:53	19.98	ft
BY-AP-MW-16V	Oxidation Reduction Potention	5/25/2022 13:53	116.69	mv
BY-AP-MW-16V	pH	5/25/2022 13:53	5.22	SU
BY-AP-MW-16V	Temperature	5/25/2022 13:53	22.24	C
BY-AP-MW-16V	Turbidity	5/25/2022 13:53	1.83	NTU
BY-AP-MW-16V	Conductivity	5/25/2022 13:58	317.04	uS/cm
BY-AP-MW-16V	DO	5/25/2022 13:58	0.39	mg/L
BY-AP-MW-16V	Depth to Water Detail	5/25/2022 13:58	19.98	ft
BY-AP-MW-16V	Oxidation Reduction Potention	5/25/2022 13:58	116.86	mv
BY-AP-MW-16V	pH	5/25/2022 13:58	5.25	SU
BY-AP-MW-16V	Temperature	5/25/2022 13:58	22.33	C
BY-AP-MW-16V	Turbidity	5/25/2022 13:58	1.6	NTU
BY-AP-MW-16V	Conductivity	5/25/2022 14:03	318.16	uS/cm
BY-AP-MW-16V	DO	5/25/2022 14:03	0.39	mg/L
BY-AP-MW-16V	Depth to Water Detail	5/25/2022 14:03	19.98	ft
BY-AP-MW-16V	Oxidation Reduction Potention	5/25/2022 14:03	117.25	mv
BY-AP-MW-16V	pH	5/25/2022 14:03	5.26	SU
BY-AP-MW-16V	Sulfide	5/25/2022 14:03	0	mg/L
BY-AP-MW-16V	Temperature	5/25/2022 14:03	22.23	C
BY-AP-MW-16V	Turbidity	5/25/2022 14:03	1.38	NTU

BY-AP-MW-15	Conductivity	5/25/2022 12:50	596.28	uS/cm
BY-AP-MW-15	DO	5/25/2022 12:50	0.11	mg/L
BY-AP-MW-15	Depth to Water Detail	5/25/2022 12:50	20.63	ft
BY-AP-MW-15	Oxidation Reduction Potention	5/25/2022 12:50	-118.55	mv
BY-AP-MW-15	pH	5/25/2022 12:50	6.7	SU
BY-AP-MW-15	Temperature	5/25/2022 12:50	21.73	C
BY-AP-MW-15	Turbidity	5/25/2022 12:50	11.4	NTU
BY-AP-MW-15	Conductivity	5/25/2022 12:55	573.11	uS/cm
BY-AP-MW-15	DO	5/25/2022 12:55	0.1	mg/L
BY-AP-MW-15	Depth to Water Detail	5/25/2022 12:55	20.63	ft
BY-AP-MW-15	Oxidation Reduction Potention	5/25/2022 12:55	-119.96	mv
BY-AP-MW-15	pH	5/25/2022 12:55	6.69	SU
BY-AP-MW-15	Temperature	5/25/2022 12:55	21.74	C
BY-AP-MW-15	Turbidity	5/25/2022 12:55	4.68	NTU
BY-AP-MW-15	Conductivity	5/25/2022 13:00	564.7	uS/cm
BY-AP-MW-15	DO	5/25/2022 13:00	0.09	mg/L
BY-AP-MW-15	Depth to Water Detail	5/25/2022 13:00	20.63	ft
BY-AP-MW-15	Oxidation Reduction Potention	5/25/2022 13:00	-120.56	mv
BY-AP-MW-15	pH	5/25/2022 13:00	6.7	SU
BY-AP-MW-15	Temperature	5/25/2022 13:00	21.8	C
BY-AP-MW-15	Turbidity	5/25/2022 13:00	5.02	NTU
BY-AP-MW-15	Conductivity	5/25/2022 13:05	564.84	uS/cm
BY-AP-MW-15	DO	5/25/2022 13:05	0.09	mg/L
BY-AP-MW-15	Depth to Water Detail	5/25/2022 13:05	20.63	ft
BY-AP-MW-15	Oxidation Reduction Potention	5/25/2022 13:05	-119.75	mv
BY-AP-MW-15	pH	5/25/2022 13:05	6.68	SU
BY-AP-MW-15	Sulfide	5/25/2022 13:05	0	mg/L
BY-AP-MW-15	Temperature	5/25/2022 13:05	21.92	C
BY-AP-MW-15	Turbidity	5/25/2022 13:05	3.64	NTU

BY-AP-MW-14	Conductivity	5/25/2022 11:38	525.4	uS/cm
BY-AP-MW-14	DO	5/25/2022 11:38	0.4	mg/L
BY-AP-MW-14	Depth to Water Detail	5/25/2022 11:38	9.42	ft
BY-AP-MW-14	Oxidation Reduction Potention	5/25/2022 11:38	-32.15	mv
BY-AP-MW-14	pH	5/25/2022 11:38	6.1	SU
BY-AP-MW-14	Temperature	5/25/2022 11:38	20.92	C
BY-AP-MW-14	Turbidity	5/25/2022 11:38	3.14	NTU
BY-AP-MW-14	Conductivity	5/25/2022 11:43	519.96	uS/cm
BY-AP-MW-14	DO	5/25/2022 11:43	0.36	mg/L
BY-AP-MW-14	Depth to Water Detail	5/25/2022 11:43	9.42	ft
BY-AP-MW-14	Oxidation Reduction Potention	5/25/2022 11:43	-34.08	mv
BY-AP-MW-14	pH	5/25/2022 11:43	6.13	SU
BY-AP-MW-14	Temperature	5/25/2022 11:43	20.61	C
BY-AP-MW-14	Turbidity	5/25/2022 11:43	3.47	NTU
BY-AP-MW-14	Conductivity	5/25/2022 11:48	515.57	uS/cm
BY-AP-MW-14	DO	5/25/2022 11:48	0.34	mg/L
BY-AP-MW-14	Depth to Water Detail	5/25/2022 11:48	9.42	ft
BY-AP-MW-14	Oxidation Reduction Potention	5/25/2022 11:48	-34.19	mv
BY-AP-MW-14	pH	5/25/2022 11:48	6.13	SU
BY-AP-MW-14	Temperature	5/25/2022 11:48	20.6	C
BY-AP-MW-14	Turbidity	5/25/2022 11:48	3.42	NTU
BY-AP-MW-14	Conductivity	5/25/2022 11:53	512.57	uS/cm
BY-AP-MW-14	DO	5/25/2022 11:53	0.33	mg/L
BY-AP-MW-14	Depth to Water Detail	5/25/2022 11:53	9.42	ft
BY-AP-MW-14	Oxidation Reduction Potention	5/25/2022 11:53	-33.94	mv
BY-AP-MW-14	pH	5/25/2022 11:53	6.14	SU
BY-AP-MW-14	Sulfide	5/25/2022 11:53	0	mg/L
BY-AP-MW-14	Temperature	5/25/2022 11:53	20.59	C
BY-AP-MW-14	Turbidity	5/25/2022 11:53	3.06	NTU

BY-AP-MW-13V	Conductivity	5/25/2022 10:05	562.11	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:05	0.2	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:05	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:05	-65.04	mv
BY-AP-MW-13V	pH	5/25/2022 10:05	6.38	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:05	20.77	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:05	11.1	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:10	521.84	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:10	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:10	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:10	-62.95	mv
BY-AP-MW-13V	pH	5/25/2022 10:10	6.35	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:10	20.76	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:10	4.45	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:15	491.75	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:15	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:15	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:15	-60.87	mv
BY-AP-MW-13V	pH	5/25/2022 10:15	6.33	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:15	20.72	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:15	2.72	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:20	474.84	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:20	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:20	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:20	-59.41	mv
BY-AP-MW-13V	pH	5/25/2022 10:20	6.33	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:20	20.72	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:20	2.55	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:25	458.91	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:25	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:25	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:25	-57.81	mv
BY-AP-MW-13V	pH	5/25/2022 10:25	6.32	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:25	20.88	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:25	2.95	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:30	446.58	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:30	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:30	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:30	-56.57	mv
BY-AP-MW-13V	pH	5/25/2022 10:30	6.32	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:30	21	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:30	2.12	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:35	527.9	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:35	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:35	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:35	-54.04	mv
BY-AP-MW-13V	pH	5/25/2022 10:35	6.29	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:35	20.93	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:35	2.76	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:40	564.08	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:40	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:40	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:40	-52.86	mv
BY-AP-MW-13V	pH	5/25/2022 10:40	6.28	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:40	20.96	C

BY-AP-MW-13V	Turbidity	5/25/2022 10:40	1.88	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:45	564.18	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:45	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:45	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:45	-52.3	mv
BY-AP-MW-13V	pH	5/25/2022 10:45	6.29	SU
BY-AP-MW-13V	Temperature	5/25/2022 10:45	20.92	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:45	1.66	NTU
BY-AP-MW-13V	Conductivity	5/25/2022 10:50	561.68	uS/cm
BY-AP-MW-13V	DO	5/25/2022 10:50	0.17	mg/L
BY-AP-MW-13V	Depth to Water Detail	5/25/2022 10:50	21.68	ft
BY-AP-MW-13V	Oxidation Reduction Potention	5/25/2022 10:50	-52.01	mv
BY-AP-MW-13V	pH	5/25/2022 10:50	6.3	SU
BY-AP-MW-13V	Sulfide	5/25/2022 10:50	0	mg/L
BY-AP-MW-13V	Temperature	5/25/2022 10:50	20.8	C
BY-AP-MW-13V	Turbidity	5/25/2022 10:50	2.04	NTU

BY-AP-MW-14V	Conductivity	5/24/2022 16:06	1066.31	uS/cm
BY-AP-MW-14V	DO	5/24/2022 16:06	0.54	mg/L
BY-AP-MW-14V	Depth to Water Detail	5/24/2022 16:06	22.15	ft
BY-AP-MW-14V	Oxidation Reduction Potention	5/24/2022 16:06	-124.62	mv
BY-AP-MW-14V	pH	5/24/2022 16:06	6.96	SU
BY-AP-MW-14V	Temperature	5/24/2022 16:06	21.81	C
BY-AP-MW-14V	Turbidity	5/24/2022 16:06	3.23	NTU
BY-AP-MW-14V	Conductivity	5/24/2022 16:11	982.38	uS/cm
BY-AP-MW-14V	DO	5/24/2022 16:11	0.45	mg/L
BY-AP-MW-14V	Depth to Water Detail	5/24/2022 16:11	22.15	ft
BY-AP-MW-14V	Oxidation Reduction Potention	5/24/2022 16:11	-104.88	mv
BY-AP-MW-14V	pH	5/24/2022 16:11	6.69	SU
BY-AP-MW-14V	Temperature	5/24/2022 16:11	21.7	C
BY-AP-MW-14V	Turbidity	5/24/2022 16:11	1.06	NTU
BY-AP-MW-14V	Conductivity	5/24/2022 16:16	982.39	uS/cm
BY-AP-MW-14V	DO	5/24/2022 16:16	0.43	mg/L
BY-AP-MW-14V	Depth to Water Detail	5/24/2022 16:16	22.15	ft
BY-AP-MW-14V	Oxidation Reduction Potention	5/24/2022 16:16	-104.29	mv
BY-AP-MW-14V	pH	5/24/2022 16:16	6.69	SU
BY-AP-MW-14V	Temperature	5/24/2022 16:16	21.52	C
BY-AP-MW-14V	Turbidity	5/24/2022 16:16	1.26	NTU
BY-AP-MW-14V	Conductivity	5/24/2022 16:21	969.26	uS/cm
BY-AP-MW-14V	DO	5/24/2022 16:21	0.42	mg/L
BY-AP-MW-14V	Depth to Water Detail	5/24/2022 16:21	22.15	ft
BY-AP-MW-14V	Oxidation Reduction Potention	5/24/2022 16:21	-104.33	mv
BY-AP-MW-14V	pH	5/24/2022 16:21	6.71	SU
BY-AP-MW-14V	Sulfide	5/24/2022 16:21	0	mg/L
BY-AP-MW-14V	Temperature	5/24/2022 16:21	21.42	C
BY-AP-MW-14V	Turbidity	5/24/2022 16:21	1.07	NTU

BY-AP-MW-9	Conductivity	5/24/2022 14:57	542.4	uS/cm
BY-AP-MW-9	DO	5/24/2022 14:57	0.31	mg/L
BY-AP-MW-9	Depth to Water Detail	5/24/2022 14:57	21.92	ft
BY-AP-MW-9	Oxidation Reduction Potention	5/24/2022 14:57	-75.39	mv
BY-AP-MW-9	pH	5/24/2022 14:57	6.01	SU
BY-AP-MW-9	Temperature	5/24/2022 14:57	22.25	C
BY-AP-MW-9	Turbidity	5/24/2022 14:57	1.96	NTU
BY-AP-MW-9	Conductivity	5/24/2022 15:02	549.58	uS/cm
BY-AP-MW-9	DO	5/24/2022 15:02	0.27	mg/L
BY-AP-MW-9	Depth to Water Detail	5/24/2022 15:02	21.92	ft
BY-AP-MW-9	Oxidation Reduction Potention	5/24/2022 15:02	-74.27	mv
BY-AP-MW-9	pH	5/24/2022 15:02	6	SU
BY-AP-MW-9	Temperature	5/24/2022 15:02	22.17	C
BY-AP-MW-9	Turbidity	5/24/2022 15:02	1.79	NTU
BY-AP-MW-9	Conductivity	5/24/2022 15:07	546.56	uS/cm
BY-AP-MW-9	DO	5/24/2022 15:07	0.25	mg/L
BY-AP-MW-9	Depth to Water Detail	5/24/2022 15:07	21.92	ft
BY-AP-MW-9	Oxidation Reduction Potention	5/24/2022 15:07	-73.61	mv
BY-AP-MW-9	pH	5/24/2022 15:07	6.01	SU
BY-AP-MW-9	Temperature	5/24/2022 15:07	22.21	C
BY-AP-MW-9	Turbidity	5/24/2022 15:07	0.91	NTU
BY-AP-MW-9	Conductivity	5/24/2022 15:12	543.47	uS/cm
BY-AP-MW-9	DO	5/24/2022 15:12	0.25	mg/L
BY-AP-MW-9	Depth to Water Detail	5/24/2022 15:12	21.92	ft
BY-AP-MW-9	Oxidation Reduction Potention	5/24/2022 15:12	-73.75	mv
BY-AP-MW-9	pH	5/24/2022 15:12	6.03	SU
BY-AP-MW-9	Sulfide	5/24/2022 15:12	0	mg/L
BY-AP-MW-9	Temperature	5/24/2022 15:12	22.35	C
BY-AP-MW-9	Turbidity	5/24/2022 15:12	1.63	NTU

BY-AP-MW-7V	Conductivity	5/24/2022 13:54	440.25	uS/cm
BY-AP-MW-7V	DO	5/24/2022 13:54	0.48	mg/L
BY-AP-MW-7V	Depth to Water Detail	5/24/2022 13:54	22.42	ft
BY-AP-MW-7V	Oxidation Reduction Potention	5/24/2022 13:54	-124.39	mv
BY-AP-MW-7V	pH	5/24/2022 13:54	6.88	SU
BY-AP-MW-7V	Temperature	5/24/2022 13:54	22.23	C
BY-AP-MW-7V	Turbidity	5/24/2022 13:54	1.9	NTU
BY-AP-MW-7V	Conductivity	5/24/2022 13:59	423.31	uS/cm
BY-AP-MW-7V	DO	5/24/2022 13:59	0.41	mg/L
BY-AP-MW-7V	Depth to Water Detail	5/24/2022 13:59	22.42	ft
BY-AP-MW-7V	Oxidation Reduction Potention	5/24/2022 13:59	-122.99	mv
BY-AP-MW-7V	pH	5/24/2022 13:59	6.89	SU
BY-AP-MW-7V	Temperature	5/24/2022 13:59	22.5	C
BY-AP-MW-7V	Turbidity	5/24/2022 13:59	1.52	NTU
BY-AP-MW-7V	Conductivity	5/24/2022 14:04	425.36	uS/cm
BY-AP-MW-7V	DO	5/24/2022 14:04	0.38	mg/L
BY-AP-MW-7V	Depth to Water Detail	5/24/2022 14:04	22.42	ft
BY-AP-MW-7V	Oxidation Reduction Potention	5/24/2022 14:04	-124.85	mv
BY-AP-MW-7V	pH	5/24/2022 14:04	6.92	SU
BY-AP-MW-7V	Temperature	5/24/2022 14:04	22.42	C
BY-AP-MW-7V	Turbidity	5/24/2022 14:04	1.85	NTU
BY-AP-MW-7V	Conductivity	5/24/2022 14:09	424.17	uS/cm
BY-AP-MW-7V	DO	5/24/2022 14:09	0.37	mg/L
BY-AP-MW-7V	Depth to Water Detail	5/24/2022 14:09	22.42	ft
BY-AP-MW-7V	Oxidation Reduction Potention	5/24/2022 14:09	-124.32	mv
BY-AP-MW-7V	pH	5/24/2022 14:09	6.92	SU
BY-AP-MW-7V	Sulfide	5/24/2022 14:09	0	mg/L
BY-AP-MW-7V	Temperature	5/24/2022 14:09	22.25	C
BY-AP-MW-7V	Turbidity	5/24/2022 14:09	1.73	NTU

BY-AP-MW-7	Conductivity	5/24/2022 12:53	254.18	uS/cm
BY-AP-MW-7	DO	5/24/2022 12:53	0.31	mg/L
BY-AP-MW-7	Depth to Water Detail	5/24/2022 12:53	23	ft
BY-AP-MW-7	Oxidation Reduction Potention	5/24/2022 12:53	-18.71	mv
BY-AP-MW-7	pH	5/24/2022 12:53	6.27	SU
BY-AP-MW-7	Temperature	5/24/2022 12:53	21.64	C
BY-AP-MW-7	Turbidity	5/24/2022 12:53	8.77	NTU
BY-AP-MW-7	Conductivity	5/24/2022 12:58	247.33	uS/cm
BY-AP-MW-7	DO	5/24/2022 12:58	0.29	mg/L
BY-AP-MW-7	Depth to Water Detail	5/24/2022 12:58	23	ft
BY-AP-MW-7	Oxidation Reduction Potention	5/24/2022 12:58	-21.78	mv
BY-AP-MW-7	pH	5/24/2022 12:58	6.29	SU
BY-AP-MW-7	Temperature	5/24/2022 12:58	21.64	C
BY-AP-MW-7	Turbidity	5/24/2022 12:58	4.13	NTU
BY-AP-MW-7	Conductivity	5/24/2022 13:03	248.82	uS/cm
BY-AP-MW-7	DO	5/24/2022 13:03	0.3	mg/L
BY-AP-MW-7	Depth to Water Detail	5/24/2022 13:03	23	ft
BY-AP-MW-7	Oxidation Reduction Potention	5/24/2022 13:03	-24.15	mv
BY-AP-MW-7	pH	5/24/2022 13:03	6.3	SU
BY-AP-MW-7	Temperature	5/24/2022 13:03	21.57	C
BY-AP-MW-7	Turbidity	5/24/2022 13:03	3.14	NTU
BY-AP-MW-7	Conductivity	5/24/2022 13:08	243.46	uS/cm
BY-AP-MW-7	DO	5/24/2022 13:08	0.3	mg/L
BY-AP-MW-7	Depth to Water Detail	5/24/2022 13:08	23	ft
BY-AP-MW-7	Oxidation Reduction Potention	5/24/2022 13:08	-25	mv
BY-AP-MW-7	pH	5/24/2022 13:08	6.32	SU
BY-AP-MW-7	Sulfide	5/24/2022 13:08	0	mg/L
BY-AP-MW-7	Temperature	5/24/2022 13:08	21.47	C
BY-AP-MW-7	Turbidity	5/24/2022 13:08	3.47	NTU

BY-AP-MW-15V	Conductivity	5/24/2022 10:39	618.48	uS/cm
BY-AP-MW-15V	DO	5/24/2022 10:39	0.32	mg/L
BY-AP-MW-15V	Depth to Water Detail	5/24/2022 10:39	4.59	ft
BY-AP-MW-15V	Oxidation Reduction Potention	5/24/2022 10:39	68.29	mv
BY-AP-MW-15V	pH	5/24/2022 10:39	5.56	SU
BY-AP-MW-15V	Temperature	5/24/2022 10:39	21.11	C
BY-AP-MW-15V	Turbidity	5/24/2022 10:39	3.56	NTU
BY-AP-MW-15V	Conductivity	5/24/2022 10:44	585.28	uS/cm
BY-AP-MW-15V	DO	5/24/2022 10:44	0.26	mg/L
BY-AP-MW-15V	Depth to Water Detail	5/24/2022 10:44	4.59	ft
BY-AP-MW-15V	Oxidation Reduction Potention	5/24/2022 10:44	52.2	mv
BY-AP-MW-15V	pH	5/24/2022 10:44	5.67	SU
BY-AP-MW-15V	Temperature	5/24/2022 10:44	21.13	C
BY-AP-MW-15V	Turbidity	5/24/2022 10:44	3.67	NTU
BY-AP-MW-15V	Conductivity	5/24/2022 10:49	591.8	uS/cm
BY-AP-MW-15V	DO	5/24/2022 10:49	0.26	mg/L
BY-AP-MW-15V	Depth to Water Detail	5/24/2022 10:49	4.59	ft
BY-AP-MW-15V	Oxidation Reduction Potention	5/24/2022 10:49	45.86	mv
BY-AP-MW-15V	pH	5/24/2022 10:49	5.7	SU
BY-AP-MW-15V	Temperature	5/24/2022 10:49	21.13	C
BY-AP-MW-15V	Turbidity	5/24/2022 10:49	10.61	NTU
BY-AP-MW-15V	Conductivity	5/24/2022 10:54	594.35	uS/cm
BY-AP-MW-15V	DO	5/24/2022 10:54	0.26	mg/L
BY-AP-MW-15V	Depth to Water Detail	5/24/2022 10:54	4.59	ft
BY-AP-MW-15V	Oxidation Reduction Potention	5/24/2022 10:54	44.5	mv
BY-AP-MW-15V	pH	5/24/2022 10:54	5.7	SU
BY-AP-MW-15V	Sulfide	5/24/2022 10:54	0	mg/L
BY-AP-MW-15V	Temperature	5/24/2022 10:54	21.14	C
BY-AP-MW-15V	Turbidity	5/24/2022 10:54	6.89	NTU

BY-AP-MW-19H	Conductivity	5/24/2022 8:39	163.33	uS/cm
BY-AP-MW-19H	DO	5/24/2022 8:39	0.29	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 8:39	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 8:39	8.46	mv
BY-AP-MW-19H	pH	5/24/2022 8:39	5.46	SU
BY-AP-MW-19H	Temperature	5/24/2022 8:39	20.07	C
BY-AP-MW-19H	Turbidity	5/24/2022 8:39	2.86	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 8:44	163.32	uS/cm
BY-AP-MW-19H	DO	5/24/2022 8:44	0.25	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 8:44	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 8:44	6.93	mv
BY-AP-MW-19H	pH	5/24/2022 8:44	5.47	SU
BY-AP-MW-19H	Temperature	5/24/2022 8:44	20.1	C
BY-AP-MW-19H	Turbidity	5/24/2022 8:44	2.52	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 8:49	167.54	uS/cm
BY-AP-MW-19H	DO	5/24/2022 8:49	0.23	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 8:49	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 8:49	-1.5	mv
BY-AP-MW-19H	pH	5/24/2022 8:49	5.53	SU
BY-AP-MW-19H	Temperature	5/24/2022 8:49	20.11	C
BY-AP-MW-19H	Turbidity	5/24/2022 8:49	1.92	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 8:54	174	uS/cm
BY-AP-MW-19H	DO	5/24/2022 8:54	0.22	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 8:54	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 8:54	-9.66	mv
BY-AP-MW-19H	pH	5/24/2022 8:54	5.6	SU
BY-AP-MW-19H	Temperature	5/24/2022 8:54	20.13	C
BY-AP-MW-19H	Turbidity	5/24/2022 8:54	2.5	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 8:59	179.18	uS/cm
BY-AP-MW-19H	DO	5/24/2022 8:59	0.22	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 8:59	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 8:59	-20.24	mv
BY-AP-MW-19H	pH	5/24/2022 8:59	5.64	SU
BY-AP-MW-19H	Temperature	5/24/2022 8:59	20.15	C
BY-AP-MW-19H	Turbidity	5/24/2022 8:59	1.88	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 9:04	185.76	uS/cm
BY-AP-MW-19H	DO	5/24/2022 9:04	0.22	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 9:04	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 9:04	-28.34	mv
BY-AP-MW-19H	pH	5/24/2022 9:04	5.68	SU
BY-AP-MW-19H	Temperature	5/24/2022 9:04	20.16	C
BY-AP-MW-19H	Turbidity	5/24/2022 9:04	1.85	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 9:09	191.64	uS/cm
BY-AP-MW-19H	DO	5/24/2022 9:09	0.21	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 9:09	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 9:09	-36.57	mv
BY-AP-MW-19H	pH	5/24/2022 9:09	5.72	SU
BY-AP-MW-19H	Temperature	5/24/2022 9:09	20.18	C
BY-AP-MW-19H	Turbidity	5/24/2022 9:09	1.54	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 9:14	199.9	uS/cm

BY-AP-MW-19H	DO	5/24/2022 9:14	0.21	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 9:14	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 9:14	-45.48	mv
BY-AP-MW-19H	pH	5/24/2022 9:14	5.75	SU
BY-AP-MW-19H	Temperature	5/24/2022 9:14	20.18	C
BY-AP-MW-19H	Turbidity	5/24/2022 9:14	1.54	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 9:19	207.65	uS/cm
BY-AP-MW-19H	DO	5/24/2022 9:19	0.21	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 9:19	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 9:19	-52.36	mv
BY-AP-MW-19H	pH	5/24/2022 9:19	5.79	SU
BY-AP-MW-19H	Temperature	5/24/2022 9:19	20.19	C
BY-AP-MW-19H	Turbidity	5/24/2022 9:19	1.48	NTU
BY-AP-MW-19H	Conductivity	5/24/2022 9:24	206.31	uS/cm
BY-AP-MW-19H	DO	5/24/2022 9:24	0.21	mg/L
BY-AP-MW-19H	Depth to Water Detail	5/24/2022 9:24	7.48	ft
BY-AP-MW-19H	Oxidation Reduction Potention	5/24/2022 9:24	-59.87	mv
BY-AP-MW-19H	pH	5/24/2022 9:24	5.8	SU
BY-AP-MW-19H	Sulfide	5/24/2022 9:24	0	mg/L
BY-AP-MW-19H	Temperature	5/24/2022 9:24	20.19	C
BY-AP-MW-19H	Turbidity	5/24/2022 9:24	1.65	NTU

BY-AP-MW-11	Conductivity	5/23/2022 17:02	594.71	uS/cm
BY-AP-MW-11	DO	5/23/2022 17:02	0.35	mg/L
BY-AP-MW-11	Depth to Water Detail	5/23/2022 17:02	20.42	ft
BY-AP-MW-11	Oxidation Reduction Potention	5/23/2022 17:02	-95.39	mv
BY-AP-MW-11	pH	5/23/2022 17:02	6.34	SU
BY-AP-MW-11	Temperature	5/23/2022 17:02	21.22	C
BY-AP-MW-11	Turbidity	5/23/2022 17:02	5.9	NTU
BY-AP-MW-11	Conductivity	5/23/2022 17:07	576.2	uS/cm
BY-AP-MW-11	DO	5/23/2022 17:07	0.31	mg/L
BY-AP-MW-11	Depth to Water Detail	5/23/2022 17:07	20.42	ft
BY-AP-MW-11	Oxidation Reduction Potention	5/23/2022 17:07	-96.13	mv
BY-AP-MW-11	pH	5/23/2022 17:07	6.32	SU
BY-AP-MW-11	Temperature	5/23/2022 17:07	21.17	C
BY-AP-MW-11	Turbidity	5/23/2022 17:07	5.24	NTU
BY-AP-MW-11	Conductivity	5/23/2022 17:12	565.73	uS/cm
BY-AP-MW-11	DO	5/23/2022 17:12	0.28	mg/L
BY-AP-MW-11	Depth to Water Detail	5/23/2022 17:12	20.42	ft
BY-AP-MW-11	Oxidation Reduction Potention	5/23/2022 17:12	-96.48	mv
BY-AP-MW-11	pH	5/23/2022 17:12	6.32	SU
BY-AP-MW-11	Temperature	5/23/2022 17:12	21.17	C
BY-AP-MW-11	Turbidity	5/23/2022 17:12	4.3	NTU
BY-AP-MW-11	Conductivity	5/23/2022 17:17	555.51	uS/cm
BY-AP-MW-11	DO	5/23/2022 17:17	0.27	mg/L
BY-AP-MW-11	Depth to Water Detail	5/23/2022 17:17	20.42	ft
BY-AP-MW-11	Oxidation Reduction Potention	5/23/2022 17:17	-96.88	mv
BY-AP-MW-11	pH	5/23/2022 17:17	6.32	SU
BY-AP-MW-11	Sulfide	5/23/2022 17:17	0	mg/L
BY-AP-MW-11	Temperature	5/23/2022 17:17	21.18	C
BY-AP-MW-11	Turbidity	5/23/2022 17:17	3.74	NTU

BY-AP-MW-18H	Conductivity	5/23/2022 15:42	355	uS/cm
BY-AP-MW-18H	DO	5/23/2022 15:42	0.26	mg/L
BY-AP-MW-18H	Depth to Water Detail	5/23/2022 15:42	7.69	ft
BY-AP-MW-18H	Oxidation Reduction Potention	5/23/2022 15:42	-66.84	mv
BY-AP-MW-18H	pH	5/23/2022 15:42	6.01	SU
BY-AP-MW-18H	Temperature	5/23/2022 15:42	20.38	C
BY-AP-MW-18H	Turbidity	5/23/2022 15:42	4.43	NTU
BY-AP-MW-18H	Conductivity	5/23/2022 15:47	378.06	uS/cm
BY-AP-MW-18H	DO	5/23/2022 15:47	0.23	mg/L
BY-AP-MW-18H	Depth to Water Detail	5/23/2022 15:47	7.69	ft
BY-AP-MW-18H	Oxidation Reduction Potention	5/23/2022 15:47	-63.53	mv
BY-AP-MW-18H	pH	5/23/2022 15:47	6	SU
BY-AP-MW-18H	Temperature	5/23/2022 15:47	20.34	C
BY-AP-MW-18H	Turbidity	5/23/2022 15:47	4.13	NTU
BY-AP-MW-18H	Conductivity	5/23/2022 15:52	399	uS/cm
BY-AP-MW-18H	DO	5/23/2022 15:52	0.21	mg/L
BY-AP-MW-18H	Depth to Water Detail	5/23/2022 15:52	7.69	ft
BY-AP-MW-18H	Oxidation Reduction Potention	5/23/2022 15:52	-65.63	mv
BY-AP-MW-18H	pH	5/23/2022 15:52	6.04	SU
BY-AP-MW-18H	Temperature	5/23/2022 15:52	20.32	C
BY-AP-MW-18H	Turbidity	5/23/2022 15:52	3.13	NTU
BY-AP-MW-18H	Conductivity	5/23/2022 15:57	406.3	uS/cm
BY-AP-MW-18H	DO	5/23/2022 15:57	0.23	mg/L
BY-AP-MW-18H	Depth to Water Detail	5/23/2022 15:57	7.69	ft
BY-AP-MW-18H	Oxidation Reduction Potention	5/23/2022 15:57	-68.64	mv
BY-AP-MW-18H	pH	5/23/2022 15:57	6.1	SU
BY-AP-MW-18H	Temperature	5/23/2022 15:57	20.3	C
BY-AP-MW-18H	Turbidity	5/23/2022 15:57	3.23	NTU
BY-AP-MW-18H	Conductivity	5/23/2022 16:02	496.21	uS/cm
BY-AP-MW-18H	DO	5/23/2022 16:02	0.19	mg/L
BY-AP-MW-18H	Depth to Water Detail	5/23/2022 16:02	7.69	ft
BY-AP-MW-18H	Oxidation Reduction Potention	5/23/2022 16:02	-70.79	mv
BY-AP-MW-18H	pH	5/23/2022 16:02	6.14	SU
BY-AP-MW-18H	Temperature	5/23/2022 16:02	20.26	C
BY-AP-MW-18H	Turbidity	5/23/2022 16:02	3.18	NTU
BY-AP-MW-18H	Conductivity	5/23/2022 16:07	495.39	uS/cm
BY-AP-MW-18H	DO	5/23/2022 16:07	0.2	mg/L
BY-AP-MW-18H	Depth to Water Detail	5/23/2022 16:07	7.69	ft
BY-AP-MW-18H	Oxidation Reduction Potention	5/23/2022 16:07	-71.86	mv
BY-AP-MW-18H	pH	5/23/2022 16:07	6.21	SU
BY-AP-MW-18H	Temperature	5/23/2022 16:07	20.29	C
BY-AP-MW-18H	Turbidity	5/23/2022 16:07	4.55	NTU
BY-AP-MW-18H	Conductivity	5/23/2022 16:12	495.93	uS/cm
BY-AP-MW-18H	DO	5/23/2022 16:12	0.2	mg/L
BY-AP-MW-18H	Depth to Water Detail	5/23/2022 16:12	7.69	ft
BY-AP-MW-18H	Oxidation Reduction Potention	5/23/2022 16:12	-70.12	mv
BY-AP-MW-18H	pH	5/23/2022 16:12	6.24	SU
BY-AP-MW-18H	Sulfide	5/23/2022 16:12	0	mg/L
BY-AP-MW-18H	Temperature	5/23/2022 16:12	20.29	C
BY-AP-MW-18H	Turbidity	5/23/2022 16:12	1.58	NTU

BY-AP-MW-1	Conductivity	5/24/2022 12:40	714.92	uS/cm
BY-AP-MW-1	DO	5/24/2022 12:40	0.13	mg/L
BY-AP-MW-1	Depth to Water Detail	5/24/2022 12:40	21.54	ft
BY-AP-MW-1	Oxidation Reduction Potention	5/24/2022 12:40	-11.15	mv
BY-AP-MW-1	pH	5/24/2022 12:40	5.61	SU
BY-AP-MW-1	Temperature	5/24/2022 12:40	21.75	C
BY-AP-MW-1	Turbidity	5/24/2022 12:40	11.2	NTU
BY-AP-MW-1	Conductivity	5/24/2022 12:45	726.52	uS/cm
BY-AP-MW-1	DO	5/24/2022 12:45	0.12	mg/L
BY-AP-MW-1	Depth to Water Detail	5/24/2022 12:45	21.61	ft
BY-AP-MW-1	Oxidation Reduction Potention	5/24/2022 12:45	-11.01	mv
BY-AP-MW-1	pH	5/24/2022 12:45	5.55	SU
BY-AP-MW-1	Temperature	5/24/2022 12:45	21.76	C
BY-AP-MW-1	Turbidity	5/24/2022 12:45	4.94	NTU
BY-AP-MW-1	Conductivity	5/24/2022 12:50	743.7	uS/cm
BY-AP-MW-1	DO	5/24/2022 12:50	0.12	mg/L
BY-AP-MW-1	Depth to Water Detail	5/24/2022 12:50	21.63	ft
BY-AP-MW-1	Oxidation Reduction Potention	5/24/2022 12:50	-8.68	mv
BY-AP-MW-1	pH	5/24/2022 12:50	5.48	SU
BY-AP-MW-1	Temperature	5/24/2022 12:50	21.66	C
BY-AP-MW-1	Turbidity	5/24/2022 12:50	3.5	NTU
BY-AP-MW-1	Conductivity	5/24/2022 12:55	758.26	uS/cm
BY-AP-MW-1	DO	5/24/2022 12:55	0.12	mg/L
BY-AP-MW-1	Depth to Water Detail	5/24/2022 12:55	21.66	ft
BY-AP-MW-1	Oxidation Reduction Potention	5/24/2022 12:55	-8.45	mv
BY-AP-MW-1	pH	5/24/2022 12:55	5.44	SU
BY-AP-MW-1	Sulfide	5/24/2022 12:55	0	mg/L
BY-AP-MW-1	Temperature	5/24/2022 12:55	21.65	C
BY-AP-MW-1	Turbidity	5/24/2022 12:55	2.83	NTU

BY-AP-MW-1V	Conductivity	5/24/2022 14:22	384.69	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:22	0.22	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:22	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:22	104.49	mv
BY-AP-MW-1V	pH	5/24/2022 14:22	5.37	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:22	22.52	C
BY-AP-MW-1V	Turbidity	5/24/2022 14:22	7.45	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 14:27	380.78	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:27	0.18	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:27	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:27	112.72	mv
BY-AP-MW-1V	pH	5/24/2022 14:27	5.32	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:27	22.59	C
BY-AP-MW-1V	Turbidity	5/24/2022 14:27	1.52	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 14:32	379.23	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:32	0.16	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:32	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:32	134.46	mv
BY-AP-MW-1V	pH	5/24/2022 14:32	4.96	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:32	22.62	C
BY-AP-MW-1V	Turbidity	5/24/2022 14:32	0.86	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 14:37	378.37	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:37	0.16	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:37	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:37	134.36	mv
BY-AP-MW-1V	pH	5/24/2022 14:37	5	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:37	22.25	C
BY-AP-MW-1V	Turbidity	5/24/2022 14:37	0.83	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 14:42	377.94	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:42	0.15	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:42	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:42	122.46	mv
BY-AP-MW-1V	pH	5/24/2022 14:42	5.18	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:42	22.11	C
BY-AP-MW-1V	Turbidity	5/24/2022 14:42	0.77	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 14:47	375.94	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:47	0.15	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:47	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:47	119.85	mv
BY-AP-MW-1V	pH	5/24/2022 14:47	5.21	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:47	22.21	C
BY-AP-MW-1V	Turbidity	5/24/2022 14:47	0.53	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 14:52	374.94	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:52	0.15	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:52	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:52	143.9	mv
BY-AP-MW-1V	pH	5/24/2022 14:52	4.76	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:52	22.26	C
BY-AP-MW-1V	Turbidity	5/24/2022 14:52	0.78	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 14:57	375.16	uS/cm
BY-AP-MW-1V	DO	5/24/2022 14:57	0.15	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 14:57	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 14:57	146.98	mv
BY-AP-MW-1V	pH	5/24/2022 14:57	4.72	SU
BY-AP-MW-1V	Temperature	5/24/2022 14:57	22.37	C

BY-AP-MW-1V	Turbidity	5/24/2022 14:57	0.79	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 15:02	374.66	uS/cm
BY-AP-MW-1V	DO	5/24/2022 15:02	0.15	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 15:02	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 15:02	128.94	mv
BY-AP-MW-1V	pH	5/24/2022 15:02	5.01	SU
BY-AP-MW-1V	Temperature	5/24/2022 15:02	22.24	C
BY-AP-MW-1V	Turbidity	5/24/2022 15:02	0.65	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 15:07	375.42	uS/cm
BY-AP-MW-1V	DO	5/24/2022 15:07	0.14	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 15:07	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 15:07	130.48	mv
BY-AP-MW-1V	pH	5/24/2022 15:07	4.96	SU
BY-AP-MW-1V	Temperature	5/24/2022 15:07	22.08	C
BY-AP-MW-1V	Turbidity	5/24/2022 15:07	0.58	NTU
BY-AP-MW-1V	Conductivity	5/24/2022 15:12	375.09	uS/cm
BY-AP-MW-1V	DO	5/24/2022 15:12	0.14	mg/L
BY-AP-MW-1V	Depth to Water Detail	5/24/2022 15:12	22.74	ft
BY-AP-MW-1V	Oxidation Reduction Potention	5/24/2022 15:12	133.41	mv
BY-AP-MW-1V	pH	5/24/2022 15:12	4.9	SU
BY-AP-MW-1V	Sulfide	5/24/2022 15:12	0	mg/L
BY-AP-MW-1V	Temperature	5/24/2022 15:12	22.07	C
BY-AP-MW-1V	Turbidity	5/24/2022 15:12	0.51	NTU

BY-AP-MW-2	Conductivity	5/24/2022 16:20	53.06	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:20	0.44	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:20	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:20	161.58	mv
BY-AP-MW-2	pH	5/24/2022 16:20	4.82	SU
BY-AP-MW-2	Temperature	5/24/2022 16:20	21.89	C
BY-AP-MW-2	Turbidity	5/24/2022 16:20	0.84	NTU
BY-AP-MW-2	Conductivity	5/24/2022 16:25	53.05	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:25	0.31	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:25	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:25	160.93	mv
BY-AP-MW-2	pH	5/24/2022 16:25	4.84	SU
BY-AP-MW-2	Temperature	5/24/2022 16:25	22.04	C
BY-AP-MW-2	Turbidity	5/24/2022 16:25	0.75	NTU
BY-AP-MW-2	Conductivity	5/24/2022 16:30	52.99	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:30	0.29	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:30	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:30	160.5	mv
BY-AP-MW-2	pH	5/24/2022 16:30	4.87	SU
BY-AP-MW-2	Temperature	5/24/2022 16:30	22.07	C
BY-AP-MW-2	Turbidity	5/24/2022 16:30	0.86	NTU
BY-AP-MW-2	Conductivity	5/24/2022 16:35	52.98	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:35	0.27	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:35	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:35	186.52	mv
BY-AP-MW-2	pH	5/24/2022 16:35	4.44	SU
BY-AP-MW-2	Temperature	5/24/2022 16:35	22.18	C
BY-AP-MW-2	Turbidity	5/24/2022 16:35	0.83	NTU
BY-AP-MW-2	Conductivity	5/24/2022 16:40	53.14	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:40	0.27	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:40	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:40	181.53	mv
BY-AP-MW-2	pH	5/24/2022 16:40	4.54	SU
BY-AP-MW-2	Temperature	5/24/2022 16:40	22.03	C
BY-AP-MW-2	Turbidity	5/24/2022 16:40	0.87	NTU
BY-AP-MW-2	Conductivity	5/24/2022 16:45	53.12	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:45	0.27	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:45	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:45	170.42	mv
BY-AP-MW-2	pH	5/24/2022 16:45	4.73	SU
BY-AP-MW-2	Temperature	5/24/2022 16:45	21.99	C
BY-AP-MW-2	Turbidity	5/24/2022 16:45	0.86	NTU
BY-AP-MW-2	Conductivity	5/24/2022 16:50	53.14	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:50	0.26	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:50	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:50	166.36	mv
BY-AP-MW-2	pH	5/24/2022 16:50	4.82	SU
BY-AP-MW-2	Temperature	5/24/2022 16:50	22.05	C
BY-AP-MW-2	Turbidity	5/24/2022 16:50	0.86	NTU
BY-AP-MW-2	Conductivity	5/24/2022 16:55	53.16	uS/cm
BY-AP-MW-2	DO	5/24/2022 16:55	0.26	mg/L
BY-AP-MW-2	Depth to Water Detail	5/24/2022 16:55	20.11	ft
BY-AP-MW-2	Oxidation Reduction Potention	5/24/2022 16:55	168.85	mv
BY-AP-MW-2	pH	5/24/2022 16:55	4.78	SU
BY-AP-MW-2	Sulfide	5/24/2022 16:55	0	mg/L

BY-AP-MW-2	Temperature	5/24/2022 16:55	22.12	C
BY-AP-MW-2	Turbidity	5/24/2022 16:55	0.78	NTU

BY-AP-MW-5	Conductivity	5/25/2022 12:47	440.89	uS/cm
BY-AP-MW-5	DO	5/25/2022 12:47	0.15	mg/L
BY-AP-MW-5	Depth to Water Detail	5/25/2022 12:47	25.43	ft
BY-AP-MW-5	Oxidation Reduction Potention	5/25/2022 12:47	-63.26	mv
BY-AP-MW-5	pH	5/25/2022 12:47	5.98	SU
BY-AP-MW-5	Temperature	5/25/2022 12:47	22.13	C
BY-AP-MW-5	Turbidity	5/25/2022 12:47	0.85	NTU
BY-AP-MW-5	Conductivity	5/25/2022 12:52	438.54	uS/cm
BY-AP-MW-5	DO	5/25/2022 12:52	0.14	mg/L
BY-AP-MW-5	Depth to Water Detail	5/25/2022 12:52	25.43	ft
BY-AP-MW-5	Oxidation Reduction Potention	5/25/2022 12:52	-68.28	mv
BY-AP-MW-5	pH	5/25/2022 12:52	5.99	SU
BY-AP-MW-5	Temperature	5/25/2022 12:52	22.17	C
BY-AP-MW-5	Turbidity	5/25/2022 12:52	2.14	NTU
BY-AP-MW-5	Conductivity	5/25/2022 12:57	431.18	uS/cm
BY-AP-MW-5	DO	5/25/2022 12:57	0.13	mg/L
BY-AP-MW-5	Depth to Water Detail	5/25/2022 12:57	25.43	ft
BY-AP-MW-5	Oxidation Reduction Potention	5/25/2022 12:57	-71.47	mv
BY-AP-MW-5	pH	5/25/2022 12:57	6	SU
BY-AP-MW-5	Temperature	5/25/2022 12:57	22.19	C
BY-AP-MW-5	Turbidity	5/25/2022 12:57	1.72	NTU
BY-AP-MW-5	Conductivity	5/25/2022 13:02	426.36	uS/cm
BY-AP-MW-5	DO	5/25/2022 13:02	0.13	mg/L
BY-AP-MW-5	Depth to Water Detail	5/25/2022 13:02	25.43	ft
BY-AP-MW-5	Oxidation Reduction Potention	5/25/2022 13:02	-73.02	mv
BY-AP-MW-5	pH	5/25/2022 13:02	5.99	SU
BY-AP-MW-5	Sulfide	5/25/2022 13:02	0	mg/L
BY-AP-MW-5	Temperature	5/25/2022 13:02	22.21	C
BY-AP-MW-5	Turbidity	5/25/2022 13:02	1.77	NTU

BY-AP-MW-5V	Conductivity	5/25/2022 13:35	107.72	uS/cm
BY-AP-MW-5V	DO	5/25/2022 13:35	0.62	mg/L
BY-AP-MW-5V	Depth to Water Detail	5/25/2022 13:35	25.44	ft
BY-AP-MW-5V	Oxidation Reduction Potention	5/25/2022 13:35	59.85	mv
BY-AP-MW-5V	pH	5/25/2022 13:35	5.75	SU
BY-AP-MW-5V	Temperature	5/25/2022 13:35	22.56	C
BY-AP-MW-5V	Turbidity	5/25/2022 13:35	11.6	NTU
BY-AP-MW-5V	Conductivity	5/25/2022 13:40	109.37	uS/cm
BY-AP-MW-5V	DO	5/25/2022 13:40	0.81	mg/L
BY-AP-MW-5V	Depth to Water Detail	5/25/2022 13:40	25.44	ft
BY-AP-MW-5V	Oxidation Reduction Potention	5/25/2022 13:40	75.4	mv
BY-AP-MW-5V	pH	5/25/2022 13:40	5.8	SU
BY-AP-MW-5V	Temperature	5/25/2022 13:40	22.58	C
BY-AP-MW-5V	Turbidity	5/25/2022 13:40	6.74	NTU
BY-AP-MW-5V	Conductivity	5/25/2022 13:45	110.83	uS/cm
BY-AP-MW-5V	DO	5/25/2022 13:45	0.96	mg/L
BY-AP-MW-5V	Depth to Water Detail	5/25/2022 13:45	25.44	ft
BY-AP-MW-5V	Oxidation Reduction Potention	5/25/2022 13:45	85.54	mv
BY-AP-MW-5V	pH	5/25/2022 13:45	5.81	SU
BY-AP-MW-5V	Temperature	5/25/2022 13:45	22.77	C
BY-AP-MW-5V	Turbidity	5/25/2022 13:45	5.45	NTU
BY-AP-MW-5V	Conductivity	5/25/2022 13:50	112.36	uS/cm
BY-AP-MW-5V	DO	5/25/2022 13:50	1.08	mg/L
BY-AP-MW-5V	Depth to Water Detail	5/25/2022 13:50	25.44	ft
BY-AP-MW-5V	Oxidation Reduction Potention	5/25/2022 13:50	92.82	mv
BY-AP-MW-5V	pH	5/25/2022 13:50	5.82	SU
BY-AP-MW-5V	Temperature	5/25/2022 13:50	22.68	C
BY-AP-MW-5V	Turbidity	5/25/2022 13:50	5.87	NTU
BY-AP-MW-5V	Conductivity	5/25/2022 13:55	113.12	uS/cm
BY-AP-MW-5V	DO	5/25/2022 13:55	1.17	mg/L
BY-AP-MW-5V	Depth to Water Detail	5/25/2022 13:55	25.44	ft
BY-AP-MW-5V	Oxidation Reduction Potention	5/25/2022 13:55	96.93	mv
BY-AP-MW-5V	pH	5/25/2022 13:55	5.86	SU
BY-AP-MW-5V	Temperature	5/25/2022 13:55	22.46	C
BY-AP-MW-5V	Turbidity	5/25/2022 13:55	2.44	NTU
BY-AP-MW-5V	Conductivity	5/25/2022 14:00	114.39	uS/cm
BY-AP-MW-5V	DO	5/25/2022 14:00	1.23	mg/L
BY-AP-MW-5V	Depth to Water Detail	5/25/2022 14:00	25.44	ft
BY-AP-MW-5V	Oxidation Reduction Potention	5/25/2022 14:00	99.33	mv
BY-AP-MW-5V	pH	5/25/2022 14:00	5.88	SU
BY-AP-MW-5V	Sulfide	5/25/2022 14:00	0	mg/L
BY-AP-MW-5V	Temperature	5/25/2022 14:00	22.54	C
BY-AP-MW-5V	Turbidity	5/25/2022 14:00	1.64	NTU

BY-AP-MW-6	Conductivity	5/25/2022 15:03	52.6	uS/cm
BY-AP-MW-6	DO	5/25/2022 15:03	0.48	mg/L
BY-AP-MW-6	Depth to Water Detail	5/25/2022 15:03	23.32	ft
BY-AP-MW-6	Oxidation Reduction Potention	5/25/2022 15:03	226.2	mv
BY-AP-MW-6	pH	5/25/2022 15:03	4.77	SU
BY-AP-MW-6	Temperature	5/25/2022 15:03	21.72	C
BY-AP-MW-6	Turbidity	5/25/2022 15:03	0.93	NTU
BY-AP-MW-6	Conductivity	5/25/2022 15:08	52.94	uS/cm
BY-AP-MW-6	DO	5/25/2022 15:08	0.48	mg/L
BY-AP-MW-6	Depth to Water Detail	5/25/2022 15:08	23.32	ft
BY-AP-MW-6	Oxidation Reduction Potention	5/25/2022 15:08	251.43	mv
BY-AP-MW-6	pH	5/25/2022 15:08	4.58	SU
BY-AP-MW-6	Temperature	5/25/2022 15:08	21.59	C
BY-AP-MW-6	Turbidity	5/25/2022 15:08	0.69	NTU
BY-AP-MW-6	Conductivity	5/25/2022 15:13	52.83	uS/cm
BY-AP-MW-6	DO	5/25/2022 15:13	0.48	mg/L
BY-AP-MW-6	Depth to Water Detail	5/25/2022 15:13	23.32	ft
BY-AP-MW-6	Oxidation Reduction Potention	5/25/2022 15:13	263.5	mv
BY-AP-MW-6	pH	5/25/2022 15:13	4.54	SU
BY-AP-MW-6	Temperature	5/25/2022 15:13	21.45	C
BY-AP-MW-6	Turbidity	5/25/2022 15:13	0.71	NTU
BY-AP-MW-6	Conductivity	5/25/2022 15:18	52.89	uS/cm
BY-AP-MW-6	DO	5/25/2022 15:18	0.49	mg/L
BY-AP-MW-6	Depth to Water Detail	5/25/2022 15:18	23.32	ft
BY-AP-MW-6	Oxidation Reduction Potention	5/25/2022 15:18	268.89	mv
BY-AP-MW-6	pH	5/25/2022 15:18	4.57	SU
BY-AP-MW-6	Sulfide	5/25/2022 15:18	0	mg/L
BY-AP-MW-6	Temperature	5/25/2022 15:18	21.47	C
BY-AP-MW-6	Turbidity	5/25/2022 15:18	0.87	NTU

BY-AP-MW-12	Conductivity	5/23/2022 15:57	576.63	uS/cm
BY-AP-MW-12	DO	5/23/2022 15:57	0.15	mg/L
BY-AP-MW-12	Depth to Water Detail	5/23/2022 15:57	21.16	ft
BY-AP-MW-12	Oxidation Reduction Potention	5/23/2022 15:57	-81.29	mv
BY-AP-MW-12	pH	5/23/2022 15:57	6.11	SU
BY-AP-MW-12	Temperature	5/23/2022 15:57	20.91	C
BY-AP-MW-12	Turbidity	5/23/2022 15:57	3.48	NTU
BY-AP-MW-12	Conductivity	5/23/2022 16:02	574.22	uS/cm
BY-AP-MW-12	DO	5/23/2022 16:02	0.12	mg/L
BY-AP-MW-12	Depth to Water Detail	5/23/2022 16:02	21.16	ft
BY-AP-MW-12	Oxidation Reduction Potention	5/23/2022 16:02	-79.37	mv
BY-AP-MW-12	pH	5/23/2022 16:02	6.13	SU
BY-AP-MW-12	Temperature	5/23/2022 16:02	20.83	C
BY-AP-MW-12	Turbidity	5/23/2022 16:02	2.35	NTU
BY-AP-MW-12	Conductivity	5/23/2022 16:07	565.99	uS/cm
BY-AP-MW-12	DO	5/23/2022 16:07	0.12	mg/L
BY-AP-MW-12	Depth to Water Detail	5/23/2022 16:07	21.16	ft
BY-AP-MW-12	Oxidation Reduction Potention	5/23/2022 16:07	-75.6	mv
BY-AP-MW-12	pH	5/23/2022 16:07	6.13	SU
BY-AP-MW-12	Temperature	5/23/2022 16:07	20.84	C
BY-AP-MW-12	Turbidity	5/23/2022 16:07	1.94	NTU
BY-AP-MW-12	Conductivity	5/23/2022 16:12	578.36	uS/cm
BY-AP-MW-12	DO	5/23/2022 16:12	0.12	mg/L
BY-AP-MW-12	Depth to Water Detail	5/23/2022 16:12	21.16	ft
BY-AP-MW-12	Oxidation Reduction Potention	5/23/2022 16:12	-72.55	mv
BY-AP-MW-12	pH	5/23/2022 16:12	6.12	SU
BY-AP-MW-12	Sulfide	5/23/2022 16:12	0	mg/L
BY-AP-MW-12	Temperature	5/23/2022 16:12	20.85	C
BY-AP-MW-12	Turbidity	5/23/2022 16:12	2.67	NTU

BY-AP-MW-12V	Conductivity	5/23/2022 16:47	616.53	uS/cm
BY-AP-MW-12V	DO	5/23/2022 16:47	0.15	mg/L
BY-AP-MW-12V	Depth to Water Detail	5/23/2022 16:47	20.73	ft
BY-AP-MW-12V	Oxidation Reduction Potention	5/23/2022 16:47	-64.88	mv
BY-AP-MW-12V	pH	5/23/2022 16:47	6.22	SU
BY-AP-MW-12V	Temperature	5/23/2022 16:47	20.8	C
BY-AP-MW-12V	Turbidity	5/23/2022 16:47	2.66	NTU
BY-AP-MW-12V	Conductivity	5/23/2022 16:52	616.08	uS/cm
BY-AP-MW-12V	DO	5/23/2022 16:52	0.12	mg/L
BY-AP-MW-12V	Depth to Water Detail	5/23/2022 16:52	20.73	ft
BY-AP-MW-12V	Oxidation Reduction Potention	5/23/2022 16:52	-67.12	mv
BY-AP-MW-12V	pH	5/23/2022 16:52	6.23	SU
BY-AP-MW-12V	Temperature	5/23/2022 16:52	20.67	C
BY-AP-MW-12V	Turbidity	5/23/2022 16:52	2.66	NTU
BY-AP-MW-12V	Conductivity	5/23/2022 16:57	615.09	uS/cm
BY-AP-MW-12V	DO	5/23/2022 16:57	0.11	mg/L
BY-AP-MW-12V	Depth to Water Detail	5/23/2022 16:57	20.73	ft
BY-AP-MW-12V	Oxidation Reduction Potention	5/23/2022 16:57	-67.3	mv
BY-AP-MW-12V	pH	5/23/2022 16:57	6.22	SU
BY-AP-MW-12V	Temperature	5/23/2022 16:57	20.69	C
BY-AP-MW-12V	Turbidity	5/23/2022 16:57	0.98	NTU
BY-AP-MW-12V	Conductivity	5/23/2022 17:02	616.65	uS/cm
BY-AP-MW-12V	DO	5/23/2022 17:02	0.11	mg/L
BY-AP-MW-12V	Depth to Water Detail	5/23/2022 17:02	20.73	ft
BY-AP-MW-12V	Oxidation Reduction Potention	5/23/2022 17:02	-67.29	mv
BY-AP-MW-12V	pH	5/23/2022 17:02	6.22	SU
BY-AP-MW-12V	Sulfide	5/23/2022 17:02	0	mg/L
BY-AP-MW-12V	Temperature	5/23/2022 17:02	20.7	C
BY-AP-MW-12V	Turbidity	5/23/2022 17:02	1.04	NTU

BY-AP-MW-20V	Conductivity	5/24/2022 8:47	553.23	uS/cm
BY-AP-MW-20V	DO	5/24/2022 8:47	0.26	mg/L
BY-AP-MW-20V	Depth to Water Detail	5/24/2022 8:47	23.06	ft
BY-AP-MW-20V	Oxidation Reduction Potention	5/24/2022 8:47	-81.45	mv
BY-AP-MW-20V	pH	5/24/2022 8:47	6.3	SU
BY-AP-MW-20V	Temperature	5/24/2022 8:47	20.49	C
BY-AP-MW-20V	Turbidity	5/24/2022 8:47	7.41	NTU
BY-AP-MW-20V	Conductivity	5/24/2022 8:52	550.93	uS/cm
BY-AP-MW-20V	DO	5/24/2022 8:52	0.22	mg/L
BY-AP-MW-20V	Depth to Water Detail	5/24/2022 8:52	23.06	ft
BY-AP-MW-20V	Oxidation Reduction Potention	5/24/2022 8:52	-81.54	mv
BY-AP-MW-20V	pH	5/24/2022 8:52	6.3	SU
BY-AP-MW-20V	Temperature	5/24/2022 8:52	20.52	C
BY-AP-MW-20V	Turbidity	5/24/2022 8:52	1.34	NTU
BY-AP-MW-20V	Conductivity	5/24/2022 8:57	549.66	uS/cm
BY-AP-MW-20V	DO	5/24/2022 8:57	0.22	mg/L
BY-AP-MW-20V	Depth to Water Detail	5/24/2022 8:57	23.06	ft
BY-AP-MW-20V	Oxidation Reduction Potention	5/24/2022 8:57	-80.37	mv
BY-AP-MW-20V	pH	5/24/2022 8:57	6.3	SU
BY-AP-MW-20V	Temperature	5/24/2022 8:57	20.53	C
BY-AP-MW-20V	Turbidity	5/24/2022 8:57	1.25	NTU
BY-AP-MW-20V	Conductivity	5/24/2022 9:02	549.97	uS/cm
BY-AP-MW-20V	DO	5/24/2022 9:02	0.25	mg/L
BY-AP-MW-20V	Depth to Water Detail	5/24/2022 9:02	23.06	ft
BY-AP-MW-20V	Oxidation Reduction Potention	5/24/2022 9:02	-77.95	mv
BY-AP-MW-20V	pH	5/24/2022 9:02	6.28	SU
BY-AP-MW-20V	Sulfide	5/24/2022 9:02	0	mg/L
BY-AP-MW-20V	Temperature	5/24/2022 9:02	20.55	C
BY-AP-MW-20V	Turbidity	5/24/2022 9:02	1.01	NTU

BY-AP-MW-24H	Conductivity	5/24/2022 10:09	788.22	uS/cm
BY-AP-MW-24H	DO	5/24/2022 10:09	0.13	mg/L
BY-AP-MW-24H	Depth to Water Detail	5/24/2022 10:09	23.74	ft
BY-AP-MW-24H	Oxidation Reduction Potention	5/24/2022 10:09	-80.03	mv
BY-AP-MW-24H	pH	5/24/2022 10:09	6.22	SU
BY-AP-MW-24H	Temperature	5/24/2022 10:09	21.65	C
BY-AP-MW-24H	Turbidity	5/24/2022 10:09	3.44	NTU
BY-AP-MW-24H	Conductivity	5/24/2022 10:14	788.97	uS/cm
BY-AP-MW-24H	DO	5/24/2022 10:14	0.15	mg/L
BY-AP-MW-24H	Depth to Water Detail	5/24/2022 10:14	23.74	ft
BY-AP-MW-24H	Oxidation Reduction Potention	5/24/2022 10:14	-81.82	mv
BY-AP-MW-24H	pH	5/24/2022 10:14	6.24	SU
BY-AP-MW-24H	Temperature	5/24/2022 10:14	21.85	C
BY-AP-MW-24H	Turbidity	5/24/2022 10:14	4.94	NTU
BY-AP-MW-24H	Conductivity	5/24/2022 10:19	791.93	uS/cm
BY-AP-MW-24H	DO	5/24/2022 10:19	0.18	mg/L
BY-AP-MW-24H	Depth to Water Detail	5/24/2022 10:19	23.74	ft
BY-AP-MW-24H	Oxidation Reduction Potention	5/24/2022 10:19	-81.4	mv
BY-AP-MW-24H	pH	5/24/2022 10:19	6.25	SU
BY-AP-MW-24H	Temperature	5/24/2022 10:19	22.06	C
BY-AP-MW-24H	Turbidity	5/24/2022 10:19	3.26	NTU
BY-AP-MW-24H	Conductivity	5/24/2022 10:24	793.76	uS/cm
BY-AP-MW-24H	DO	5/24/2022 10:24	0.21	mg/L
BY-AP-MW-24H	Depth to Water Detail	5/24/2022 10:24	23.74	ft
BY-AP-MW-24H	Oxidation Reduction Potention	5/24/2022 10:24	-79.76	mv
BY-AP-MW-24H	pH	5/24/2022 10:24	6.26	SU
BY-AP-MW-24H	Temperature	5/24/2022 10:24	23.44	C
BY-AP-MW-24H	Turbidity	5/24/2022 10:24	2.17	NTU
BY-AP-MW-24H	Conductivity	5/24/2022 10:29	792.5	uS/cm
BY-AP-MW-24H	DO	5/24/2022 10:29	0.1	mg/L
BY-AP-MW-24H	Depth to Water Detail	5/24/2022 10:29	23.74	ft
BY-AP-MW-24H	Oxidation Reduction Potention	5/24/2022 10:29	-80.03	mv
BY-AP-MW-24H	pH	5/24/2022 10:29	6.22	SU
BY-AP-MW-24H	Sulfide	5/24/2022 10:29	0	mg/L
BY-AP-MW-24H	Temperature	5/24/2022 10:29	21.7	C
BY-AP-MW-24H	Turbidity	5/24/2022 10:29	2.5	NTU

BY-AP-MW-25H	Conductivity	5/25/2022 11:21	43.2	uS/cm
BY-AP-MW-25H	DO	5/25/2022 11:21	0.89	mg/L
BY-AP-MW-25H	Depth to Water Detail	5/25/2022 11:21	20.26	ft
BY-AP-MW-25H	Oxidation Reduction Potention	5/25/2022 11:21	269.23	mv
BY-AP-MW-25H	pH	5/25/2022 11:21	5.23	SU
BY-AP-MW-25H	Temperature	5/25/2022 11:21	22.56	C
BY-AP-MW-25H	Turbidity	5/25/2022 11:21	1.62	NTU
BY-AP-MW-25H	Conductivity	5/25/2022 11:26	43.16	uS/cm
BY-AP-MW-25H	DO	5/25/2022 11:26	0.87	mg/L
BY-AP-MW-25H	Depth to Water Detail	5/25/2022 11:26	20.26	ft
BY-AP-MW-25H	Oxidation Reduction Potention	5/25/2022 11:26	286.65	mv
BY-AP-MW-25H	pH	5/25/2022 11:26	5.06	SU
BY-AP-MW-25H	Temperature	5/25/2022 11:26	22.6	C
BY-AP-MW-25H	Turbidity	5/25/2022 11:26	1.21	NTU
BY-AP-MW-25H	Conductivity	5/25/2022 11:31	43.04	uS/cm
BY-AP-MW-25H	DO	5/25/2022 11:31	0.86	mg/L
BY-AP-MW-25H	Depth to Water Detail	5/25/2022 11:31	20.26	ft
BY-AP-MW-25H	Oxidation Reduction Potention	5/25/2022 11:31	286.9	mv
BY-AP-MW-25H	pH	5/25/2022 11:31	5.15	SU
BY-AP-MW-25H	Temperature	5/25/2022 11:31	22.44	C
BY-AP-MW-25H	Turbidity	5/25/2022 11:31	1.01	NTU
BY-AP-MW-25H	Conductivity	5/25/2022 11:36	43	uS/cm
BY-AP-MW-25H	DO	5/25/2022 11:36	0.84	mg/L
BY-AP-MW-25H	Depth to Water Detail	5/25/2022 11:36	20.26	ft
BY-AP-MW-25H	Oxidation Reduction Potention	5/25/2022 11:36	285.43	mv
BY-AP-MW-25H	pH	5/25/2022 11:36	5.23	SU
BY-AP-MW-25H	Sulfide	5/25/2022 11:36	0	mg/L
BY-AP-MW-25H	Temperature	5/25/2022 11:36	22.54	C
BY-AP-MW-25H	Turbidity	5/25/2022 11:36	0.93	NTU

BY-AP-MW-25V	Conductivity	5/25/2022 10:30	29.76	uS/cm
BY-AP-MW-25V	DO	5/25/2022 10:30	3.52	mg/L
BY-AP-MW-25V	Depth to Water Detail	5/25/2022 10:30	20.33	ft
BY-AP-MW-25V	Oxidation Reduction Potention	5/25/2022 10:30	231.5	mv
BY-AP-MW-25V	pH	5/25/2022 10:30	5.42	SU
BY-AP-MW-25V	Temperature	5/25/2022 10:30	22.45	C
BY-AP-MW-25V	Turbidity	5/25/2022 10:30	2.16	NTU
BY-AP-MW-25V	Conductivity	5/25/2022 10:35	29.66	uS/cm
BY-AP-MW-25V	DO	5/25/2022 10:35	3.53	mg/L
BY-AP-MW-25V	Depth to Water Detail	5/25/2022 10:35	20.33	ft
BY-AP-MW-25V	Oxidation Reduction Potention	5/25/2022 10:35	243.72	mv
BY-AP-MW-25V	pH	5/25/2022 10:35	5.43	SU
BY-AP-MW-25V	Temperature	5/25/2022 10:35	22.3	C
BY-AP-MW-25V	Turbidity	5/25/2022 10:35	1.71	NTU
BY-AP-MW-25V	Conductivity	5/25/2022 10:38	29.78	uS/cm
BY-AP-MW-25V	DO	5/25/2022 10:38	3.55	mg/L
BY-AP-MW-25V	Depth to Water Detail	5/25/2022 10:38	20.33	ft
BY-AP-MW-25V	Oxidation Reduction Potention	5/25/2022 10:38	242.97	mv
BY-AP-MW-25V	pH	5/25/2022 10:38	5.51	SU
BY-AP-MW-25V	Temperature	5/25/2022 10:38	22.31	C
BY-AP-MW-25V	Turbidity	5/25/2022 10:38	1.47	NTU
BY-AP-MW-25V	Conductivity	5/25/2022 10:43	29.77	uS/cm
BY-AP-MW-25V	DO	5/25/2022 10:43	3.54	mg/L
BY-AP-MW-25V	Depth to Water Detail	5/25/2022 10:43	20.33	ft
BY-AP-MW-25V	Oxidation Reduction Potention	5/25/2022 10:43	255.12	mv
BY-AP-MW-25V	pH	5/25/2022 10:43	5.45	SU
BY-AP-MW-25V	Temperature	5/25/2022 10:43	22.39	C
BY-AP-MW-25V	Turbidity	5/25/2022 10:43	1.47	NTU
BY-AP-MW-25V	Conductivity	5/25/2022 10:48	29.82	uS/cm
BY-AP-MW-25V	DO	5/25/2022 10:48	3.54	mg/L
BY-AP-MW-25V	Depth to Water Detail	5/25/2022 10:48	20.33	ft
BY-AP-MW-25V	Oxidation Reduction Potention	5/25/2022 10:48	261.01	mv
BY-AP-MW-25V	pH	5/25/2022 10:48	5.45	SU
BY-AP-MW-25V	Sulfide	5/25/2022 10:48	0	mg/L
BY-AP-MW-25V	Temperature	5/25/2022 10:48	22.35	C
BY-AP-MW-25V	Turbidity	5/25/2022 10:48	1.53	NTU

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

Analytical Report



Sample Group : WMWBARPU_1372

Project/Site : Barry Pooled Upgradient
Bucks, AL 36512

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

June 16, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on June 02, 2022. 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, 2022

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: 2022.06.16
09:10:32 -05'00'

Supervision: **T Durant
Maske**

Digitally signed by T Durant Maske
DN: cn=T Durant Maske, gn=T Durant Maske, o=US
United States, ou=United States
e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-06-16 10:06:05.00



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.



Total Metals ICP

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728204	WMWBARPU_1372
BC10403	728204	WMWBARPU_1372
BC10404	728204	WMWBARPU_1372
BC10405	728204	WMWBARPU_1372
BC10406	728204	WMWBARPU_1372
BC10407	728204	WMWBARPU_1372
BC10408	728204	WMWBARPU_1372

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.
 - 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 sample was diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC10402	Iron	10.15

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

Dissolved Metals ICP

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728219	WMWBARPU_1372
BC10403	728219	WMWBARPU_1372
BC10405	728219	WMWBARPU_1372
BC10406	728219	WMWBARPU_1372
BC10407	728219	WMWBARPU_1372

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:

Revision 5

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.
 - A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.
7. The following sample was diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC10402	Iron	10.15

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

Total Metals ICPMS

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728449	WMWBARPU_1372
BC10403	728449	WMWBARPU_1372
BC10404	728449	WMWBARPU_1372
BC10405	728449	WMWBARPU_1372
BC10406	728449	WMWBARPU_1372
BC10407	728449	WMWBARPU_1372
BC10408	728449	WMWBARPU_1372

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

Dissolved Metals ICPMS

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728465	WMWBARPU_1372
BC10403	728465	WMWBARPU_1372
BC10405	728465	WMWBARPU_1372
BC10406	728465	WMWBARPU_1372
BC10407	728465	WMWBARPU_1372

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

Mercury

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728373	WMWBARPU_1372
BC10403	728373	WMWBARPU_1372
BC10404	728373	WMWBARPU_1372
BC10405	728373	WMWBARPU_1372
BC10406	728373	WMWBARPU_1372
BC10407	728373	WMWBARPU_1372
BC10408	728373	WMWBARPU_1372

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.

Revision 5

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.
7. All samples were analyzed without a dilution factor.

Total Dissolved Solids

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728167	WMWBARPU_1372
BC10403	728167	WMWBARPU_1372
BC10404	728167	WMWBARPU_1372
BC10405	728167	WMWBARPU_1372
BC10406	728167	WMWBARPU_1372
BC10407	728167	WMWBARPU_1372
BC10408	728167	WMWBARPU_1372

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 $\leq 10\%$.
- 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 $< 2.5\text{mg}$ had the maximum volume of 150mL filtered. Affected samples are as follows:
 - BC10404
 - BC10408

Alkalinity

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728840,728841	WMWBARPU_1372
BC10403	728840,728841	WMWBARPU_1372
BC10405	728840,728841	WMWBARPU_1372
BC10406	728840,728841	WMWBARPU_1372
BC10407	728840,728841	WMWBARPU_1372

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
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, except for the following:
 - BC10407 Precision is invalid due to sample concentration.

Anions

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728178,728649,728620	WMWBARPU_1372
BC10403	728178,728649,728620	WMWBARPU_1372
BC10404	728178,728649,728620	WMWBARPU_1372
BC10405	728178,728649,728620	WMWBARPU_1372
BC10406	728178,728649,728620	WMWBARPU_1372
BC10407	728178,728649,728620	WMWBARPU_1372
BC10408	728178,728649,728620	WMWBARPU_1372

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) was analyzed, 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. All samples were analyzed without dilution.

Nitrate-Nitrite

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728305	WMWBARPU_1372
BC10403	728305	WMWBARPU_1372
BC10404	728305	WMWBARPU_1372
BC10405	728305	WMWBARPU_1372
BC10406	728305	WMWBARPU_1372
BC10407	728305	WMWBARPU_1372
BC10408	728305	WMWBARPU_1372

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.

Total Organic Carbon

Barry Pooled Upgradient

WMWBARPU_1372

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC10402	728186	WMWBARPU_1372
BC10403	728186	WMWBARPU_1372
BC10404	728186	WMWBARPU_1372
BC10405	728186	WMWBARPU_1372
BC10406	728186	WMWBARPU_1372
BC10407	728186	WMWBARPU_1372
BC10408	728186	WMWBARPU_1372

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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-1

Location Code: WMWBARPU
Collected: 5/31/22 13:24
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10402

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	6/6/22 09:22	6/8/22 09:50		1.015	0.0567	mg/L	0.030000	0.1015	J
* Calcium, Total	6/6/22 09:22	6/8/22 09:50		1.015	1.14	mg/L	0.070035	0.406	
* Iron, Total	6/6/22 09:22	6/8/22 10:16		10.15	4.80	mg/L	0.08120	0.406	
* Lithium, Total	6/6/22 09:22	6/8/22 09:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/6/22 09:22	6/8/22 09:50		1.015	2.23	mg/L	0.021315	0.406	
Silica, Total (calc.)	6/6/22 09:22	6/8/22 09:50		1	6.74	mg/L			
Silicon, Total	6/6/22 09:22	6/8/22 09:50		1.015	3.15	mg/L	0.02030	0.25375	
* Sodium, Total	6/6/22 09:22	6/8/22 09:50		1.015	2.05	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	6/6/22 09:06	6/8/22 11:12		1.015	0.0564	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	6/6/22 09:06	6/8/22 11:12		1.015	1.13	mg/L	0.070035	0.406	
* Iron, Dissolved	6/6/22 09:06	6/8/22 11:32		10.15	4.08	mg/L	0.08120	0.406	
* Lithium, Dissolved	6/6/22 09:06	6/8/22 11:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/6/22 09:06	6/8/22 11:12		1.015	2.25	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	6/6/22 09:06	6/8/22 11:12		1	6.83	mg/L			
Silicon, Dissolved	6/6/22 09:06	6/8/22 11:12		1.015	3.19	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/6/22 09:06	6/8/22 11:12		1.015	2.09	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/6/22 07:13	6/6/22 14:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.0898	mg/L	0.006090	0.01015	
* Arsenic, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.000237	mg/L	0.000081	0.000203	
* Barium, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.100	mg/L	0.000508	0.001015	
* Beryllium, Total	6/6/22 07:13	6/6/22 14:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/6/22 07:13	6/6/22 14:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.000334	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.00487	mg/L	0.000068	0.000203	
* Lead, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.0000838	mg/L	0.000068	0.000203	J
* Manganese, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.154	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/6/22 07:13	6/6/22 14:37		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/6/22 07:13	6/6/22 14:37		1.015	0.444	mg/L	0.169505	0.5075	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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-1

Location Code: WMWBARPU
Collected: 5/31/22 13:24
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10402

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/6/22 07:13	6/6/22 14:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/6/22 07:13	6/6/22 14:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	0.0534	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	0.000168	mg/L	0.000081	0.000203	J
* Barium, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	0.101	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	0.000231	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	0.00484	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	0.155	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	0.458	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/6/22 07:31	6/6/22 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/7/22 11:15	6/7/22 13:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	6/6/22 12:38	6/6/22 12:38		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/10/22 13:35	6/10/22 14:52		1	8.56	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	6/3/22 13:15	6/6/22 13:42		1	32.0	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	8.56	mg/L			
Carbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/8/22 01:15	6/8/22 01:15		1	1.58	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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-1

Location Code: WMWBARPU

Collected: 5/31/22 13:24

Customer ID:

Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10402

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: JCC							
* Chloride	6/6/22 12:56	6/6/22 12:56		1	1.93	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 13:27	6/8/22 13:27		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 16:10	6/7/22 16:10		1	12.8	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/31/22 13:21	5/31/22 13:21			57.06	uS/cm			FA
pH	5/31/22 13:21	5/31/22 13:21			3.89	SU			FA
Temperature	5/31/22 13:21	5/31/22 13:21			20.77	C			FA
Turbidity	5/31/22 13:21	5/31/22 13:21			2	NTU			FA
Sulfide	5/31/22 13:21	5/31/22 13:21			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.

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 13:24
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-1

Laboratory ID Number: BC10402

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10407	Aluminum, Dissolved	mg/L	0.000977	0.010	0.100	0.124	0.128	0.104	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BC10408	Aluminum, Total	mg/L	0.000555	0.010	0.100	0.110	0.106	0.106	0.0850 to 0.115	110	70.0 to 130	3.70	20.0
BC10407	Antimony, Dissolved	mg/L	0.000304	0.00100	0.100	0.0937	0.0957	0.0923	0.0850 to 0.115	93.7	70.0 to 130	2.11	20.0
BC10408	Antimony, Total	mg/L	0.000382	0.00100	0.100	0.0896	0.0901	0.0945	0.0850 to 0.115	89.6	70.0 to 130	0.556	20.0
BC10407	Arsenic, Dissolved	mg/L	0.000034	0.000176	0.100	0.100	0.102	0.104	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10408	Arsenic, Total	mg/L	0.0000173	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10407	Barium, Dissolved	mg/L	0.0000071	0.00100	0.100	0.229	0.234	0.103	0.0850 to 0.115	100	70.0 to 130	2.16	20.0
BC10408	Barium, Total	mg/L	0.0000192	0.00100	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.4	70.0 to 130	1.60	20.0
BC10407	Beryllium, Dissolved	mg/L	0.0000130	0.000880	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Beryllium, Total	mg/L	0.0000106	0.000880	0.100	0.103	0.0970	0.0977	0.0850 to 0.115	103	70.0 to 130	6.00	20.0
BC10407	Boron, Dissolved	mg/L	0.000221	0.0650	1.00	1.02	1.02	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Boron, Total	mg/L	0.000098	0.0650	1.00	0.990	0.990	1.01	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC10407	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BC10408	Cadmium, Total	mg/L	0.0000036	0.000147	0.100	0.102	0.0997	0.102	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC10407	Calcium, Dissolved	mg/L	-0.00230	0.152	5.00	6.91	6.88	4.88	4.25 to 5.75	97.6	70.0 to 130	0.435	20.0
BC10408	Calcium, Total	mg/L	-0.00539	0.152	5.00	4.87	4.79	4.93	4.25 to 5.75	97.4	70.0 to 130	1.66	20.0
BC10408	Chloride	mg/L	-0.0327	1.00	10.0	10.6	10.6	9.58	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC10407	Chromium, Dissolved	mg/L	0.0000008	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC10408	Chromium, Total	mg/L	0.0000337	0.000440	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC10407	Cobalt, Dissolved	mg/L	-0.0000006	0.000147	0.100	0.106	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	0.939	20.0
BC10408	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC10408	Fluoride	mg/L	0.00175	0.125	2.50	2.53	2.56	2.54	2.25 to 2.75	101	80.0 to 120	1.18	20.0
BC10407	Iron, Dissolved	mg/L	-0.000261	0.0176	0.2	0.201	0.200	0.200	0.170 to 0.230	100	70.0 to 130	0.499	20.0

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

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 13:24
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-1

Laboratory ID Number: BC10402

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10408	Iron, Total	mg/L	0.000083	0.0176	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC10407	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.108	0.104	0.109	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BC10408	Lead, Total	mg/L	0.0000100	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10407	Lithium, Dissolved	mg/L	0.000211	0.0154	0.200	0.201	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BC10408	Lithium, Total	mg/L	0.000209	0.0154	0.200	0.203	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC10407	Magnesium, Dissolved	mg/L	-0.00997	0.0462	5.00	7.28	7.22	5.16	4.25 to 5.75	103	70.0 to 130	0.828	20.0
BC10408	Magnesium, Total	mg/L	-0.00569	0.0462	5.00	5.11	5.07	5.18	4.25 to 5.75	102	70.0 to 130	0.786	20.0
BC10407	Manganese, Dissolved	mg/L	0.0000037	0.0002	0.100	0.118	0.120	0.103	0.0850 to 0.115	102	70.0 to 130	1.68	20.0
BC10408	Manganese, Total	mg/L	0.0000112	0.0002	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC10408	Mercury, Total by CVAA	mg/L	0.000134	0.000500	0.004	0.00425	0.00421	0.00400	0.00340 to 0.00460	106	70.0 to 130	0.946	20.0
BC10407	Molybdenum, Dissolved	mg/L	0.0000017	0.0002	0.100	0.0978	0.100	0.0987	0.0850 to 0.115	97.8	70.0 to 130	2.22	20.0
BC10408	Molybdenum, Total	mg/L	-0.0000073	0.0002	0.100	0.0990	0.0981	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.913	20.0
BC10407	Potassium, Dissolved	mg/L	0.00152	0.367	10.0	11.0	11.1	9.97	8.50 to 11.5	99.9	70.0 to 130	0.905	20.0
BC10408	Potassium, Total	mg/L	0.0102	0.367	10.0	10.2	10.0	10.2	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC10407	Selenium, Dissolved	mg/L	-0.0000214	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Selenium, Total	mg/L	0.0000056	0.00100	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC10407	Silicon, Dissolved	mg/L	-0.00110	0.0440	1.00	5.02	5.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Silicon, Total	mg/L	-0.000555	0.0440	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC10407	Sodium, Dissolved	mg/L	-0.000155	0.0660	5.00	7.73	7.76	5.13	4.25 to 5.75	102	70.0 to 130	0.387	20.0
BC10408	Sodium, Total	mg/L	0.00196	0.0660	5.00	5.16	5.17	5.17	4.25 to 5.75	103	70.0 to 130	0.194	20.0
BC10408	Sulfate	mg/L	-0.0817	2.0	20.0	20.1	20.4	19.0	18.0 to 22.0	100	80.0 to 120	1.48	20.0
BC10407	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.109	0.105	0.110	0.0850 to 0.115	109	70.0 to 130	3.74	20.0

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

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 13:24
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-1

Laboratory ID Number: BC10402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Limit	Prec	Prec Limit	
BC10408	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC10408	Total Organic Carbon	mg/L	0.160	1.00	10.0	10.0	10.2	25.1		100	80.0 to 120	1.98	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 13:24

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-1

Laboratory ID Number: BC10402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Limit	Prec	Prec Limit
BC10407	Alkalinity, Total as CaCO3	mg/L					0.680	52.5	45.0 to 55.0				42.9 10.0
BC10408	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.12	0.073	2.01	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10407	Solids, Dissolved	mg/L	0.0000	25.0			36.0	50.0	40.0 to 60.0				1.93 10.0

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

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-2

Location Code: WMWBARPU
Collected: 5/31/22 14:28
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10403

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	6/6/22 09:22	6/8/22 09:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/6/22 09:22	6/8/22 09:53		1.015	1.24	mg/L	0.070035	0.406	
* Iron, Total	6/6/22 09:22	6/8/22 09:53		1.015	0.0704	mg/L	0.008120	0.0406	
* Lithium, Total	6/6/22 09:22	6/8/22 09:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/6/22 09:22	6/8/22 09:53		1.015	2.48	mg/L	0.021315	0.406	
Silica, Total (calc.)	6/6/22 09:22	6/8/22 09:53		1	8.39	mg/L			
Silicon, Total	6/6/22 09:22	6/8/22 09:53		1.015	3.92	mg/L	0.02030	0.25375	
* Sodium, Total	6/6/22 09:22	6/8/22 09:53		1.015	2.25	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	6/6/22 09:06	6/8/22 11:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/6/22 09:06	6/8/22 11:15		1.015	1.26	mg/L	0.070035	0.406	
* Iron, Dissolved	6/6/22 09:06	6/8/22 11:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/6/22 09:06	6/8/22 11:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/6/22 09:06	6/8/22 11:15		1.015	2.48	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	6/6/22 09:06	6/8/22 11:15		1	8.26	mg/L			
Silicon, Dissolved	6/6/22 09:06	6/8/22 11:15		1.015	3.86	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/6/22 09:06	6/8/22 11:15		1.015	2.25	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/6/22 07:13	6/6/22 14:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.127	mg/L	0.006090	0.01015	
* Arsenic, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.0000879	mg/L	0.000081	0.000203	J
* Barium, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.153	mg/L	0.000508	0.001015	
* Beryllium, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.000413	mg/L	0.000406	0.001015	J
* Cadmium, Total	6/6/22 07:13	6/6/22 14:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.00120	mg/L	0.000203	0.001015	
* Cobalt, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.00194	mg/L	0.000068	0.000203	
* Lead, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.0000781	mg/L	0.000068	0.000203	J
* Manganese, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.0241	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/6/22 07:13	6/6/22 14:40		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.905	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-2

Location Code: WMWBARPU

Collected: 5/31/22 14:28

Customer ID:

Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10403

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/6/22 07:13	6/6/22 14:40		1.015	0.000633	mg/L	0.000508	0.001015	J
* Thallium, Total	6/6/22 07:13	6/6/22 14:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.0788	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.153	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.000413	mg/L	0.000406	0.001015	J
* Cadmium, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.000998	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.00187	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.0235	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.885	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	0.000575	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	6/6/22 07:31	6/6/22 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/7/22 11:15	6/7/22 13:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	6/6/22 12:39	6/6/22 12:39		1	1.84	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/10/22 13:35	6/10/22 14:52		1	0.44	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	6/3/22 13:15	6/6/22 13:42		1	30.7	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	Not Detected	mg/L		1	
Carbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/8/22 01:35	6/8/22 01:35		1	1.14	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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-2

Location Code: WMWBARPU

Collected: 5/31/22 14:28

Customer ID:

Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10403

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: JCC							
* Chloride	6/6/22 12:57	6/6/22 12:57		1	2.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 13:28	6/8/22 13:28		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 16:11	6/7/22 16:11		1	8.09	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/31/22 14:25	5/31/22 14:25			50.04	uS/cm			FA
pH	5/31/22 14:25	5/31/22 14:25			3.31	SU			FA
Temperature	5/31/22 14:25	5/31/22 14:25			20.00	C			FA
Turbidity	5/31/22 14:25	5/31/22 14:25			4.82	NTU			FA
Sulfide	5/31/22 14:25	5/31/22 14:25			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.

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 14:28
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-2

Laboratory ID Number: BC10403

Sample	Analysis	Units	MB	MB				Standard		Rec			Prec Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	
BC10407	Aluminum, Dissolved	mg/L	0.000977	0.010	0.100	0.124	0.128	0.104	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BC10408	Aluminum, Total	mg/L	0.000555	0.010	0.100	0.110	0.106	0.106	0.0850 to 0.115	110	70.0 to 130	3.70	20.0
BC10407	Antimony, Dissolved	mg/L	0.000304	0.00100	0.100	0.0937	0.0957	0.0923	0.0850 to 0.115	93.7	70.0 to 130	2.11	20.0
BC10408	Antimony, Total	mg/L	0.000382	0.00100	0.100	0.0896	0.0901	0.0945	0.0850 to 0.115	89.6	70.0 to 130	0.556	20.0
BC10407	Arsenic, Dissolved	mg/L	0.000034	0.000176	0.100	0.100	0.102	0.104	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10408	Arsenic, Total	mg/L	0.0000173	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10407	Barium, Dissolved	mg/L	0.0000071	0.00100	0.100	0.229	0.234	0.103	0.0850 to 0.115	100	70.0 to 130	2.16	20.0
BC10408	Barium, Total	mg/L	0.0000192	0.00100	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.4	70.0 to 130	1.60	20.0
BC10407	Beryllium, Dissolved	mg/L	0.0000130	0.000880	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Beryllium, Total	mg/L	0.0000106	0.000880	0.100	0.103	0.0970	0.0977	0.0850 to 0.115	103	70.0 to 130	6.00	20.0
BC10407	Boron, Dissolved	mg/L	0.000221	0.0650	1.00	1.02	1.02	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Boron, Total	mg/L	0.000098	0.0650	1.00	0.990	0.990	1.01	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC10407	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BC10408	Cadmium, Total	mg/L	0.0000036	0.000147	0.100	0.102	0.0997	0.102	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC10407	Calcium, Dissolved	mg/L	-0.00230	0.152	5.00	6.91	6.88	4.88	4.25 to 5.75	97.6	70.0 to 130	0.435	20.0
BC10408	Calcium, Total	mg/L	-0.00539	0.152	5.00	4.87	4.79	4.93	4.25 to 5.75	97.4	70.0 to 130	1.66	20.0
BC10408	Chloride	mg/L	-0.0327	1.00	10.0	10.6	10.6	9.58	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC10407	Chromium, Dissolved	mg/L	0.0000008	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC10408	Chromium, Total	mg/L	0.0000337	0.000440	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC10407	Cobalt, Dissolved	mg/L	-0.0000006	0.000147	0.100	0.106	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	0.939	20.0
BC10408	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC10408	Fluoride	mg/L	0.00175	0.125	2.50	2.53	2.56	2.54	2.25 to 2.75	101	80.0 to 120	1.18	20.0
BC10407	Iron, Dissolved	mg/L	-0.000261	0.0176	0.2	0.201	0.200	0.200	0.170 to 0.230	100	70.0 to 130	0.499	20.0

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

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 14:28
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-2

Laboratory ID Number: BC10403

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10408	Iron, Total	mg/L	0.000083	0.0176	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC10407	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.108	0.104	0.109	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BC10408	Lead, Total	mg/L	0.0000100	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10407	Lithium, Dissolved	mg/L	0.000211	0.0154	0.200	0.201	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BC10408	Lithium, Total	mg/L	0.000209	0.0154	0.200	0.203	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC10407	Magnesium, Dissolved	mg/L	-0.00997	0.0462	5.00	7.28	7.22	5.16	4.25 to 5.75	103	70.0 to 130	0.828	20.0
BC10408	Magnesium, Total	mg/L	-0.00569	0.0462	5.00	5.11	5.07	5.18	4.25 to 5.75	102	70.0 to 130	0.786	20.0
BC10407	Manganese, Dissolved	mg/L	0.0000037	0.0002	0.100	0.118	0.120	0.103	0.0850 to 0.115	102	70.0 to 130	1.68	20.0
BC10408	Manganese, Total	mg/L	0.0000112	0.0002	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC10408	Mercury, Total by CVAA	mg/L	0.000134	0.000500	0.004	0.00425	0.00421	0.00400	0.00340 to 0.00460	106	70.0 to 130	0.946	20.0
BC10407	Molybdenum, Dissolved	mg/L	0.0000017	0.0002	0.100	0.0978	0.100	0.0987	0.0850 to 0.115	97.8	70.0 to 130	2.22	20.0
BC10408	Molybdenum, Total	mg/L	-0.0000073	0.0002	0.100	0.0990	0.0981	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.913	20.0
BC10407	Potassium, Dissolved	mg/L	0.00152	0.367	10.0	11.0	11.1	9.97	8.50 to 11.5	99.9	70.0 to 130	0.905	20.0
BC10408	Potassium, Total	mg/L	0.0102	0.367	10.0	10.2	10.0	10.2	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC10407	Selenium, Dissolved	mg/L	-0.0000214	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Selenium, Total	mg/L	0.0000056	0.00100	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC10407	Silicon, Dissolved	mg/L	-0.00110	0.0440	1.00	5.02	5.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Silicon, Total	mg/L	-0.000555	0.0440	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC10407	Sodium, Dissolved	mg/L	-0.000155	0.0660	5.00	7.73	7.76	5.13	4.25 to 5.75	102	70.0 to 130	0.387	20.0
BC10408	Sodium, Total	mg/L	0.00196	0.0660	5.00	5.16	5.17	5.17	4.25 to 5.75	103	70.0 to 130	0.194	20.0
BC10408	Sulfate	mg/L	-0.0817	2.0	20.0	20.1	20.4	19.0	18.0 to 22.0	100	80.0 to 120	1.48	20.0
BC10407	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.109	0.105	0.110	0.0850 to 0.115	109	70.0 to 130	3.74	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 14:28

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-2

Laboratory ID Number: BC10403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10408	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC10408	Total Organic Carbon	mg/L	0.160	1.00	10.0	10.0	10.2	25.1		100	80.0 to 120	1.98	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 14:28

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-2

Laboratory ID Number: BC10403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10407	Alkalinity, Total as CaCO3	mg/L					0.680	52.5	45.0 to 55.0			42.9	10.0
BC10408	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.12	0.073	2.01	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10407	Solids, Dissolved	mg/L	0.0000	25.0			36.0	50.0	40.0 to 60.0			1.93	10.0

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

Certificate Of Analysis

Description: Barry Pooled Upgradient Field Blank-1

Location Code: WMWBARPUFB
Collected: 5/31/22 14:45
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10404

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	6/6/22 09:22	6/8/22 09:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/6/22 09:22	6/8/22 09:56		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	6/6/22 09:22	6/8/22 09:56		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/6/22 09:22	6/8/22 09:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/6/22 09:22	6/8/22 09:56		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	6/6/22 09:22	6/8/22 09:56		1	Not Detected	mg/L			
Silicon, Total	6/6/22 09:22	6/8/22 09:56		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	6/6/22 09:22	6/8/22 09:56		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/6/22 07:13	6/6/22 14:44		1.015	0.000273	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/6/22 07:13	6/6/22 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1			Analyst: CRB						
* Mercury, Total by CVAA	6/7/22 11:15	6/7/22 13:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2			Analyst: CES						
* Nitrogen, Nitrate/Nitrite	6/6/22 12:41	6/6/22 12:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C			Analyst: CNJ						
* Solids, Dissolved	6/3/22 13:15	6/6/22 13:42		1	Not Detected	mg/L		25	U

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

Comments:

Certificate Of Analysis

Description: Barry Pooled Upgradient Field Blank-1

Location Code: WMWBARPUFB

Collected: 5/31/22 14:45

Customer ID:

Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10404

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/8/22 01:56	6/8/22 01:56		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		Analyst: JCC							
* Chloride	6/6/22 12:58	6/6/22 12:58		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 13:29	6/8/22 13:29		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 16:13	6/7/22 16:13		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Batch QC Summary

Customer Account: WMWBARPUFB

Sample Date: 5/31/22 14:45

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient Field Blank-1

Laboratory ID Number: BC10404

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10408	Aluminum, Total	mg/L	0.000555	0.010	0.100	0.110	0.106	0.106	0.0850 to 0.115	110	70.0 to 130	3.70	20.0
BC10408	Antimony, Total	mg/L	0.000382	0.00100	0.100	0.0896	0.0901	0.0945	0.0850 to 0.115	89.6	70.0 to 130	0.556	20.0
BC10408	Arsenic, Total	mg/L	0.0000173	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10408	Barium, Total	mg/L	0.0000192	0.00100	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.4	70.0 to 130	1.60	20.0
BC10408	Beryllium, Total	mg/L	0.0000106	0.000880	0.100	0.103	0.0970	0.0977	0.0850 to 0.115	103	70.0 to 130	6.00	20.0
BC10408	Boron, Total	mg/L	0.000098	0.0650	1.00	0.990	0.990	1.01	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC10408	Cadmium, Total	mg/L	0.0000036	0.000147	0.100	0.102	0.0997	0.102	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC10408	Calcium, Total	mg/L	-0.00539	0.152	5.00	4.87	4.79	4.93	4.25 to 5.75	97.4	70.0 to 130	1.66	20.0
BC10408	Chloride	mg/L	-0.0327	1.00	10.0	10.6	10.6	9.58	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC10408	Chromium, Total	mg/L	0.0000337	0.000440	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC10408	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC10408	Fluoride	mg/L	0.00175	0.125	2.50	2.53	2.56	2.54	2.25 to 2.75	101	80.0 to 120	1.18	20.0
BC10408	Iron, Total	mg/L	0.000083	0.0176	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC10408	Lead, Total	mg/L	0.0000100	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10408	Lithium, Total	mg/L	0.000209	0.0154	0.200	0.203	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC10408	Magnesium, Total	mg/L	-0.00569	0.0462	5.00	5.11	5.07	5.18	4.25 to 5.75	102	70.0 to 130	0.786	20.0
BC10408	Manganese, Total	mg/L	0.0000112	0.0002	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC10408	Mercury, Total by CVAA	mg/L	0.000134	0.000500	0.004	0.00425	0.00421	0.00400	0.00340 to 0.00460	106	70.0 to 130	0.946	20.0
BC10408	Molybdenum, Total	mg/L	-0.0000073	0.0002	0.100	0.0990	0.0981	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.913	20.0
BC10408	Potassium, Total	mg/L	0.0102	0.367	10.0	10.2	10.0	10.2	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC10408	Selenium, Total	mg/L	0.0000056	0.00100	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC10408	Silicon, Total	mg/L	-0.000555	0.0440	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC10408	Sodium, Total	mg/L	0.00196	0.0660	5.00	5.16	5.17	5.17	4.25 to 5.75	103	70.0 to 130	0.194	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARPUFB

Sample Date: 5/31/22 14:45

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient Field Blank-1

Laboratory ID Number: BC10404

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC10408	Sulfate	mg/L	-0.0817	2.0	20.0	20.1	20.4	19.0	18.0 to 22.0	100	80.0 to 120	1.48	20.0		
BC10408	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115	106	70.0 to 130	0.948	20.0		
BC10408	Total Organic Carbon	mg/L	0.160	1.00	10.0	10.0	10.2	25.1		100	80.0 to 120	1.98	20.0		

Comments:

Batch QC Summary

Customer Account: WMWBARPUFB

Sample Date: 5/31/22 14:45

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient Field Blank-1

Laboratory ID Number: BC10404

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec Limit	Prec	Prec Limit	
BC10408	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.12	0.073	2.01	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10407	Solids, Dissolved	mg/L	0.0000	25.0			36.0	50.0	40.0 to 60.0			1.93	10.0

Comments:

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-3

Location Code: WMWBARPU
Collected: 5/31/22 15:22
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10405

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA			Preparation Method: EPA 1638			
* Boron, Total	6/6/22 09:22	6/8/22 09:59		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/6/22 09:22	6/8/22 09:59		1.015	1.95	mg/L	0.070035	0.406	
* Iron, Total	6/6/22 09:22	6/8/22 09:59		1.015	0.0270	mg/L	0.008120	0.0406	J
* Lithium, Total	6/6/22 09:22	6/8/22 09:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/6/22 09:22	6/8/22 09:59		1.015	2.05	mg/L	0.021315	0.406	
Silica, Total (calc.)	6/6/22 09:22	6/8/22 09:59		1	8.60	mg/L			
Silicon, Total	6/6/22 09:22	6/8/22 09:59		1.015	4.02	mg/L	0.02030	0.25375	
* Sodium, Total	6/6/22 09:22	6/8/22 09:59		1.015	3.11	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA			Preparation Method: EPA 1638			
* Boron, Dissolved	6/6/22 09:06	6/8/22 11:17		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/6/22 09:06	6/8/22 11:17		1.015	1.94	mg/L	0.070035	0.406	
* Iron, Dissolved	6/6/22 09:06	6/8/22 11:17		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/6/22 09:06	6/8/22 11:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/6/22 09:06	6/8/22 11:17		1.015	2.01	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	6/6/22 09:06	6/8/22 11:17		1	8.52	mg/L			
Silicon, Dissolved	6/6/22 09:06	6/8/22 11:17		1.015	3.98	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/6/22 09:06	6/8/22 11:17		1.015	3.11	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ			Preparation Method: EPA 1638			
* Antimony, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/6/22 07:13	6/6/22 14:47		1.015	0.0446	mg/L	0.006090	0.01015	
* Arsenic, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	6/6/22 07:13	6/6/22 14:47		1.015	0.0992	mg/L	0.000508	0.001015	
* Beryllium, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/6/22 07:13	6/6/22 14:47		1.015	0.00139	mg/L	0.000203	0.001015	
* Cobalt, Total	6/6/22 07:13	6/6/22 14:47		1.015	0.00149	mg/L	0.000068	0.000203	
* Lead, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/6/22 07:13	6/6/22 14:47		1.015	0.0196	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/6/22 07:13	6/6/22 14:47		1.015	0.987	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-3

Location Code: WMWBARPU
Collected: 5/31/22 15:22
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10405

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/6/22 07:13	6/6/22 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	0.0232	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	0.101	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	0.00129	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	0.00154	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	0.0198	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	0.961	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/6/22 07:31	6/6/22 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/7/22 11:15	6/7/22 13:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	6/6/22 12:42	6/6/22 12:42		1	2.11	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/10/22 13:35	6/10/22 14:52		1	1.24	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	6/3/22 13:15	6/6/22 13:42		1	35.3	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	1.24	mg/L			
Carbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/8/22 02:12	6/8/22 02:12		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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-3

Location Code: WMWBARPU
Collected: 5/31/22 15:22
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10405

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: JCC							
* Chloride	6/6/22 12:59	6/6/22 12:59		1	3.39	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 13:30	6/8/22 13:30		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 16:14	6/7/22 16:14		1	7.02	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/31/22 15:19	5/31/22 15:19			49.57	uS/cm			FA
pH	5/31/22 15:19	5/31/22 15:19			3.54	SU			FA
Temperature	5/31/22 15:19	5/31/22 15:19			20.09	C			FA
Turbidity	5/31/22 15:19	5/31/22 15:19			3.1	NTU			FA
Sulfide	5/31/22 15:19	5/31/22 15:19			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.

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 15:22

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3

Laboratory ID Number: BC10405

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10407	Aluminum, Dissolved	mg/L	0.000977	0.010	0.100	0.124	0.128	0.104	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BC10408	Aluminum, Total	mg/L	0.000555	0.010	0.100	0.110	0.106	0.106	0.0850 to 0.115	110	70.0 to 130	3.70	20.0
BC10407	Antimony, Dissolved	mg/L	0.000304	0.00100	0.100	0.0937	0.0957	0.0923	0.0850 to 0.115	93.7	70.0 to 130	2.11	20.0
BC10408	Antimony, Total	mg/L	0.000382	0.00100	0.100	0.0896	0.0901	0.0945	0.0850 to 0.115	89.6	70.0 to 130	0.556	20.0
BC10407	Arsenic, Dissolved	mg/L	0.000034	0.000176	0.100	0.100	0.102	0.104	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10408	Arsenic, Total	mg/L	0.0000173	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10407	Barium, Dissolved	mg/L	0.0000071	0.00100	0.100	0.229	0.234	0.103	0.0850 to 0.115	100	70.0 to 130	2.16	20.0
BC10408	Barium, Total	mg/L	0.0000192	0.00100	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.4	70.0 to 130	1.60	20.0
BC10407	Beryllium, Dissolved	mg/L	0.0000130	0.000880	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Beryllium, Total	mg/L	0.0000106	0.000880	0.100	0.103	0.0970	0.0977	0.0850 to 0.115	103	70.0 to 130	6.00	20.0
BC10407	Boron, Dissolved	mg/L	0.000221	0.0650	1.00	1.02	1.02	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Boron, Total	mg/L	0.000098	0.0650	1.00	0.990	0.990	1.01	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC10407	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BC10408	Cadmium, Total	mg/L	0.0000036	0.000147	0.100	0.102	0.0997	0.102	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC10407	Calcium, Dissolved	mg/L	-0.00230	0.152	5.00	6.91	6.88	4.88	4.25 to 5.75	97.6	70.0 to 130	0.435	20.0
BC10408	Calcium, Total	mg/L	-0.00539	0.152	5.00	4.87	4.79	4.93	4.25 to 5.75	97.4	70.0 to 130	1.66	20.0
BC10408	Chloride	mg/L	-0.0327	1.00	10.0	10.6	10.6	9.58	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC10407	Chromium, Dissolved	mg/L	0.0000008	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC10408	Chromium, Total	mg/L	0.0000337	0.000440	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC10407	Cobalt, Dissolved	mg/L	-0.0000006	0.000147	0.100	0.106	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	0.939	20.0
BC10408	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC10408	Fluoride	mg/L	0.00175	0.125	2.50	2.53	2.56	2.54	2.25 to 2.75	101	80.0 to 120	1.18	20.0
BC10407	Iron, Dissolved	mg/L	-0.000261	0.0176	0.2	0.201	0.200	0.200	0.170 to 0.230	100	70.0 to 130	0.499	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 15:22

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3

Laboratory ID Number: BC10405

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10408	Iron, Total	mg/L	0.000083	0.0176	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC10407	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.108	0.104	0.109	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BC10408	Lead, Total	mg/L	0.0000100	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10407	Lithium, Dissolved	mg/L	0.000211	0.0154	0.200	0.201	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BC10408	Lithium, Total	mg/L	0.000209	0.0154	0.200	0.203	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC10407	Magnesium, Dissolved	mg/L	-0.00997	0.0462	5.00	7.28	7.22	5.16	4.25 to 5.75	103	70.0 to 130	0.828	20.0
BC10408	Magnesium, Total	mg/L	-0.00569	0.0462	5.00	5.11	5.07	5.18	4.25 to 5.75	102	70.0 to 130	0.786	20.0
BC10407	Manganese, Dissolved	mg/L	0.0000037	0.0002	0.100	0.118	0.120	0.103	0.0850 to 0.115	102	70.0 to 130	1.68	20.0
BC10408	Manganese, Total	mg/L	0.0000112	0.0002	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC10408	Mercury, Total by CVAA	mg/L	0.000134	0.000500	0.004	0.00425	0.00421	0.00400	0.00340 to 0.00460	106	70.0 to 130	0.946	20.0
BC10407	Molybdenum, Dissolved	mg/L	0.0000017	0.0002	0.100	0.0978	0.100	0.0987	0.0850 to 0.115	97.8	70.0 to 130	2.22	20.0
BC10408	Molybdenum, Total	mg/L	-0.0000073	0.0002	0.100	0.0990	0.0981	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.913	20.0
BC10407	Potassium, Dissolved	mg/L	0.00152	0.367	10.0	11.0	11.1	9.97	8.50 to 11.5	99.9	70.0 to 130	0.905	20.0
BC10408	Potassium, Total	mg/L	0.0102	0.367	10.0	10.2	10.0	10.2	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC10407	Selenium, Dissolved	mg/L	-0.0000214	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Selenium, Total	mg/L	0.0000056	0.00100	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC10407	Silicon, Dissolved	mg/L	-0.00110	0.0440	1.00	5.02	5.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Silicon, Total	mg/L	-0.000555	0.0440	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC10407	Sodium, Dissolved	mg/L	-0.000155	0.0660	5.00	7.73	7.76	5.13	4.25 to 5.75	102	70.0 to 130	0.387	20.0
BC10408	Sodium, Total	mg/L	0.00196	0.0660	5.00	5.16	5.17	5.17	4.25 to 5.75	103	70.0 to 130	0.194	20.0
BC10408	Sulfate	mg/L	-0.0817	2.0	20.0	20.1	20.4	19.0	18.0 to 22.0	100	80.0 to 120	1.48	20.0
BC10407	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.109	0.105	0.110	0.0850 to 0.115	109	70.0 to 130	3.74	20.0

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

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 15:22
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3

Laboratory ID Number: BC10405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Limit	Prec	Prec Limit	
BC10408	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC10408	Total Organic Carbon	mg/L	0.160	1.00	10.0	10.0	10.2	25.1		100	80.0 to 120	1.98	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 15:22

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3

Laboratory ID Number: BC10405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10407	Alkalinity, Total as CaCO3	mg/L					0.680	52.5	45.0 to 55.0			42.9	10.0
BC10408	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.12	0.073	2.01	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10407	Solids, Dissolved	mg/L	0.0000	25.0			36.0	50.0	40.0 to 60.0			1.93	10.0

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

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-3 Dup

Location Code: WMWBARPU
Collected: 5/31/22 15:22
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10406

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	6/6/22 09:22	6/8/22 10:02		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/6/22 09:22	6/8/22 10:02		1.015	1.97	mg/L	0.070035	0.406	
* Iron, Total	6/6/22 09:22	6/8/22 10:02		1.015	0.0242	mg/L	0.008120	0.0406	J
* Lithium, Total	6/6/22 09:22	6/8/22 10:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/6/22 09:22	6/8/22 10:02		1.015	2.04	mg/L	0.021315	0.406	
Silica, Total (calc.)	6/6/22 09:22	6/8/22 10:02		1	8.54	mg/L			
Silicon, Total	6/6/22 09:22	6/8/22 10:02		1.015	3.99	mg/L	0.02030	0.25375	
* Sodium, Total	6/6/22 09:22	6/8/22 10:02		1.015	3.11	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	6/6/22 09:06	6/8/22 11:20		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/6/22 09:06	6/8/22 11:20		1.015	1.94	mg/L	0.070035	0.406	
* Iron, Dissolved	6/6/22 09:06	6/8/22 11:20		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/6/22 09:06	6/8/22 11:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/6/22 09:06	6/8/22 11:20		1.015	2.04	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	6/6/22 09:06	6/8/22 11:20		1	8.52	mg/L			
Silicon, Dissolved	6/6/22 09:06	6/8/22 11:20		1.015	3.98	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/6/22 09:06	6/8/22 11:20		1.015	3.14	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/6/22 07:13	6/6/22 14:51		1.015	0.0429	mg/L	0.006090	0.01015	
* Arsenic, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	6/6/22 07:13	6/6/22 14:51		1.015	0.101	mg/L	0.000508	0.001015	
* Beryllium, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/6/22 07:13	6/6/22 14:51		1.015	0.00134	mg/L	0.000203	0.001015	
* Cobalt, Total	6/6/22 07:13	6/6/22 14:51		1.015	0.00152	mg/L	0.000068	0.000203	
* Lead, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/6/22 07:13	6/6/22 14:51		1.015	0.0198	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/6/22 07:13	6/6/22 14:51		1.015	0.974	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-3 Dup

Location Code: WMWBARPU
Collected: 5/31/22 15:22
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10406

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/6/22 07:13	6/6/22 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	0.0237	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	0.0993	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	0.00122	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	0.00158	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	0.0199	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	1.01	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/6/22 07:31	6/6/22 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/7/22 11:15	6/7/22 13:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	6/6/22 12:43	6/6/22 12:43		1	2.01	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/10/22 13:35	6/10/22 14:52		1	1.20	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	6/3/22 13:15	6/6/22 13:42		1	31.3	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	1.20	mg/L			
Carbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/8/22 02:28	6/8/22 02:28		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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-3 Dup

Location Code: WMWBARPU

Collected: 5/31/22 15:22

Customer ID:

Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10406

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: JCC							
* Chloride	6/6/22 13:01	6/6/22 13:01		1	3.41	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 13:32	6/8/22 13:32		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 16:15	6/7/22 16:15		1	7.18	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/31/22 15:19	5/31/22 15:19			49.57	uS/cm			FA
pH	5/31/22 15:19	5/31/22 15:19			3.54	SU			FA
Temperature	5/31/22 15:19	5/31/22 15:19			20.09	C			FA
Turbidity	5/31/22 15:19	5/31/22 15:19			3.1	NTU			FA
Sulfide	5/31/22 15:19	5/31/22 15:19			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.

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 15:22

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3 Dup

Laboratory ID Number: BC10406

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10407	Aluminum, Dissolved	mg/L	0.000977	0.010	0.100	0.124	0.128	0.104	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BC10408	Aluminum, Total	mg/L	0.000555	0.010	0.100	0.110	0.106	0.106	0.0850 to 0.115	110	70.0 to 130	3.70	20.0
BC10407	Antimony, Dissolved	mg/L	0.000304	0.00100	0.100	0.0937	0.0957	0.0923	0.0850 to 0.115	93.7	70.0 to 130	2.11	20.0
BC10408	Antimony, Total	mg/L	0.000382	0.00100	0.100	0.0896	0.0901	0.0945	0.0850 to 0.115	89.6	70.0 to 130	0.556	20.0
BC10407	Arsenic, Dissolved	mg/L	0.000034	0.000176	0.100	0.100	0.102	0.104	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10408	Arsenic, Total	mg/L	0.0000173	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10407	Barium, Dissolved	mg/L	0.0000071	0.00100	0.100	0.229	0.234	0.103	0.0850 to 0.115	100	70.0 to 130	2.16	20.0
BC10408	Barium, Total	mg/L	0.0000192	0.00100	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.4	70.0 to 130	1.60	20.0
BC10407	Beryllium, Dissolved	mg/L	0.0000130	0.000880	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Beryllium, Total	mg/L	0.0000106	0.000880	0.100	0.103	0.0970	0.0977	0.0850 to 0.115	103	70.0 to 130	6.00	20.0
BC10407	Boron, Dissolved	mg/L	0.000221	0.0650	1.00	1.02	1.02	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Boron, Total	mg/L	0.000098	0.0650	1.00	0.990	0.990	1.01	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC10407	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BC10408	Cadmium, Total	mg/L	0.0000036	0.000147	0.100	0.102	0.0997	0.102	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC10407	Calcium, Dissolved	mg/L	-0.00230	0.152	5.00	6.91	6.88	4.88	4.25 to 5.75	97.6	70.0 to 130	0.435	20.0
BC10408	Calcium, Total	mg/L	-0.00539	0.152	5.00	4.87	4.79	4.93	4.25 to 5.75	97.4	70.0 to 130	1.66	20.0
BC10408	Chloride	mg/L	-0.0327	1.00	10.0	10.6	10.6	9.58	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC10407	Chromium, Dissolved	mg/L	0.0000008	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC10408	Chromium, Total	mg/L	0.0000337	0.000440	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC10407	Cobalt, Dissolved	mg/L	-0.0000006	0.000147	0.100	0.106	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	0.939	20.0
BC10408	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC10408	Fluoride	mg/L	0.00175	0.125	2.50	2.53	2.56	2.54	2.25 to 2.75	101	80.0 to 120	1.18	20.0
BC10407	Iron, Dissolved	mg/L	-0.000261	0.0176	0.2	0.201	0.200	0.200	0.170 to 0.230	100	70.0 to 130	0.499	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 15:22

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3 Dup

Laboratory ID Number: BC10406

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10408	Iron, Total	mg/L	0.000083	0.0176	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC10407	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.108	0.104	0.109	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BC10408	Lead, Total	mg/L	0.0000100	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10407	Lithium, Dissolved	mg/L	0.000211	0.0154	0.200	0.201	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BC10408	Lithium, Total	mg/L	0.000209	0.0154	0.200	0.203	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC10407	Magnesium, Dissolved	mg/L	-0.00997	0.0462	5.00	7.28	7.22	5.16	4.25 to 5.75	103	70.0 to 130	0.828	20.0
BC10408	Magnesium, Total	mg/L	-0.00569	0.0462	5.00	5.11	5.07	5.18	4.25 to 5.75	102	70.0 to 130	0.786	20.0
BC10407	Manganese, Dissolved	mg/L	0.0000037	0.0002	0.100	0.118	0.120	0.103	0.0850 to 0.115	102	70.0 to 130	1.68	20.0
BC10408	Manganese, Total	mg/L	0.0000112	0.0002	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC10408	Mercury, Total by CVAA	mg/L	0.000134	0.000500	0.004	0.00425	0.00421	0.00400	0.00340 to 0.00460	106	70.0 to 130	0.946	20.0
BC10407	Molybdenum, Dissolved	mg/L	0.0000017	0.0002	0.100	0.0978	0.100	0.0987	0.0850 to 0.115	97.8	70.0 to 130	2.22	20.0
BC10408	Molybdenum, Total	mg/L	-0.0000073	0.0002	0.100	0.0990	0.0981	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.913	20.0
BC10407	Potassium, Dissolved	mg/L	0.00152	0.367	10.0	11.0	11.1	9.97	8.50 to 11.5	99.9	70.0 to 130	0.905	20.0
BC10408	Potassium, Total	mg/L	0.0102	0.367	10.0	10.2	10.0	10.2	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC10407	Selenium, Dissolved	mg/L	-0.0000214	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Selenium, Total	mg/L	0.0000056	0.00100	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC10407	Silicon, Dissolved	mg/L	-0.00110	0.0440	1.00	5.02	5.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Silicon, Total	mg/L	-0.000555	0.0440	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC10407	Sodium, Dissolved	mg/L	-0.000155	0.0660	5.00	7.73	7.76	5.13	4.25 to 5.75	102	70.0 to 130	0.387	20.0
BC10408	Sodium, Total	mg/L	0.00196	0.0660	5.00	5.16	5.17	5.17	4.25 to 5.75	103	70.0 to 130	0.194	20.0
BC10408	Sulfate	mg/L	-0.0817	2.0	20.0	20.1	20.4	19.0	18.0 to 22.0	100	80.0 to 120	1.48	20.0
BC10407	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.109	0.105	0.110	0.0850 to 0.115	109	70.0 to 130	3.74	20.0

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

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 15:22
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3 Dup

Laboratory ID Number: BC10406

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Limit	Prec	Prec Limit	
BC10408	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC10408	Total Organic Carbon	mg/L	0.160	1.00	10.0	10.0	10.2	25.1		100	80.0 to 120	1.98	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 15:22

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-3 Dup

Laboratory ID Number: BC10406

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10407	Alkalinity, Total as CaCO3	mg/L					0.680	52.5	45.0 to 55.0			42.9	10.0
BC10408	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.12	0.073	2.01	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10407	Solids, Dissolved	mg/L	0.0000	25.0			36.0	50.0	40.0 to 60.0			1.93	10.0

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

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-4

Location Code: WMWBARPU
Collected: 5/31/22 16:24
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10407

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	6/6/22 09:22	6/8/22 10:05		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/6/22 09:22	6/8/22 10:05		1.015	2.02	mg/L	0.070035	0.406	
* Iron, Total	6/6/22 09:22	6/8/22 10:05		1.015	0.222	mg/L	0.008120	0.0406	
* Lithium, Total	6/6/22 09:22	6/8/22 10:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/6/22 09:22	6/8/22 10:05		1.015	2.20	mg/L	0.021315	0.406	
Silica, Total (calc.)	6/6/22 09:22	6/8/22 10:05		1	8.82	mg/L			
Silicon, Total	6/6/22 09:22	6/8/22 10:05		1.015	4.12	mg/L	0.02030	0.25375	
* Sodium, Total	6/6/22 09:22	6/8/22 10:05		1.015	2.69	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	6/6/22 09:06	6/8/22 11:23		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	6/6/22 09:06	6/8/22 11:23		1.015	2.03	mg/L	0.070035	0.406	
* Iron, Dissolved	6/6/22 09:06	6/8/22 11:23		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	6/6/22 09:06	6/8/22 11:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	6/6/22 09:06	6/8/22 11:23		1.015	2.14	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	6/6/22 09:06	6/8/22 11:23		1	8.56	mg/L			
Silicon, Dissolved	6/6/22 09:06	6/8/22 11:23		1.015	4.00	mg/L	0.02030	0.25375	
* Sodium, Dissolved	6/6/22 09:06	6/8/22 11:23		1.015	2.65	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/6/22 07:13	6/6/22 14:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/6/22 07:13	6/6/22 14:55		1.015	0.233	mg/L	0.006090	0.01015	
* Arsenic, Total	6/6/22 07:13	6/6/22 14:55		1.015	0.000203	mg/L	0.000081	0.000203	
* Barium, Total	6/6/22 07:13	6/6/22 14:55		1.015	0.129	mg/L	0.000508	0.001015	
* Beryllium, Total	6/6/22 07:13	6/6/22 14:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/6/22 07:13	6/6/22 14:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/6/22 07:13	6/6/22 14:55		1.015	0.00156	mg/L	0.000203	0.001015	
* Cobalt, Total	6/6/22 07:13	6/6/22 14:55		1.015	0.00150	mg/L	0.000068	0.000203	
* Lead, Total	6/6/22 07:13	6/6/22 14:55		1.015	0.000173	mg/L	0.000068	0.000203	J
* Manganese, Total	6/6/22 07:13	6/6/22 14:55		1.015	0.0173	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/6/22 07:13	6/6/22 14:55		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/6/22 07:13	6/6/22 14:55		1.015	1.05	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-4

Location Code: WMWBARPU
Collected: 5/31/22 16:24
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10407

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/6/22 07:13	6/6/22 14:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/6/22 07:13	6/6/22 14:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	0.0212	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	0.129	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	0.00104	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	0.00138	mg/L	0.000068	0.000203	
* Lead, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	0.0165	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	1.01	mg/L	0.169505	0.5075	
* Selenium, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	6/6/22 07:31	6/6/22 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/7/22 11:15	6/7/22 13:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	6/6/22 12:44	6/6/22 12:44		1	2.55	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/10/22 13:35	6/10/22 14:52		1	0.44	mg/L		0.1	PA
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	6/3/22 13:15	6/6/22 13:42		1	36.7	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	Not Detected	mg/L		1	
Carbonate Alkalinity, (calc.)	6/10/22 13:35	6/10/22 14:52		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/8/22 02:51	6/8/22 02:51		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.

Certificate Of Analysis

Description: Barry Pooled Upgradient - MW-4

Location Code: WMWBARPU
Collected: 5/31/22 16:24
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10407

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: JCC							
* Chloride	6/6/22 13:02	6/6/22 13:02		1	3.31	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 13:33	6/8/22 13:33		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 16:16	6/7/22 16:16		1	7.94	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/31/22 16:21	5/31/22 16:21			52.45	uS/cm			FA
pH	5/31/22 16:21	5/31/22 16:21			3.97	SU			FA
Temperature	5/31/22 16:21	5/31/22 16:21			22.67	C			FA
Turbidity	5/31/22 16:21	5/31/22 16:21			8.23	NTU			FA
Sulfide	5/31/22 16:21	5/31/22 16:21			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.

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 16:24
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-4

Laboratory ID Number: BC10407

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10407	Aluminum, Dissolved	mg/L	0.000977	0.010	0.100	0.124	0.128	0.104	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BC10408	Aluminum, Total	mg/L	0.000555	0.010	0.100	0.110	0.106	0.106	0.0850 to 0.115	110	70.0 to 130	3.70	20.0
BC10407	Antimony, Dissolved	mg/L	0.000304	0.00100	0.100	0.0937	0.0957	0.0923	0.0850 to 0.115	93.7	70.0 to 130	2.11	20.0
BC10408	Antimony, Total	mg/L	0.000382	0.00100	0.100	0.0896	0.0901	0.0945	0.0850 to 0.115	89.6	70.0 to 130	0.556	20.0
BC10407	Arsenic, Dissolved	mg/L	0.000034	0.000176	0.100	0.100	0.102	0.104	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10408	Arsenic, Total	mg/L	0.0000173	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10407	Barium, Dissolved	mg/L	0.0000071	0.00100	0.100	0.229	0.234	0.103	0.0850 to 0.115	100	70.0 to 130	2.16	20.0
BC10408	Barium, Total	mg/L	0.0000192	0.00100	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.4	70.0 to 130	1.60	20.0
BC10407	Beryllium, Dissolved	mg/L	0.0000130	0.000880	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Beryllium, Total	mg/L	0.0000106	0.000880	0.100	0.103	0.0970	0.0977	0.0850 to 0.115	103	70.0 to 130	6.00	20.0
BC10407	Boron, Dissolved	mg/L	0.000221	0.0650	1.00	1.02	1.02	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Boron, Total	mg/L	0.000098	0.0650	1.00	0.990	0.990	1.01	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC10407	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BC10408	Cadmium, Total	mg/L	0.0000036	0.000147	0.100	0.102	0.0997	0.102	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC10407	Calcium, Dissolved	mg/L	-0.00230	0.152	5.00	6.91	6.88	4.88	4.25 to 5.75	97.6	70.0 to 130	0.435	20.0
BC10408	Calcium, Total	mg/L	-0.00539	0.152	5.00	4.87	4.79	4.93	4.25 to 5.75	97.4	70.0 to 130	1.66	20.0
BC10408	Chloride	mg/L	-0.0327	1.00	10.0	10.6	10.6	9.58	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC10407	Chromium, Dissolved	mg/L	0.0000008	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BC10408	Chromium, Total	mg/L	0.0000337	0.000440	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC10407	Cobalt, Dissolved	mg/L	-0.0000006	0.000147	0.100	0.106	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	0.939	20.0
BC10408	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC10408	Fluoride	mg/L	0.00175	0.125	2.50	2.53	2.56	2.54	2.25 to 2.75	101	80.0 to 120	1.18	20.0
BC10407	Iron, Dissolved	mg/L	-0.000261	0.0176	0.2	0.201	0.200	0.200	0.170 to 0.230	100	70.0 to 130	0.499	20.0

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

Batch QC Summary

Customer Account: WMWBARPU
Sample Date: 5/31/22 16:24
Customer ID:
Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-4

Laboratory ID Number: BC10407

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10408	Iron, Total	mg/L	0.000083	0.0176	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC10407	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.108	0.104	0.109	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BC10408	Lead, Total	mg/L	0.0000100	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10407	Lithium, Dissolved	mg/L	0.000211	0.0154	0.200	0.201	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BC10408	Lithium, Total	mg/L	0.000209	0.0154	0.200	0.203	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC10407	Magnesium, Dissolved	mg/L	-0.00997	0.0462	5.00	7.28	7.22	5.16	4.25 to 5.75	103	70.0 to 130	0.828	20.0
BC10408	Magnesium, Total	mg/L	-0.00569	0.0462	5.00	5.11	5.07	5.18	4.25 to 5.75	102	70.0 to 130	0.786	20.0
BC10407	Manganese, Dissolved	mg/L	0.0000037	0.0002	0.100	0.118	0.120	0.103	0.0850 to 0.115	102	70.0 to 130	1.68	20.0
BC10408	Manganese, Total	mg/L	0.0000112	0.0002	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC10408	Mercury, Total by CVAA	mg/L	0.000134	0.000500	0.004	0.00425	0.00421	0.00400	0.00340 to 0.00460	106	70.0 to 130	0.946	20.0
BC10407	Molybdenum, Dissolved	mg/L	0.0000017	0.0002	0.100	0.0978	0.100	0.0987	0.0850 to 0.115	97.8	70.0 to 130	2.22	20.0
BC10408	Molybdenum, Total	mg/L	-0.0000073	0.0002	0.100	0.0990	0.0981	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.913	20.0
BC10407	Potassium, Dissolved	mg/L	0.00152	0.367	10.0	11.0	11.1	9.97	8.50 to 11.5	99.9	70.0 to 130	0.905	20.0
BC10408	Potassium, Total	mg/L	0.0102	0.367	10.0	10.2	10.0	10.2	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC10407	Selenium, Dissolved	mg/L	-0.0000214	0.00100	0.100	0.100	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC10408	Selenium, Total	mg/L	0.0000056	0.00100	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC10407	Silicon, Dissolved	mg/L	-0.00110	0.0440	1.00	5.02	5.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10408	Silicon, Total	mg/L	-0.000555	0.0440	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC10407	Sodium, Dissolved	mg/L	-0.000155	0.0660	5.00	7.73	7.76	5.13	4.25 to 5.75	102	70.0 to 130	0.387	20.0
BC10408	Sodium, Total	mg/L	0.00196	0.0660	5.00	5.16	5.17	5.17	4.25 to 5.75	103	70.0 to 130	0.194	20.0
BC10408	Sulfate	mg/L	-0.0817	2.0	20.0	20.1	20.4	19.0	18.0 to 22.0	100	80.0 to 120	1.48	20.0
BC10407	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.109	0.105	0.110	0.0850 to 0.115	109	70.0 to 130	3.74	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 16:24

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-4

Laboratory ID Number: BC10407

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10408	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BC10408	Total Organic Carbon	mg/L	0.160	1.00	10.0	10.0	10.2	25.1		100	80.0 to 120	1.98	20.0

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

Batch QC Summary

Customer Account: WMWBARPU

Sample Date: 5/31/22 16:24

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient - MW-4

Laboratory ID Number: BC10407

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10407	Alkalinity, Total as CaCO3	mg/L					0.680	52.5	45.0 to 55.0			42.9	10.0
BC10408	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.12	0.073	2.01	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10407	Solids, Dissolved	mg/L	0.0000	25.0			36.0	50.0	40.0 to 60.0			1.93	10.0

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

Certificate Of Analysis

Description: Barry Pooled Upgradient Equipment Blank-1

Location Code: WMWBARPUEB
Collected: 5/31/22 16:45
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10408

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	6/6/22 09:22	6/8/22 10:07		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	6/6/22 09:22	6/8/22 10:07		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	6/6/22 09:22	6/8/22 10:07		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	6/6/22 09:22	6/8/22 10:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	6/6/22 09:22	6/8/22 10:07		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	6/6/22 09:22	6/8/22 10:07		1	Not Detected	mg/L			
Silicon, Total	6/6/22 09:22	6/8/22 10:07		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	6/6/22 09:22	6/8/22 10:07		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/6/22 07:13	6/6/22 14:58		1.015	0.000269	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/6/22 07:13	6/6/22 14:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1			Analyst: CRB						
* Mercury, Total by CVAA	6/7/22 11:15	6/7/22 13:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2			Analyst: CES						
* Nitrogen, Nitrate/Nitrite	6/6/22 12:45	6/6/22 12:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C			Analyst: CNJ						
* Solids, Dissolved	6/3/22 13:15	6/6/22 13:42		1	Not Detected	mg/L		25	U

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

Comments:

Certificate Of Analysis

Description: Barry Pooled Upgradient Equipment Blank-1

Location Code: WMWBARPUEB
Collected: 5/31/22 16:45
Customer ID:
Submittal Date: 6/2/22 08:21

Laboratory ID Number: BC10408

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/8/22 03:13	6/8/22 03:13		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		Analyst: JCC							
* Chloride	6/6/22 13:03	6/6/22 13:03		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 13:34	6/8/22 13:34		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 16:17	6/7/22 16:17		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Batch QC Summary

Customer Account: WMWBARPUEB

Sample Date: 5/31/22 16:45

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BC10408

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10408	Aluminum, Total	mg/L	0.000555	0.010	0.100	0.110	0.106	0.106	0.0850 to 0.115	110	70.0 to 130	3.70	20.0
BC10408	Antimony, Total	mg/L	0.000382	0.00100	0.100	0.0896	0.0901	0.0945	0.0850 to 0.115	89.6	70.0 to 130	0.556	20.0
BC10408	Arsenic, Total	mg/L	0.0000173	0.000176	0.100	0.102	0.101	0.102	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10408	Barium, Total	mg/L	0.0000192	0.00100	0.100	0.0994	0.101	0.103	0.0850 to 0.115	99.4	70.0 to 130	1.60	20.0
BC10408	Beryllium, Total	mg/L	0.0000106	0.000880	0.100	0.103	0.0970	0.0977	0.0850 to 0.115	103	70.0 to 130	6.00	20.0
BC10408	Boron, Total	mg/L	0.000098	0.0650	1.00	0.990	0.990	1.01	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BC10408	Cadmium, Total	mg/L	0.0000036	0.000147	0.100	0.102	0.0997	0.102	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC10408	Calcium, Total	mg/L	-0.00539	0.152	5.00	4.87	4.79	4.93	4.25 to 5.75	97.4	70.0 to 130	1.66	20.0
BC10408	Chloride	mg/L	-0.0327	1.00	10.0	10.6	10.6	9.58	9.00 to 11.0	106	80.0 to 120	0.00	20.0
BC10408	Chromium, Total	mg/L	0.0000337	0.000440	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BC10408	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BC10408	Fluoride	mg/L	0.00175	0.125	2.50	2.53	2.56	2.54	2.25 to 2.75	101	80.0 to 120	1.18	20.0
BC10408	Iron, Total	mg/L	0.000083	0.0176	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BC10408	Lead, Total	mg/L	0.0000100	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10408	Lithium, Total	mg/L	0.000209	0.0154	0.200	0.203	0.203	0.204	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BC10408	Magnesium, Total	mg/L	-0.00569	0.0462	5.00	5.11	5.07	5.18	4.25 to 5.75	102	70.0 to 130	0.786	20.0
BC10408	Manganese, Total	mg/L	0.0000112	0.0002	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC10408	Mercury, Total by CVAA	mg/L	0.000134	0.000500	0.004	0.00425	0.00421	0.00400	0.00340 to 0.00460	106	70.0 to 130	0.946	20.0
BC10408	Molybdenum, Total	mg/L	-0.0000073	0.0002	0.100	0.0990	0.0981	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.913	20.0
BC10408	Potassium, Total	mg/L	0.0102	0.367	10.0	10.2	10.0	10.2	8.50 to 11.5	102	70.0 to 130	1.98	20.0
BC10408	Selenium, Total	mg/L	0.0000056	0.00100	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BC10408	Silicon, Total	mg/L	-0.000555	0.0440	1.00	1.01	1.01	1.02	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC10408	Sodium, Total	mg/L	0.00196	0.0660	5.00	5.16	5.17	5.17	4.25 to 5.75	103	70.0 to 130	0.194	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARPUEB

Sample Date: 5/31/22 16:45

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BC10408

Sample	Analysis	Units	MB	MB				Standard	Standard		Rec		Prec	Limit	
				Limit	Spike	MS	MSD		Limit	Rec	Limit	Prec			
BC10408	Sulfate	mg/L	-0.0817	2.0	20.0	20.1	20.4	19.0	18.0 to 22.0		100	80.0 to 120		1.48	20.0
BC10408	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115		106	70.0 to 130		0.948	20.0
BC10408	Total Organic Carbon	mg/L	0.160	1.00	10.0	10.0	10.2	25.1			100	80.0 to 120		1.98	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARPUEB

Sample Date: 5/31/22 16:45

Customer ID:

Delivery Date: 6/2/22 08:21

Description: Barry Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BC10408

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC10408	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.12	0.073	2.01	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10407	Solids, Dissolved	mg/L	0.0000	25.0			36.0	50.0	40.0 to 60.0			1.93	10.0

Comments:

Definitions

Project Number: WMWBARPU_1372

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
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.
PA	Precision is invalid due to sample concentration.
U	Compound was analyzed, but not detected.



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
		Location	Barry Pooled Upgradient

Bottles	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Samples relinquished to GSC Building 8 shipping lab on 06/01/22 @ 1554.
N/N, TOC pH < 2 SU. BC 06/02/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	05/31/2022	13:24	7	Groundwater		BC10402
MW-2	05/31/2022	14:28	7	Groundwater		BC10403
FB-1	05/31/2022	14:45	5	Field Blank		BC10404
MW-3	05/31/2022	15:22	7	Groundwater		BC10405
MW-3 dup	05/31/2022	15:22	7	Sample Duplicate		BC10406
MW-4	05/31/2022	16:24	7	Groundwater		BC10407
EB-1	05/31/2022	16:45	5	Equipment Blank		BC10408

Relinquished By	Received By	Date/Time
	Brooke Caton <small>Digitally signed by Brooke Caton Date: 2022.06.02 08:18:41 -05'00'</small>	06/02/2022 08:18

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	
Sample Event	1372	
Cooler Temp	1.9 °C	
Thermometer ID	7044-38281-2-1	
pH Strip ID	10275-59506-10-2	

Bottles/Pre-Preserved Bottles are provided by the GTL



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	Barry Pooled Upgradient

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-1. Samples relinquished to GSC Building 8 shipping lab on 06/01/22 @ 1555.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	05/31/2022	13:24	3	Groundwater		BC10409
MW-2	05/31/2022	14:28	1	Groundwater		BC10410
FB-1	05/31/2022	14:45	1	Field Blank		BC10411
MW-3	05/31/2022	15:22	1	Groundwater		BC10412
MW-3 dup	05/31/2022	15:22	1	Sample Duplicate		BC10413
MW-4	05/31/2022	16:24	1	Groundwater		BC10414
EB-1	05/31/2022	16:45	1	Equipment Blank		BC10415

Relinquished By	Received By	Date/Time
	Brooke Caton <small>Digitally signed by Brooke Caton Date: 2022.06.02 08:19:17 -05'00'</small>	06/02/2022 08:19

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20010-2-2
Sample Event	1372

All metals and radiological bottles have pH < 2

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	10275-59506-10-2

July 18, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWBARPU_1372
Pace Project No.: 30502759

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on June 08, 2022. 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: WMWBARPU_1372
Pace Project No.: 30502759

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30497264001	BC10409 MW-1	Water	05/31/22 13:24	06/08/22 10:55
30497264002	BC10409 MW-1 MS	Water	05/31/22 13:24	06/08/22 10:55
30497264003	BC10409 MW-1 MSD	Water	05/31/22 13:24	06/08/22 10:55
30497264004	BC10410 MW-2	Water	05/31/22 14:28	06/08/22 10:55
30497264005	BC10411 FB-1	Water	05/31/22 14:45	06/08/22 10:55
30497264006	BC10412 MW-3	Water	05/31/22 15:22	06/08/22 10:55
30497264007	BC10413 MW-3 Dup	Water	05/31/22 15:22	06/08/22 10:55
30497264008	BC10414 MW-4	Water	05/31/22 16:24	06/08/22 10:55
30497264009	BC10415 EB-1	Water	05/31/22 16:45	06/08/22 10:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWBARPU_1372
Pace Project No.: 30502759

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30497264001	BC10409 MW-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30497264002	BC10409 MW-1 MS	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30497264003	BC10409 MW-1 MSD	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30497264004	BC10410 MW-2	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30497264005	BC10411 FB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30497264006	BC10412 MW-3	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30497264007	BC10413 MW-3 Dup	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30497264008	BC10414 MW-4	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30497264009	BC10415 EB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WMWBARPU_1372
Pace Project No.: 30502759

Method: EPA 9315
Description: 9315 Total Radium
Client: Alabama Power
Date: July 18, 2022

General Information:

9 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:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WMWBARPU_1372

Pace Project No.: 30502759

Method: EPA 9320

Description: 9320 Radium 228

Client: Alabama Power

Date: July 18, 2022

General Information:

9 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:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WMWBARPU_1372
Pace Project No.: 30502759

Method: Total Radium Calculation
Description: Total Radium 228+226
Client: Alabama Power
Date: July 18, 2022

General Information:

7 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.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10409 MW-1 **Lab ID: 30497264001** Collected: 05/31/22 13:24 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.489 ± 0.227 (0.256) C:87% T:NA	pCi/L	07/11/22 09:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.849 ± 0.368 (0.583) C:70% T:95%	pCi/L	07/07/22 11:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.34 ± 0.595 (0.839)	pCi/L	07/11/22 22:45	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10409 MW-1 MS **Lab ID: 30497264002** Collected: 05/31/22 13:24 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	100.20 %REC ± NA (NA) C:NA T:NA	pCi/L	07/11/22 10:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	100.48 %REC ± NA (NA) C:NA T:NA	pCi/L	07/07/22 11:21	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10409 MW-1 MSD **Lab ID: 30497264003** Collected: 05/31/22 13:24 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	107.43 %REC 6.96 RPD ± NA (NA) C:NA T:NA	pCi/L	07/11/22 10:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	96.00 %REC 4.56 RPD ± NA (NA) C:NA T:NA	pCi/L	07/07/22 11:21	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10410 MW-2 **Lab ID: 30497264004** Collected: 05/31/22 14:28 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.599 ± 0.245 (0.238) C:88% T:NA	pCi/L	07/11/22 10:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.783 ± 0.376 (0.633) C:71% T:91%	pCi/L	07/07/22 11:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.38 ± 0.621 (0.871)	pCi/L	07/11/22 22:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10411 FB-1 **Lab ID: 30497264005** Collected: 05/31/22 14:45 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.205U ± 0.156 (0.242) C:91% T:NA	pCi/L	07/11/22 10:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.418U ± 0.295 (0.564) C:74% T:96%	pCi/L	07/07/22 11:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.623U ± 0.451 (0.806)	pCi/L	07/11/22 22:45	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10412 MW-3 **Lab ID: 30497264006** Collected: 05/31/22 15:22 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.393 ± 0.203 (0.247) C:93% T:NA	pCi/L	07/11/22 10:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.28 ± 0.477 (0.700) C:71% T:86%	pCi/L	07/07/22 11:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.67 ± 0.680 (0.947)	pCi/L	07/11/22 22:45	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10413 MW-3 Dup **Lab ID: 30497264007** Collected: 05/31/22 15:22 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.585 ± 0.243 (0.241) C:91% T:NA	pCi/L	07/11/22 10:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.768 ± 0.378 (0.645) C:70% T:92%	pCi/L	07/07/22 11:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.35 ± 0.621 (0.886)	pCi/L	07/11/22 22:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

Sample: BC10414 MW-4 **Lab ID: 30497264008** Collected: 05/31/22 16:24 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.469 ± 0.216 (0.222) C:91% T:NA	pCi/L	07/11/22 10:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.996 ± 0.362 (0.479) C:72% T:94%	pCi/L	07/07/22 11:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.47 ± 0.578 (0.701)	pCi/L	07/11/22 22:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARPU_1372
Pace Project No.: 30502759

Sample: BC10415 EB-1 **Lab ID: 30497264009** Collected: 05/31/22 16:45 Received: 06/08/22 10:55 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	0.107U ± 0.131 (0.264) C:93% T:NA	pCi/L	07/11/22 10:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.447U ± 0.321 (0.618) C:69% T:99%	pCi/L	07/07/22 11:21	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.554U ± 0.452 (0.882)	pCi/L	07/11/22 22:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

QC Batch: 511756

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30497264001, 30497264002, 30497264003, 30497264004, 30497264005, 30497264006, 30497264007, 30497264008, 30497264009

METHOD BLANK: 2480257

Matrix: Water

Associated Lab Samples: 30497264001, 30497264002, 30497264003, 30497264004, 30497264005, 30497264006, 30497264007, 30497264008, 30497264009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.215 ± 0.115 (0.148) C:93% T:NA	pCi/L	07/11/22 09:59	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARPU_1372

Pace Project No.: 30502759

QC Batch: 511755

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30497264001, 30497264002, 30497264003, 30497264004, 30497264005, 30497264006, 30497264007, 30497264008, 30497264009

METHOD BLANK: 2480254

Matrix: Water

Associated Lab Samples: 30497264001, 30497264002, 30497264003, 30497264004, 30497264005, 30497264006, 30497264007, 30497264008, 30497264009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.729 ± 0.340 (0.552) C:70% T:96%	pCi/L	07/07/22 11:25	

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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QUALIFIERS

Project: WMWBARPU_1372

Pace Project No.: 30502759

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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWBARPU_1372
Pace Project No.: 30502759

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30497264001	BC10409 MW-1	EPA 9315	511756		
30497264002	BC10409 MW-1 MS	EPA 9315	511756		
30497264003	BC10409 MW-1 MSD	EPA 9315	511756		
30497264004	BC10410 MW-2	EPA 9315	511756		
30497264005	BC10411 FB-1	EPA 9315	511756		
30497264006	BC10412 MW-3	EPA 9315	511756		
30497264007	BC10413 MW-3 Dup	EPA 9315	511756		
30497264008	BC10414 MW-4	EPA 9315	511756		
30497264009	BC10415 EB-1	EPA 9315	511756		
30497264001	BC10409 MW-1	EPA 9320	511755		
30497264002	BC10409 MW-1 MS	EPA 9320	511755		
30497264003	BC10409 MW-1 MSD	EPA 9320	511755		
30497264004	BC10410 MW-2	EPA 9320	511755		
30497264005	BC10411 FB-1	EPA 9320	511755		
30497264006	BC10412 MW-3	EPA 9320	511755		
30497264007	BC10413 MW-3 Dup	EPA 9320	511755		
30497264008	BC10414 MW-4	EPA 9320	511755		
30497264009	BC10415 EB-1	EPA 9320	511755		
30497264001	BC10409 MW-1	Total Radium Calculation	517875		
30497264004	BC10410 MW-2	Total Radium Calculation	517875		
30497264005	BC10411 FB-1	Total Radium Calculation	517875		
30497264006	BC10412 MW-3	Total Radium Calculation	517875		
30497264007	BC10413 MW-3 Dup	Total Radium Calculation	517875		
30497264008	BC10414 MW-4	Total Radium Calculation	517875		
30497264009	BC10415 EB-1	Total Radium Calculation	517875		

REPORT OF LABORATORY ANALYSIS

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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 #: APC10755638
 Project Name: Plant Barry Pooled Upgradient
 Project Number: VMWBARPU_1372

Attention: Brooke Caton
 Company Name: Alabama Power Co.
 Address: 744 Highway 87 GSC Bldg #8
 PACE Quote: CCR
 PACE Project Manager: Skivler Richmond
 PACE Profile #: 16788

Regulatory Agency
 State / Location: AL

ITEM #	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		# OF CONTAINERS	Preservatives		Y/N	Requested Analysis Filtered (Y/N)	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)	Custody (Y/N)	Sealed (Y/N)	Cooler (Y/N)	Intact (Y/N)	
									DATE	TIME		H2SO4	HNO3											
1	BC10409	MW-1	APCO-BY-UP-MW-1	APCO_Barry_Pooled_Upgradient	X		GW	G	5/31/2022	13:24	3				X	X	X							
2	BC10410	MW-2	APCO-BY-UP-MW-2	APCO_Barry_Pooled_Upgradient			GW	G	5/31/2022	14:28	1	X			X	X	X							
3	BC10411	FB-1	APCO-BY-UP-FB-01	APCO_Barry_Pooled_Upgradient			GW	G	5/31/2022	14:45	1	X			X	X	X							
4	BC10412	MW-3	APCO-BY-UP-MW-3	APCO_Barry_Pooled_Upgradient			GW	G	5/31/2022	15:22	1	X			X	X	X							
5	BC10413	MW-3 Dup	APCO-BY-UP-MW-3	APCO_Barry_Pooled_Upgradient	X		GW	G	5/31/2022	15:22	1	X			X	X	X							
6	BC10414	MW-4	APCO-BY-UP-MW-4	APCO_Barry_Pooled_Upgradient			GW	G	5/31/2022	16:24	1	X			X	X	X							
7	BC10415	EB-1	APCO-BY-UP-EB-01	APCO_Barry_Pooled_Upgradient			GW	G	5/31/2022	16:45	1	X			X	X	X							
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION: Brooke Caton/ APC GTL

DATE: 6/3/2022

TIME: 7:46

ACCEPTED BY / AFFILIATION: *[Signature]*

DATE: 08-22

TIME: 10:59

SAMPLER NAME AND SIGNATURE: *[Signature]*

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER: *[Signature]*

DATE Signed: *[Signature]*

TEMP in C

Received on

Ice (Y/N)

Custody (Y/N)

Sealed (Y/N)

Cooler (Y/N)

Intact (Y/N)

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 6/19/2022
Worklist: 67288
Matrix: DW

Method Blank Assessment	
MB Sample ID	2480257
MB concentration:	0.215
MB Counting Uncertainty:	0.111
MB MDC:	0.148
MB Numerical Performance Indicator:	3.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment		LCS (Y or N)?	Y
Count Date:	7/11/2022	LCS67288	7/11/2022
Spike I.D.:	19-033	LCS67288	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.026		24.026
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.505		0.506
Target Conc. (pCi/L, g, F):	4.756		4.747
Uncertainty (Calculated):	0.057		0.057
Result (pCi/L, g, F):	4.603		4.462
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.465		0.446
Numerical Performance Indicator:	-0.64		-1.25
Percent Recovery:	96.77%		93.98%
Status vs Numerical Indicator:	N/A		N/A
Status vs Recovery:	Pass		Pass
Upper % Recovery Limits:	125%		125%
Lower % Recovery Limits:	75%		75%

Duplicate Sample Assessment	
Sample I.D.:	LCS67288
Duplicate Sample I.D.:	LCS67288
Sample Result (pCi/L, g, F):	4.603
Sample Result Counting Uncertainty (pCi/L, g, F):	0.465
Sample Duplicate Result (pCi/L, g, F):	4.462
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.446
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	0.429
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.93%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

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

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

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/31/2022	30497264001	
Sample I.D.:	30497264002	30497264003	
Sample MS I.D.:	19-033		
Sample MSD I.D.:	24.027		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	0.20		
Spike Volume Used in MS (mL):	0.20		
Spike Volume Used in MSD (mL):	0.308		
MS Aliquot (L, g, F):	15.619		
MS Target Conc.(pCi/L, g, F):	0.275		
MSD Aliquot (L, g, F):	17.494		
MSD Target Conc. (pCi/L, g, F):	0.187		
MS Spike Uncertainty (calculated):	0.210		
MSD Spike Uncertainty (calculated):	0.489		
Sample Result Counting Uncertainty (pCi/L, g, F):	0.216		
Sample Matrix Spike Result:	16.140		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.094		
Sample Matrix Spike Duplicate Result:	19.283		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.262		
MS Numerical Performance Indicator:	0.054		
MSD Numerical Performance Indicator:	1.964		
MS Percent Recovery:	100.20%		
MSD Percent Recovery:	107.43%		
MS Status vs Numerical Indicator:	N/A		
MSD Status vs Numerical Indicator:	N/A		
MS Status vs Recovery:	Pass		
MSD Status vs Recovery:	Pass		
MS/MSD Upper % Recovery Limits:	125%		
MS/MSD Lower % Recovery Limits:	75%		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30497264001
Sample MS I.D.:	30497264002
Sample MSD I.D.:	16.140
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.094
Sample Matrix Spike Duplicate Result:	19.283
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.262
Duplicate Numerical Performance Indicator:	-3.687
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	6.96%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 6/17/2022
Worklist: 67287
Matrix: WI

Method Blank Assessment	
MB Sample ID	2480254
MB concentration:	0.729
M/B 2 Sigma CSU:	0.340
MB MDC:	0.552
MB Numerical Performance Indicator:	4.21
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS67287	N LCS67287
Count Date:	7/7/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.124	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.809	
Target Conc. (pCi/L, g, F):	4.344	
Uncertainty (Calculated):	0.213	
Result (pCi/L, g, F):	3.828	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.860	
Numerical Performance Indicator:	-1.14	
Percent Recovery:	88.11%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	See Below ##
Duplicate Sample I.D.:	
Sample Result (pCi/L, g, F):	
Sample Duplicate Result (pCi/L, g, F):	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	
Are sample and/or duplicate results below RL?	
Duplicate Numerical Performance Indicator:	
Duplicate RPD:	
Duplicate Status vs Numerical Indicator:	
Duplicate Status vs RPD:	
% RPD Limit:	

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

Comments:

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

Handwritten signature/initials

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/31/2022	
Sample I.D.:	30497264001	
Sample MS I.D.:	30497264002	
Sample MSD I.D.:	30497264003	
Spike I.D.:	22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	35.554	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.806	
MS Target Conc. (pCi/L, g, F):	8.818	
MSD Aliquot (L, g, F):	0.810	
MSD Target Conc. (pCi/L, g, F):	8.784	
MS Spike Uncertainty (calculated):	0.432	
MSD Spike Uncertainty (calculated):	0.430	
Sample Result:	0.849	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.368	
Sample Matrix Spike Result:	9.709	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.924	
Sample Matrix Spike Duplicate Result:	9.282	
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.838	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.041	
MS Numerical Performance Indicator:	-0.358	
MSD Numerical Performance Indicator:	100.48%	
MS Percent Recovery:	96.00%	
MSD Percent Recovery:	Pass	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	135%	
MS/MSD Upper % Recovery Limits:	60%	
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	MS/MSD 1	MS/MSD 2
Sample I.D.:	30497264001	
Sample MS I.D.:	30497264002	
Sample MSD I.D.:	30497264003	
Sample Matrix Spike Result:	9.709	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.924	
Sample Matrix Spike Duplicate Result:	9.282	
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.838	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.315	
Duplicate Numerical Performance Indicator:	4.56%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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

Analytical Report



Sample Group : WMWBARAP_1367

Project/Site : Barry Ash Pond
Bucks, AL 36512

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

June 15, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between May 25, 2022 and May 26, 2022. 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, 2022

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: 2022.06.16
10:52:56 -05'00'

Supervision: **T Durant
Maske**

Digitally signed by T Durant Maske
DN: cn=T. Durant Maske, gn=T. Durant Maske, o=US
United States, +u.S. United States
e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-06-16 11:07:05:00



REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted.
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Alabama Power's General Test Laboratory.



Total Metals ICP

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	728050	WMWBARAP_1367
BC09975	728050	WMWBARAP_1367
BC09976	728050	WMWBARAP_1367
BC09977	728050	WMWBARAP_1367
BC09978	728050	WMWBARAP_1367
BC09979	728050	WMWBARAP_1367
BC09980	728050	WMWBARAP_1367
BC09981	728050	WMWBARAP_1367
BC09982	728050	WMWBARAP_1367
BC09983	728050	WMWBARAP_1367
BC09984	728051	WMWBARAP_1367
BC09985	728051	WMWBARAP_1367
BC09986	728051	WMWBARAP_1367
BC09987	728051	WMWBARAP_1367
BC09988	728051	WMWBARAP_1367
BC09989	728051	WMWBARAP_1367
BC09990	728051	WMWBARAP_1367
BC09991	728051	WMWBARAP_1367
BC09992	728051	WMWBARAP_1367
BC09993	728051	WMWBARAP_1367
BC09994	728052	WMWBARAP_1367
BC09995	728052	WMWBARAP_1367
BC09996	728052	WMWBARAP_1367
BC09997	728052	WMWBARAP_1367
BC09998	728052	WMWBARAP_1367
BC09999	728052	WMWBARAP_1367
BC10000	728052	WMWBARAP_1367
BC10001	728052	WMWBARAP_1367
BC10111	728052	WMWBARAP_1367
BC10112	728052	WMWBARAP_1367
BC10113	728053	WMWBARAP_1367

BC10114	728053	WMWBARAP_1367
BC10115	728053	WMWBARAP_1367
BC10116	728053	WMWBARAP_1367
BC10117	728053	WMWBARAP_1367
BC10118	728053	WMWBARAP_1367
BC10119	728053	WMWBARAP_1367
BC10120	728053	WMWBARAP_1367
BC10121	728053	WMWBARAP_1367
BC10122	728053	WMWBARAP_1367
BC10123	728054	WMWBARAP_1367
BC10124	728054	WMWBARAP_1367
BC10125	728054	WMWBARAP_1367
BC10126	728054	WMWBARAP_1367
BC10127	728054	WMWBARAP_1367
BC10128	728054	WMWBARAP_1367
BC10129	728054	WMWBARAP_1367

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:
 - BC09983 Iron and Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
 - BC09993 Iron and Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
 - BC10112 Iron MS/MSD spike levels were less than 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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC09974	Iron, Sodium	50.75
BC09975	Iron	50.75
BC09976	Iron, Sodium	50.75
BC09977	Iron	50.75
BC09979	Calcium, Iron	50.75
BC09981	Calcium, Iron	50.75
BC09982	Iron, Sodium	50.75
BC09983	Iron, Sodium	50.75
BC09984	Iron	50.75
BC09985	Iron, Sodium	50.75
BC09986	Iron	50.75
BC09987	Iron, Sodium	50.75
BC09988	Iron	50.75
BC09989	Iron	50.75
BC09991	Iron, Sodium	50.75
BC09992	Iron	50.75
BC09993	Iron, Sodium	50.75
BC09994	Iron, Sodium	50.75
BC09995	Iron, Sodium	50.75
BC09996	Iron, Sodium	50.75
BC09997	Iron, Sodium	50.75
BC09998	Iron, Sodium	50.75
BC09999	Calcium, Iron	50.75

Case Narrative

BC10000	Sodium	50.75
BC10111	Iron, Sodium	50.75
BC10112	Iron, Sodium	50.75
BC10113	Iron	50.75
BC10114	Iron	50.75
BC10115	Iron, Sodium	20.3
BC10116	Iron	50.75
BC10118	Calcium, Sodium	20.3
BC10119	Iron	50.75
BC10120	Sodium	20.3
BC10121	Iron	50.75
BC10126	Iron	50.75

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

Dissolved Metals ICP

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	727585	WMWBARAP_1367
BC09975	727585	WMWBARAP_1367
BC09976	727585	WMWBARAP_1367
BC09977	727585	WMWBARAP_1367
BC09979	727585	WMWBARAP_1367
BC09981	727585	WMWBARAP_1367
BC09982	727585	WMWBARAP_1367
BC09983	727585	WMWBARAP_1367
BC09984	727585	WMWBARAP_1367
BC09985	727585	WMWBARAP_1367
BC09986	727586	WMWBARAP_1367
BC09987	727586	WMWBARAP_1367
BC09988	727586	WMWBARAP_1367
BC09989	727586	WMWBARAP_1367
BC09991	727586	WMWBARAP_1367
BC09992	727586	WMWBARAP_1367
BC09993	727586	WMWBARAP_1367
BC09994	727586	WMWBARAP_1367
BC09995	727586	WMWBARAP_1367
BC09996	727586	WMWBARAP_1367
BC09997	727587	WMWBARAP_1367
BC09998	727587	WMWBARAP_1367
BC09999	727587	WMWBARAP_1367
BC10000	727587	WMWBARAP_1367
BC10001	727587	WMWBARAP_1367
BC10111	727587	WMWBARAP_1367
BC10112	727587	WMWBARAP_1367
BC10113	727587	WMWBARAP_1367
BC10114	727587	WMWBARAP_1367
BC10115	727587	WMWBARAP_1367
BC10116	727588	WMWBARAP_1367

BC10117	727588	WMWBARAP_1367
BC10118	727588	WMWBARAP_1367
BC10119	727588	WMWBARAP_1367
BC10120	727588	WMWBARAP_1367
BC10121	727588	WMWBARAP_1367
BC10122	727588	WMWBARAP_1367
BC10124	727588	WMWBARAP_1367
BC10125	727588	WMWBARAP_1367
BC10126	727588	WMWBARAP_1367
BC10127	727589	WMWBARAP_1367
BC10128	727589	WMWBARAP_1367

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.

Case Narrative

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
 - BC09985 Iron MS/MSD spike levels were less than 30% of the sample concentrations.
 - BC09996 Iron MS/MSD spike levels were less than 30% of the sample concentrations.
 - BC10115 Iron and Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
 - BC10126 Iron MS/MSD spike levels were less than 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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC09974	Iron, Sodium	50.75
BC09975	Iron	50.75
BC09976	Iron, Sodium	50.75
BC09977	Iron	50.75
BC09979	Calcium, Iron	50.75
BC09981	Calcium, Iron	50.75
BC09982	Iron, Sodium	50.75
BC09983	Iron, Sodium	50.75
BC09984	Iron	50.75
BC09985	Iron, Sodium	50.75
BC09986	Iron	50.75
BC09987	Iron, Sodium	50.75
BC09988	Iron	50.75
BC09989	Iron	50.75
BC09991	Iron, Sodium	50.75
BC09992	Iron	50.75
BC09993	Iron, Sodium	50.75
BC09994	Iron, Sodium	50.75
BC09995	Iron, Sodium	50.75
BC09996	Iron, Sodium	50.75
BC09997	Iron, Sodium	50.75
BC09998	Iron, Sodium	50.75
BC09999	Calcium, Iron	50.75
BC10000	Sodium	50.75
BC10111	Iron, Sodium	50.75
BC10112	Iron, Sodium	50.75
BC10113	Iron	50.75
BC10114	Iron	50.75

Case Narrative

BC10115	Sodium	10.15
BC10116	Iron	50.75
BC10118	Calcium, Sodium	20.3
BC10119	Iron	50.75
BC10120	Sodium	20.3
BC10121	Iron	50.75
BC10126	Iron	50.75

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

Total Metals ICPMS

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	728138	WMWBARAP_1367
BC09975	728138	WMWBARAP_1367
BC09976	728138	WMWBARAP_1367
BC09977	728138	WMWBARAP_1367
BC09978	728138	WMWBARAP_1367
BC09979	728138	WMWBARAP_1367
BC09980	728138	WMWBARAP_1367
BC09981	728138	WMWBARAP_1367
BC09982	728138	WMWBARAP_1367
BC09983	728138	WMWBARAP_1367
BC09984	728139	WMWBARAP_1367
BC09985	728139	WMWBARAP_1367
BC09986	728139	WMWBARAP_1367
BC09987	728139	WMWBARAP_1367
BC09988	728139	WMWBARAP_1367
BC09989	728139	WMWBARAP_1367
BC09990	728139	WMWBARAP_1367
BC09991	728139	WMWBARAP_1367
BC09992	728139	WMWBARAP_1367
BC09993	728139	WMWBARAP_1367
BC09994	728140	WMWBARAP_1367
BC09995	728140	WMWBARAP_1367
BC09996	728140	WMWBARAP_1367
BC09997	728140	WMWBARAP_1367
BC09998	728140	WMWBARAP_1367
BC09999	728140	WMWBARAP_1367
BC10000	728140	WMWBARAP_1367
BC10001	728140	WMWBARAP_1367
BC10111	728140	WMWBARAP_1367
BC10112	728140	WMWBARAP_1367
BC10113	728141	WMWBARAP_1367

BC10114	728141	WMWBARAP_1367
BC10115	728141	WMWBARAP_1367
BC10116	728141	WMWBARAP_1367
BC10117	728141	WMWBARAP_1367
BC10118	728141	WMWBARAP_1367
BC10119	728141	WMWBARAP_1367
BC10120	728141	WMWBARAP_1367
BC10121	728141	WMWBARAP_1367
BC10122	728141	WMWBARAP_1367
BC10123	728142	WMWBARAP_1367
BC10124	728142	WMWBARAP_1367
BC10125	728142	WMWBARAP_1367
BC10126	728142	WMWBARAP_1367
BC10127	728142	WMWBARAP_1367
BC10128	728142	WMWBARAP_1367
BC10129	728142	WMWBARAP_1367

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, except for the following:
 - BC10112 Aluminum MS and/or MSD recovery is outside specification limits.
 - 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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC09977	Manganese	5.075
BC09979	Manganese	5.075
BC09984	Manganese	5.075
BC09992	Manganese	5.075
BC09995	Manganese	5.075
BC09996	Manganese	5.075
BC09997	Manganese	5.075
BC10118	Manganese	5.075

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

Dissolved Metals ICPMS

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	728138	WMWBARAP_1367
BC09975	728138	WMWBARAP_1367
BC09976	728138	WMWBARAP_1367
BC09977	728138	WMWBARAP_1367
BC09979	728138	WMWBARAP_1367
BC09981	728138	WMWBARAP_1367
BC09982	728138	WMWBARAP_1367
BC09983	728138	WMWBARAP_1367
BC09984	728139	WMWBARAP_1367
BC09985	728139	WMWBARAP_1367
BC09986	728139	WMWBARAP_1367
BC09987	728139	WMWBARAP_1367
BC09988	728139	WMWBARAP_1367
BC09989	728139	WMWBARAP_1367
BC09991	728139	WMWBARAP_1367
BC09992	728139	WMWBARAP_1367
BC09993	728139	WMWBARAP_1367
BC09994	728140	WMWBARAP_1367
BC09995	728140	WMWBARAP_1367
BC09996	728140	WMWBARAP_1367
BC09997	728140	WMWBARAP_1367
BC09998	728140	WMWBARAP_1367
BC09999	728140	WMWBARAP_1367
BC10000	728140	WMWBARAP_1367
BC10001	728140	WMWBARAP_1367
BC10111	728140	WMWBARAP_1367
BC10112	728140	WMWBARAP_1367
BC10113	728141	WMWBARAP_1367
BC10114	728141	WMWBARAP_1367
BC10115	728141	WMWBARAP_1367
BC10116	728141	WMWBARAP_1367

BC10117	728141	WMWBARAP_1367
BC10118	728141	WMWBARAP_1367
BC10119	728141	WMWBARAP_1367
BC10120	728141	WMWBARAP_1367
BC10121	728141	WMWBARAP_1367
BC10122	728141	WMWBARAP_1367
BC10124	728142	WMWBARAP_1367
BC10125	728142	WMWBARAP_1367
BC10126	728142	WMWBARAP_1367
BC10127	728142	WMWBARAP_1367
BC10128	728142	WMWBARAP_1367

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, except for the following:
 - BC09996 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
 - BC10126 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
 - 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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC09977	Manganese	5.075
BC09979	Manganese	5.075
BC09984	Manganese	5.075
BC09992	Manganese	5.075
BC09996	Manganese	5.075
BC09997	Manganese	5.075
BC10118	Manganese	5.075

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

Mercury

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	727489	WMWBARAP_1367
BC09975	727489	WMWBARAP_1367
BC09976	727489	WMWBARAP_1367
BC09977	727489	WMWBARAP_1367
BC09978	727489	WMWBARAP_1367
BC09979	727489	WMWBARAP_1367
BC09980	727489	WMWBARAP_1367
BC09981	727489	WMWBARAP_1367
BC09982	727489	WMWBARAP_1367
BC09983	727489	WMWBARAP_1367
BC09984	727490	WMWBARAP_1367
BC09985	727490	WMWBARAP_1367
BC09986	727490	WMWBARAP_1367
BC09987	727490	WMWBARAP_1367
BC09988	727490	WMWBARAP_1367
BC09989	727490	WMWBARAP_1367
BC09990	727490	WMWBARAP_1367
BC09991	727490	WMWBARAP_1367
BC09992	727490	WMWBARAP_1367
BC09993	727490	WMWBARAP_1367
BC09994	728312	WMWBARAP_1367
BC09995	728312	WMWBARAP_1367
BC09996	728312	WMWBARAP_1367
BC09997	728312	WMWBARAP_1367
BC09998	728312	WMWBARAP_1367
BC09999	728312	WMWBARAP_1367
BC10000	728312	WMWBARAP_1367
BC10001	728312	WMWBARAP_1367
BC10111	728312	WMWBARAP_1367
BC10112	728312	WMWBARAP_1367
BC10113	728313	WMWBARAP_1367

BC10114	728313	WMWBARAP_1367
BC10115	728313	WMWBARAP_1367
BC10116	728313	WMWBARAP_1367
BC10117	728313	WMWBARAP_1367
BC10118	728313	WMWBARAP_1367
BC10119	728313	WMWBARAP_1367
BC10120	728313	WMWBARAP_1367
BC10121	728313	WMWBARAP_1367
BC10122	728313	WMWBARAP_1367
BC10123	728314	WMWBARAP_1367
BC10124	728314	WMWBARAP_1367
BC10125	728314	WMWBARAP_1367
BC10126	728314	WMWBARAP_1367
BC10127	728314	WMWBARAP_1367
BC10128	728314	WMWBARAP_1367
BC10129	728314	WMWBARAP_1367

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.

Revision 5

- 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.

Total Dissolved Solids

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	727313	WMWBARAP_1367
BC09975	727313	WMWBARAP_1367
BC09976	727313	WMWBARAP_1367
BC09977	727313	WMWBARAP_1367
BC09978	727313	WMWBARAP_1367
BC09979	727313	WMWBARAP_1367
BC09980	727313	WMWBARAP_1367
BC09981	727664	WMWBARAP_1367
BC09982	727664	WMWBARAP_1367
BC09983	727665	WMWBARAP_1367
BC09984	727313	WMWBARAP_1367
BC09985	727313	WMWBARAP_1367
BC09986	727313	WMWBARAP_1367
BC09987	727314	WMWBARAP_1367
BC09988	727314	WMWBARAP_1367
BC09989	727314	WMWBARAP_1367
BC09990	727314	WMWBARAP_1367
BC09991	727664	WMWBARAP_1367
BC09992	727664	WMWBARAP_1367
BC09993	727665	WMWBARAP_1367
BC09994	727314	WMWBARAP_1367
BC09995	727314	WMWBARAP_1367
BC09996	727314	WMWBARAP_1367
BC09997	727314	WMWBARAP_1367
BC09998	727314	WMWBARAP_1367
BC09999	727314	WMWBARAP_1367
BC10000	727664	WMWBARAP_1367
BC10001	727665	WMWBARAP_1367
BC10111	727706	WMWBARAP_1367
BC10112	727706	WMWBARAP_1367
BC10113	727706	WMWBARAP_1367

BC10114	727706	WMWBARAP_1367
BC10115	727706	WMWBARAP_1367
BC10116	727706	WMWBARAP_1367
BC10117	727706	WMWBARAP_1367
BC10118	727706	WMWBARAP_1367
BC10119	727707	WMWBARAP_1367
BC10120	727707	WMWBARAP_1367
BC10121	727707	WMWBARAP_1367
BC10122	727707	WMWBARAP_1367
BC10123	727707	WMWBARAP_1367
BC10124	727707	WMWBARAP_1367
BC10125	727707	WMWBARAP_1367
BC10126	727707	WMWBARAP_1367
BC10127	727707	WMWBARAP_1367
BC10128	727707	WMWBARAP_1367
BC10129	727760	WMWBARAP_1367

4. All of the above samples were analyzed and prepared 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. RPD/2 was less than 5%.
- 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:
 - BC09978
 - BC09980
 - BC09990
 - BC10123
 - BC10129

Alkalinity

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	727744,727745	WMWBARAP_1367
BC09975	728143,728144	WMWBARAP_1367
BC09976	728143,728144	WMWBARAP_1367
BC09977	728143,728144	WMWBARAP_1367
BC09979	728367,728368	WMWBARAP_1367
BC09981	728367,728368	WMWBARAP_1367
BC09982	728367,728368	WMWBARAP_1367
BC09983	728367,728368	WMWBARAP_1367
BC09984	728143,728144	WMWBARAP_1367
BC09985	728143,728144	WMWBARAP_1367
BC09986	728143,728144	WMWBARAP_1367
BC09987	728143,728144	WMWBARAP_1367
BC09988	728367,728368	WMWBARAP_1367
BC09989	728367,728368	WMWBARAP_1367
BC09991	728367,728368	WMWBARAP_1367
BC09992	728367,728368	WMWBARAP_1367
BC09993	728367,728368	WMWBARAP_1367
BC09994	728180,728181	WMWBARAP_1367
BC09995	728180,728181	WMWBARAP_1367
BC09996	728180,728181	WMWBARAP_1367
BC09997	728180,728181	WMWBARAP_1367
BC09998	728180,728181	WMWBARAP_1367
BC09999	728367,728368	WMWBARAP_1367
BC10000	728367,728368	WMWBARAP_1367
BC10001	728367,728368	WMWBARAP_1367
BC10111	728541,728542	WMWBARAP_1367
BC10112	728541,728542	WMWBARAP_1367
BC10113	728549,728550	WMWBARAP_1367
BC10114	728549,728550	WMWBARAP_1367
BC10115	728562,728563	WMWBARAP_1367
BC10116	728562,728563	WMWBARAP_1367

BC10117	728562,728563	WMWBARAP_1367
BC10118	728541,728542	WMWBARAP_1367
BC10119	728541,728542	WMWBARAP_1367
BC10120	728541,728542	WMWBARAP_1367
BC10121	728562,728563	WMWBARAP_1367
BC10122	728562,728563	WMWBARAP_1367
BC10124	728541,728542	WMWBARAP_1367
BC10125	728549,728550	WMWBARAP_1367
BC10126	728562,728563	WMWBARAP_1367
BC10127	728562,728563	WMWBARAP_1367
BC10128	728562,728563	WMWBARAP_1367

4. All of the above samples were analyzed and prepared by Standard Method 2320B.
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:
 - BC09993
 - BC10118

Anions

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	728172,728640,728614	WMWBARAP_1367
BC09975	728172,728640,728614	WMWBARAP_1367
BC09976	728172,728640,728614	WMWBARAP_1367
BC09977	728172,728640,728614	WMWBARAP_1367
BC09978	728172,728640,728614	WMWBARAP_1367
BC09979	728172,728640,728614	WMWBARAP_1367
BC09980	728172,728640,728614	WMWBARAP_1367
BC09981	728172,728640,728614	WMWBARAP_1367
BC09982	728172,728640,728614	WMWBARAP_1367
BC09983	728172,728640,728614	WMWBARAP_1367
BC09984	728173,728641,728615	WMWBARAP_1367
BC09985	728173,728641,728615	WMWBARAP_1367
BC09986	728173,728641,728615	WMWBARAP_1367
BC09987	728173,728641,728615	WMWBARAP_1367
BC09988	728173,728641,728615	WMWBARAP_1367
BC09989	728173,728641,728615	WMWBARAP_1367
BC09990	728173,728641,728615	WMWBARAP_1367
BC09991	728173,728641,728615	WMWBARAP_1367
BC09992	728173,728641,728615	WMWBARAP_1367
BC09993	728173,728641,728615	WMWBARAP_1367
BC09994	728174,728642,728616	WMWBARAP_1367
BC09995	728174,728642,728616	WMWBARAP_1367
BC09996	728174,728642,728616	WMWBARAP_1367
BC09997	728174,728642,728616	WMWBARAP_1367
BC09998	728174,728642,728616	WMWBARAP_1367
BC09999	728174,728642,728616	WMWBARAP_1367
BC10000	728174,728642,728616	WMWBARAP_1367
BC10001	728174,728642,728616	WMWBARAP_1367
BC10111	728174,728642,728616	WMWBARAP_1367
BC10112	728174,728642,728616	WMWBARAP_1367
BC10113	728175,728643,728617	WMWBARAP_1367

BC10114	728175,728643,728617	WMWBARAP_1367
BC10115	728175,728643,728617	WMWBARAP_1367
BC10116	728175,728643,728617	WMWBARAP_1367
BC10117	728175,728643,728617	WMWBARAP_1367
BC10118	728175,728643,728617	WMWBARAP_1367
BC10119	728175,728643,728617	WMWBARAP_1367
BC10120	728175,728643,728617	WMWBARAP_1367
BC10121	728175,728643,728617	WMWBARAP_1367
BC10122	728175,728643,728617	WMWBARAP_1367
BC10123	728177,728644,728618	WMWBARAP_1367
BC10124	728177,728644,728618	WMWBARAP_1367
BC10125	728177,728644,728618	WMWBARAP_1367
BC10126	728177,728644,728618	WMWBARAP_1367
BC10127	728177,728644,728618	WMWBARAP_1367
BC10128	728177,728644,728618	WMWBARAP_1367
BC10129	728177,728644,728618	WMWBARAP_1367

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, & 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 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.

Case Narrative

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met, except for the following:
 - BC09983 Sulfate MS and/or MSD recovery is outside of the specification limits.
 - A sample duplicate was analyzed with each batch. 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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
BC09974	Chloride, Sulfate	3,4
BC09975	Chloride	2
BC09976	Chloride, Sulfate	4,4
BC09977	Chloride	2
BC09979	Chloride	2
BC09981	Chloride	2
BC09982	Chloride	4
BC09983	Chloride, Sulfate	4,2
BC09985	Chloride	4
BC09987	Chloride	20
BC09991	Chloride	10
BC09993	Chloride	20
BC09994	Chloride	3
BC09995	Chloride	3
BC09996	Chloride	3
BC09997	Chloride	3
BC09998	Chloride	4
BC09999	Chloride	3
BC10000	Chloride	10
BC10111	Chloride, Sulfate	10,4
BC10112	Chloride, Sulfate	10,8
BC10113	Chloride	10
BC10114	Chloride	10
BC10115	Chloride	10
BC10118	Chloride, Sulfate	40,2
BC10120	Chloride	20
BC10127	Chloride	3

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

Nitrate-Nitrite

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	727376	WMWBARAP_1367
BC09975	727376	WMWBARAP_1367
BC09976	727376	WMWBARAP_1367
BC09977	727376	WMWBARAP_1367
BC09978	727376	WMWBARAP_1367
BC09979	727376	WMWBARAP_1367
BC09980	727376	WMWBARAP_1367
BC09981	727376	WMWBARAP_1367
BC09982	727376	WMWBARAP_1367
BC09983	727376	WMWBARAP_1367
BC09984	727377	WMWBARAP_1367
BC09985	727377	WMWBARAP_1367
BC09986	727377	WMWBARAP_1367
BC09987	727377	WMWBARAP_1367
BC09988	727377	WMWBARAP_1367
BC09989	727377	WMWBARAP_1367
BC09990	727377	WMWBARAP_1367
BC09991	727377	WMWBARAP_1367
BC09992	727377	WMWBARAP_1367
BC09993	727377	WMWBARAP_1367
BC09994	727378	WMWBARAP_1367
BC09995	727378	WMWBARAP_1367
BC09996	727378	WMWBARAP_1367
BC09997	727378	WMWBARAP_1367
BC09998	727378	WMWBARAP_1367
BC09999	727378	WMWBARAP_1367
BC10000	727378	WMWBARAP_1367
BC10001	727378	WMWBARAP_1367
BC10111	727708	WMWBARAP_1367
BC10112	727708	WMWBARAP_1367
BC10113	727708	WMWBARAP_1367

BC10114	727708	WMWBARAP_1367
BC10115	727708	WMWBARAP_1367
BC10116	727708	WMWBARAP_1367
BC10117	727708	WMWBARAP_1367
BC10118	727708	WMWBARAP_1367
BC10119	727708	WMWBARAP_1367
BC10120	727708	WMWBARAP_1367
BC10121	727709	WMWBARAP_1367
BC10122	727709	WMWBARAP_1367
BC10123	727709	WMWBARAP_1367
BC10124	727709	WMWBARAP_1367
BC10125	727709	WMWBARAP_1367
BC10126	727709	WMWBARAP_1367
BC10127	727709	WMWBARAP_1367
BC10128	727709	WMWBARAP_1367
BC10129	727709	WMWBARAP_1367

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.

Total Organic Carbon

Barry Ash Pond

WMWBARAP_1367

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
BC09974	727710	WMWBARAP_1367
BC09975	727710	WMWBARAP_1367
BC09976	727710	WMWBARAP_1367
BC09977	727710	WMWBARAP_1367
BC09978	727710	WMWBARAP_1367
BC09979	727710	WMWBARAP_1367
BC09980	727710	WMWBARAP_1367
BC09981	727710	WMWBARAP_1367
BC09982	727710	WMWBARAP_1367
BC09983	727710	WMWBARAP_1367
BC09984	727711	WMWBARAP_1367
BC09985	727711	WMWBARAP_1367
BC09986	727711	WMWBARAP_1367
BC09987	727711	WMWBARAP_1367
BC09988	727711	WMWBARAP_1367
BC09989	727711	WMWBARAP_1367
BC09990	727711	WMWBARAP_1367
BC09991	727711	WMWBARAP_1367
BC09992	727711	WMWBARAP_1367
BC09993	727711	WMWBARAP_1367
BC09994	727712	WMWBARAP_1367
BC09995	727712	WMWBARAP_1367
BC09996	727712	WMWBARAP_1367
BC09997	727712	WMWBARAP_1367
BC09998	727712	WMWBARAP_1367
BC09999	727712	WMWBARAP_1367
BC10000	727712	WMWBARAP_1367
BC10001	727712	WMWBARAP_1367
BC10111	728184	WMWBARAP_1367
BC10112	728184	WMWBARAP_1367
BC10113	728184	WMWBARAP_1367

BC10114	728184	WMWBARAP_1367
BC10115	728184	WMWBARAP_1367
BC10116	728184	WMWBARAP_1367
BC10117	728184	WMWBARAP_1367
BC10118	728184	WMWBARAP_1367
BC10119	728184	WMWBARAP_1367
BC10120	728184	WMWBARAP_1367
BC10121	728185	WMWBARAP_1367
BC10122	728185	WMWBARAP_1367
BC10123	728185	WMWBARAP_1367
BC10124	728185	WMWBARAP_1367
BC10125	728185	WMWBARAP_1367
BC10126	728185	WMWBARAP_1367
BC10127	728185	WMWBARAP_1367
BC10128	728185	WMWBARAP_1367
BC10129	728185	WMWBARAP_1367

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-20H

Location Code: WMWBARAP
Collected: 5/23/22 15:48
Customer ID:
Submittal Date: 5/25/22 14:49

Laboratory ID Number: BC09974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 09:41		1.015	0.0653	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 09:41		1.015	28.6	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 10:18		50.75	55.8	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 09:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 09:41		1.015	17.9	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 09:41		1	16.6	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 09:41		1.015	7.78	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 10:18		50.75	96.4	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:36		1.015	0.0647	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 10:36		1.015	28.4	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:14		50.75	53.9	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:36		1.015	17.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:36		1	16.0	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:36		1.015	7.50	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:14		50.75	99.5	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 16:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.0264	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.0136	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.0963	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 16:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.00233	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.00423	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.507	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.000537	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 16:19		1.015	3.44	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-20H

Location Code: WMWBARAP
Collected: 5/23/22 15:48
Customer ID:
Submittal Date: 5/25/22 14:49

Laboratory ID Number: BC09974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:19		1.015	0.000538	mg/L	0.000508	0.001015	J
* Thallium, Total	6/1/22 11:30	6/1/22 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	0.00856	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	0.0134	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	0.100	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	0.00235	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	0.00426	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	0.502	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	0.000399	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	3.31	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:11	5/26/22 13:11		1	0.231	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	5/31/22 13:12	5/31/22 15:37		1	377	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	462	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	5/31/22 13:12	5/31/22 15:37		1	377	mg/L			
Carbonate Alkalinity, (calc.)	5/31/22 13:12	5/31/22 15:37		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 16:03	5/31/22 16:03		1	28.3	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-20H

Location Code: WMWBARAP

Collected: 5/23/22 15:48

Customer ID:

Submittal Date: 5/25/22 14:49

Laboratory ID Number: BC09974

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:40	5/31/22 13:40		3	44.1	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:18	6/8/22 11:18		1	0.124	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:19	6/7/22 13:19		4	95.1	mg/L	2.4	8	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/23/22 15:45	5/23/22 15:45			784.43	uS/cm			FA
pH	5/23/22 15:45	5/23/22 15:45			6.15	SU			FA
Temperature	5/23/22 15:45	5/23/22 15:45			19.98	C			FA
Turbidity	5/23/22 15:45	5/23/22 15:45			1.75	NTU			FA
Sulfide	5/23/22 15:45	5/23/22 15:45			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 15:48

Customer ID:

Delivery Date: 5/25/22 14:49

Description: Barry Ash Pond - MW-20H

Laboratory ID Number: BC09974

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.0000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0	
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0	
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0	
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0	
BC09985	Arsenic, Dissolved	mg/L	0.0000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0	
BC09983	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0	
BC09985	Barium, Dissolved	mg/L	-0.0000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0	
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0	
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0	
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0	
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0	
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0	
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0	
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0	
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0	
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0	
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0	
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0	
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0	
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0	
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0	
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0	

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 15:48

Customer ID:

Delivery Date: 5/25/22 14:49

Description: Barry Ash Pond - MW-20H

Laboratory ID Number: BC09974

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 15:48

Customer ID:

Delivery Date: 5/25/22 14:49

Description: Barry Ash Pond - MW-20H

Laboratory ID Number: BC09974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 15:48

Customer ID:

Delivery Date: 5/25/22 14:49

Description: Barry Ash Pond - MW-20H

Laboratory ID Number: BC09974

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC09974	Alkalinity, Total as CaCO3	mg/L					373	50.4	45.0 to 55.0			1.07	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-8V

Location Code: WMWBARAP
Collected: 5/23/22 17:26
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 09:44		1.015	0.259	mg/L	0.030000	0.1015		
* Calcium, Total	5/31/22 10:50	6/2/22 09:44		1.015	24.4	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 10:22		50.75	73.1	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 09:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 09:44		1.015	14.0	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 09:44		1	15.3	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 09:44		1.015	7.13	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 09:44		1.015	36.3	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:38		1.015	0.254	mg/L	0.030000	0.1015		
* Calcium, Dissolved	5/27/22 09:45	6/1/22 10:38		1.015	24.3	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:17		50.75	68.0	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:38		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:38		1.015	13.8	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:38		1	14.8	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:38		1.015	6.92	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 10:38		1.015	36.3	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 16:23		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 16:23		1.015	0.00840	mg/L	0.006090	0.01015	J	
* Arsenic, Total	6/1/22 11:30	6/1/22 16:23		1.015	0.00386	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 16:23		1.015	0.277	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 16:23		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 16:23		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 16:23		1.015	0.00124	mg/L	0.000203	0.001015		
* Cobalt, Total	6/1/22 11:30	6/1/22 16:23		1.015	0.000921	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 16:23		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 16:23		1.015	0.762	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:23		1.015	0.000286	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 16:23		1.015	2.59	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-8V

Location Code: WMWBARAP
Collected: 5/23/22 17:26
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 16:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	0.00414	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	0.282	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	0.00119	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	0.000941	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	0.761	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	0.000301	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	2.48	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:12	5/26/22 13:12		1	0.298	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/2/22 11:04	6/2/22 15:20		1	267	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	331	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	267	mg/L			
Carbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 16:22	5/31/22 16:22		1	16.2	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-8V

Location Code: WMWBARAP
Collected: 5/23/22 17:26
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09975

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:41	5/31/22 13:41		2	22.1	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:20	6/8/22 11:20		1	0.108	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 12:33	6/7/22 12:33		1	8.35	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/23/22 17:23	5/23/22 17:23			557.51	uS/cm			FA
pH	5/23/22 17:23	5/23/22 17:23			6.08	SU			FA
Temperature	5/23/22 17:23	5/23/22 17:23			20.86	C			FA
Turbidity	5/23/22 17:23	5/23/22 17:23			1.61	NTU			FA
Sulfide	5/23/22 17:23	5/23/22 17:23			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:26

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8V

Laboratory ID Number: BC09975

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BC09985	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0
BC09983	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09985	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC09983	Beryllium, Total	mg/L	0.000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0
BC09985	Cadmium, Dissolved	mg/L	0.000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC09983	Cadmium, Total	mg/L	0.000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0
BC09985	Cobalt, Dissolved	mg/L	0.000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:26

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8V

Laboratory ID Number: BC09975

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:26

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8V

Laboratory ID Number: BC09975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/23/22 17:26
Customer ID:
Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8V

Laboratory ID Number: BC09975

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09987	Alkalinity, Total as CaCO3	mg/L					34.9	51.7	45.0 to 55.0			4.39	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-22H

Location Code: WMWBARAP
Collected: 5/24/22 09:14
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 09:47		1.015	0.0562	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 09:47		1.015	14.4	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 10:25		50.75	69.9	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 09:47		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 09:47		1.015	13.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 09:47		1	19.5	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 09:47		1.015	9.11	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 10:25		50.75	77.2	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:41		1.015	0.0575	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 10:41		1.015	14.5	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:21		50.75	66.3	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:41		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:41		1.015	13.1	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:41		1	18.8	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:41		1.015	8.80	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:21		50.75	76.9	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 16:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 16:26		1.015	0.0206	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 16:26		1.015	0.0197	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 16:26		1.015	0.215	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 16:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 16:26		1.015	0.000566	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 16:26		1.015	0.00270	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 16:26		1.015	0.552	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:26		1.015	0.00145	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 16:26		1.015	2.06	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-22H

Location Code: WMWBARAP
Collected: 5/24/22 09:14
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	0.0185	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	0.217	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	0.000516	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	0.00276	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	0.599	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	0.00138	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	1.94	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:14	5/26/22 13:14		1	0.243	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/2/22 11:04	6/2/22 15:20		1	246	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	372	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	246	mg/L			
Carbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 16:41	5/31/22 16:41		1	17.5	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-22H

Location Code: WMWBARAP
Collected: 5/24/22 09:14
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09976

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:52	5/31/22 13:52		4	57.1	mg/L	2.00	4	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:21	6/8/22 11:21		1	0.318	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:20	6/7/22 13:20		4	103	mg/L	2.4	8	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/24/22 09:11	5/24/22 09:11			669.92	uS/cm			FA
pH	5/24/22 09:11	5/24/22 09:11			6.57	SU			FA
Temperature	5/24/22 09:11	5/24/22 09:11			20.28	C			FA
Turbidity	5/24/22 09:11	5/24/22 09:11			2.32	NTU			FA
Sulfide	5/24/22 09:11	5/24/22 09:11			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:14

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-22H

Laboratory ID Number: BC09976

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0	
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0	
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0	
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0	
BC09985	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0	
BC09983	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0	
BC09985	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0	
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0	
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0	
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0	
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0	
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0	
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0	
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0	
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0	
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0	
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0	
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0	
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0	
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0	
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0	
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0	

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:14

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-22H

Laboratory ID Number: BC09976

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 09:14
Customer ID:
Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-22H

Laboratory ID Number: BC09976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Limit	Prec	Prec Limit	
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:14

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-22H

Laboratory ID Number: BC09976

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09987	Alkalinity, Total as CaCO3	mg/L					34.9	51.7	45.0 to 55.0			4.39	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-8

Location Code: WMWBARAP
Collected: 5/24/22 10:50
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09977

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 09:50		1.015	1.12	mg/L	0.030000	0.1015		
* Calcium, Total	5/31/22 10:50	6/2/22 09:50		1.015	31.5	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 10:29		50.75	74.0	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 09:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 09:50		1.015	10.0	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 09:50		1	32.7	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 09:50		1.015	15.3	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 09:50		1.015	19.4	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:44		1.015	1.11	mg/L	0.030000	0.1015		
* Calcium, Dissolved	5/27/22 09:45	6/1/22 10:44		1.015	31.5	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:24		50.75	73.6	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:44		1.015	9.89	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:44		1	32.3	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:44		1.015	15.1	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 10:44		1.015	19.5	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 16:30		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 16:30		1.015	0.00884	mg/L	0.006090	0.01015	J	
* Arsenic, Total	6/1/22 11:30	6/1/22 16:30		1.015	0.0583	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 16:30		1.015	0.142	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 16:30		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 16:30		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 16:30		1.015	0.00128	mg/L	0.000203	0.001015		
* Cobalt, Total	6/1/22 11:30	6/1/22 16:30		1.015	0.000666	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 16:30		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 20:50		5.075	1.78	mg/L	0.000761	0.001015		
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:30		1.015	0.000234	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 16:30		1.015	0.802	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-8

Location Code: WMWBARAP
Collected: 5/24/22 10:50
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09977

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 16:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	0.0591	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	0.148	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	0.00129	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	0.000710	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	6/1/22 17:04		5.075	1.77	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	0.000258	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	0.772	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:16	5/26/22 13:16		1	0.243	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/2/22 11:04	6/2/22 15:20		1	238	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	303	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	238	mg/L			
Carbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 16:59	5/31/22 16:59		1	13.4	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-8

Location Code: WMWBARAP
Collected: 5/24/22 10:50
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09977

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:44	5/31/22 13:44		2	27.2	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:22	6/8/22 11:22		1	0.0713	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 12:35	6/7/22 12:35		1	9.75	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/24/22 10:46	5/24/22 10:46			508.10	uS/cm			FA
pH	5/24/22 10:46	5/24/22 10:46			5.60	SU			FA
Temperature	5/24/22 10:46	5/24/22 10:46			21.81	C			FA
Turbidity	5/24/22 10:46	5/24/22 10:46			3.51	NTU			FA
Sulfide	5/24/22 10:46	5/24/22 10:46			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:50

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8

Laboratory ID Number: BC09977

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.0000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0	
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0	
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0	
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0	
BC09985	Arsenic, Dissolved	mg/L	0.0000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0	
BC09983	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0	
BC09985	Barium, Dissolved	mg/L	-0.0000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0	
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0	
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0	
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0	
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0	
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0	
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0	
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0	
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0	
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0	
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0	
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0	
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0	
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0	
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0	
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0	

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:50

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8

Laboratory ID Number: BC09977

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:50

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8

Laboratory ID Number: BC09977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:50

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-8

Laboratory ID Number: BC09977

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09987	Alkalinity, Total as CaCO3	mg/L					34.9	51.7	45.0 to 55.0			4.39	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-1

Location Code: WMWBARAPFB
Collected: 5/24/22 11:15
Customer ID:
Submittal Date: 5/25/22 14:51

Laboratory ID Number: BC09978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 09:53		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 09:53		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	5/31/22 10:50	6/2/22 09:53		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	5/31/22 10:50	6/2/22 09:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 09:53		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 09:53		1	Not Detected	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 09:53		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	5/31/22 10:50	6/2/22 09:53		1.015	Not Detected	mg/L	0.03045	0.406	U	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	6/1/22 11:30	6/1/22 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U	
Analytical Method: EPA 245.1		Analyst: CRB								
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:29		1	Not Detected	mg/L	0.0003	0.0005	U	
Analytical Method: EPA 353.2		Analyst: CES								
* Nitrogen, Nitrate/Nitrite	5/26/22 13:18	5/26/22 13:18		1	Not Detected	mg/L as N	0.20	0.3	U	
Analytical Method: SM 2540C		Analyst: CNJ								
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	Not Detected	mg/L		25	U	

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

Comments:

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-1

Location Code: WMWBARAPFB

Collected: 5/24/22 11:15

Customer ID:

Submittal Date: 5/25/22 14:51

Laboratory ID Number: BC09978

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 17:18	5/31/22 17:18		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:38	5/31/22 13:38		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:23	6/8/22 11:23		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 12:36	6/7/22 12:36		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/24/22 11:15

Customer ID:

Delivery Date: 5/25/22 14:51

Description: Barry Ash Pond Field Blank-1

Laboratory ID Number: BC09978

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BC09983	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/24/22 11:15

Customer ID:

Delivery Date: 5/25/22 14:51

Description: Barry Ash Pond Field Blank-1

Laboratory ID Number: BC09978

Sample	Analysis	Units	MB	MB				Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike	MS	MSD			Rec	Limit		
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/24/22 11:15

Customer ID:

Delivery Date: 5/25/22 14:51

Description: Barry Ash Pond Field Blank-1

Laboratory ID Number: BC09978

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

Comments:

Certificate Of Analysis

Description: Barry Ash Pond - MW-10

Location Code: WMWBARAP
Collected: 5/24/22 12:46
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 09:56		1.015	2.34	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 10:32		50.75	63.9	mg/L	3.50175	20.3	
* Iron, Total	5/31/22 10:50	6/2/22 10:32		50.75	68.0	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 09:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 09:56		1.015	17.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 09:56		1	25.9	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 09:56		1.015	12.1	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 09:56		1.015	26.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:47		1.015	2.30	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:27		50.75	62.6	mg/L	3.50175	20.3	
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:27		50.75	65.2	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:47		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:47		1.015	17.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:47		1	25.3	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:47		1.015	11.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 10:47		1.015	25.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	6/1/22 11:30	6/1/22 16:37		1.015	0.0775	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 16:37		1.015	0.0618	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 16:37		1.015	0.000522	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 16:37		1.015	0.000543	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 20:54		5.075	1.82	mg/L	0.000761	0.001015	
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/1/22 11:30	6/1/22 16:37		1.015	1.46	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-10

Location Code: WMWBARAP
Collected: 5/24/22 12:46
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 16:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	0.0780	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	0.0646	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	0.000640	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	0.000626	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	6/1/22 17:07		5.075	1.79	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	1.41	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:20	5/26/22 13:20		1	0.257	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	337	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	398	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	337	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 17:37	5/31/22 17:37		1	12.4	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-10

Location Code: WMWBARAP
Collected: 5/24/22 12:46
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09979

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:45	5/31/22 13:45		2	30.8	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:24	6/8/22 11:24		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 12:37	6/7/22 12:37		1	5.93	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/24/22 12:43	5/24/22 12:43			680.19	uS/cm			FA
pH	5/24/22 12:43	5/24/22 12:43			5.81	SU			FA
Temperature	5/24/22 12:43	5/24/22 12:43			21.37	C			FA
Turbidity	5/24/22 12:43	5/24/22 12:43			0.2	NTU			FA
Sulfide	5/24/22 12:43	5/24/22 12:43			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 12:46

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10

Laboratory ID Number: BC09979

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.0000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0	
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0	
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0	
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0	
BC09985	Arsenic, Dissolved	mg/L	0.0000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0	
BC09983	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0	
BC09985	Barium, Dissolved	mg/L	-0.0000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0	
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0	
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0	
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0	
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0	
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0	
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0	
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0	
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0	
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0	
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0	
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0	
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0	
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0	
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0	
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0	

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 12:46

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10

Laboratory ID Number: BC09979

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 12:46

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10

Laboratory ID Number: BC09979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 12:46
Customer ID:
Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10

Laboratory ID Number: BC09979

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond Equipment Blank-1

Location Code: WMWBARAPEB
Collected: 5/24/22 13:43
Customer ID:
Submittal Date: 5/25/22 14:51

Laboratory ID Number: BC09980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 09:59		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 09:59		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	5/31/22 10:50	6/2/22 09:59		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	5/31/22 10:50	6/2/22 09:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 09:59		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 09:59		1	Not Detected	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 09:59		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	5/31/22 10:50	6/2/22 09:59		1.015	Not Detected	mg/L	0.03045	0.406	U	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	6/1/22 11:30	6/1/22 16:40		1.015	Not Detected	mg/L	0.000068	0.000203	U	
Analytical Method: EPA 245.1		Analyst: CRB								
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:34		1	Not Detected	mg/L	0.0003	0.0005	U	
Analytical Method: EPA 353.2		Analyst: CES								
* Nitrogen, Nitrate/Nitrite	5/26/22 13:22	5/26/22 13:22		1	Not Detected	mg/L as N	0.20	0.3	U	
Analytical Method: SM 2540C		Analyst: CNJ								
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	Not Detected	mg/L		25	U	

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

Comments:

Certificate Of Analysis

Description: Barry Ash Pond Equipment Blank-1

Location Code: WMWBARAPEB

Collected: 5/24/22 13:43

Customer ID:

Submittal Date: 5/25/22 14:51

Laboratory ID Number: BC09980

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 17:58	5/31/22 17:58		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:39	5/31/22 13:39		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:26	6/8/22 11:26		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 12:39	6/7/22 12:39		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Batch QC Summary

Customer Account: WMWBARAPEB

Sample Date: 5/24/22 13:43

Customer ID:

Delivery Date: 5/25/22 14:51

Description: Barry Ash Pond Equipment Blank-1

Laboratory ID Number: BC09980

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BC09983	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARAPEB

Sample Date: 5/24/22 13:43

Customer ID:

Delivery Date: 5/25/22 14:51

Description: Barry Ash Pond Equipment Blank-1

Laboratory ID Number: BC09980

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARAPEB

Sample Date: 5/24/22 13:43

Customer ID:

Delivery Date: 5/25/22 14:51

Description: Barry Ash Pond Equipment Blank-1

Laboratory ID Number: BC09980

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

Comments:

Certificate Of Analysis

Description: Barry Ash Pond - MW-10V

Location Code: WMWBARAP
Collected: 5/24/22 14:44
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 10:01		1.015	0.938	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 10:35		50.75	65.0	mg/L	3.50175	20.3	
* Iron, Total	5/31/22 10:50	6/2/22 10:35		50.75	106	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 10:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 10:01		1.015	11.4	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:01		1	29.7	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 10:01		1.015	13.9	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 10:01		1.015	22.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:50		1.015	0.939	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:31		50.75	64.2	mg/L	3.50175	20.3	
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:31		50.75	101	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:50		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:50		1.015	11.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:50		1	29.5	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:50		1.015	13.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 10:50		1.015	22.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 16:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 16:44		1.015	0.00682	mg/L	0.006090	0.01015	J
* Arsenic, Total	6/1/22 11:30	6/1/22 16:44		1.015	0.000362	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 16:44		1.015	0.188	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 16:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 16:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 16:44		1.015	0.000493	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 16:44		1.015	0.000618	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 16:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 16:44		1.015	0.812	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:44		1.015	0.000111	mg/L	0.000102	0.000203	J
* Potassium, Total	6/1/22 11:30	6/1/22 16:44		1.015	2.12	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-10V

Location Code: WMWBARAP
Collected: 5/24/22 14:44
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 16:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	0.000320	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	0.194	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	0.000624	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	0.000670	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	0.811	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	0.000148	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	1.99	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:23	5/26/22 13:23		1	0.271	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	351	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	403	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	351	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 18:17	5/31/22 18:17		1	12.0	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-10V

Location Code: WMWBARAP
Collected: 5/24/22 14:44
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09981

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:46	5/31/22 13:46		2	19.4	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:27	6/8/22 11:27		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 12:40	6/7/22 12:40		1	5.73	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/24/22 14:41	5/24/22 14:41			726.04	uS/cm			FA
pH	5/24/22 14:41	5/24/22 14:41			5.77	SU			FA
Temperature	5/24/22 14:41	5/24/22 14:41			21.44	C			FA
Turbidity	5/24/22 14:41	5/24/22 14:41			1.76	NTU			FA
Sulfide	5/24/22 14:41	5/24/22 14:41			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:44

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10V

Laboratory ID Number: BC09981

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec
				Limit					Standard	Limit	Rec	Limit	
BC09985	Aluminum, Dissolved	mg/L	-0.0000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BC09985	Arsenic, Dissolved	mg/L	0.0000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0
BC09983	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09985	Barium, Dissolved	mg/L	-0.0000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:44

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10V

Laboratory ID Number: BC09981

Sample	Analysis	Units	MB	MB		MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike					Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:44

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10V

Laboratory ID Number: BC09981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:44

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-10V

Laboratory ID Number: BC09981

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09982	Solids, Dissolved	mg/L	0.0000	25.0			271	53.0	40.0 to 60.0			5.30	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-13

Location Code: WMWBARAP
Collected: 5/24/22 15:55
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09982

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 10:04		1.015	0.0457	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 10:04		1.015	19.2	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 10:39		50.75	27.1	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 10:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 10:04		1.015	6.94	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:04		1	15.6	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 10:04		1.015	7.28	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 10:39		50.75	53.9	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:53		1.015	0.0448	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 10:53		1.015	19.2	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:34		50.75	26.2	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:53		1.015	6.79	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:53		1	15.1	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:53		1.015	7.07	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:34		50.75	54.5	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 16:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.116	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.0128	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.0723	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 16:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 16:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.00685	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.00189	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.000146	mg/L	0.000068	0.000203	J
* Manganese, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.451	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.00356	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 16:48		1.015	2.52	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-13

Location Code: WMWBARAP
Collected: 5/24/22 15:55
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09982

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:48		1.015	0.000558	mg/L	0.000508	0.001015	J
* Thallium, Total	6/1/22 11:30	6/1/22 16:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	0.0115	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	0.0132	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	0.0718	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	0.00634	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	0.00202	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	0.455	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	0.00341	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	2.43	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:25	5/26/22 13:25		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	166	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	257	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	166	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 18:40	5/31/22 18:40		1	24.0	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-13

Location Code: WMWBARAP
Collected: 5/24/22 15:55
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09982

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:47	5/31/22 13:47		4	43.5	mg/L	2.00	4	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:28	6/8/22 11:28		1	0.0769	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 12:41	6/7/22 12:41		1	38.3	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/24/22 15:52	5/24/22 15:52			445.45	uS/cm			FA
pH	5/24/22 15:52	5/24/22 15:52			5.50	SU			FA
Temperature	5/24/22 15:52	5/24/22 15:52			20.79	C			FA
Turbidity	5/24/22 15:52	5/24/22 15:52			4.94	NTU			FA
Sulfide	5/24/22 15:52	5/24/22 15:52			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.

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 15:55
Customer ID:
Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13

Laboratory ID Number: BC09982

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.0000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BC09985	Arsenic, Dissolved	mg/L	0.0000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0
BC09983	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09985	Barium, Dissolved	mg/L	-0.0000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:55

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13

Laboratory ID Number: BC09982

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:55

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13

Laboratory ID Number: BC09982

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:55

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13

Laboratory ID Number: BC09982

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09982	Solids, Dissolved	mg/L	0.0000	25.0			271	53.0	40.0 to 60.0			5.30	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-13 Dup

Location Code: WMWBARAP
Collected: 5/24/22 15:55
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09983

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 10:07		1.015	0.0453	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 10:07		1.015	19.0	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 10:42		50.75	26.1	mg/L	0.40600	2.03	RA	
* Lithium, Total	5/31/22 10:50	6/2/22 10:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 10:07		1.015	6.79	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:07		1	15.2	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 10:07		1.015	7.12	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 10:42		50.75	51.6	mg/L	1.5225	20.3	RA	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:56		1.015	0.0451	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 10:56		1.015	19.0	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:38		50.75	26.2	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:56		1.015	6.89	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:56		1	15.2	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:56		1.015	7.11	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:38		50.75	54.8	mg/L	1.5225	20.3		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 16:51		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.131	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.0131	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.0721	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 16:51		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 16:51		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.00665	mg/L	0.000203	0.001015		
* Cobalt, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.00187	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.000170	mg/L	0.000068	0.000203	J	
* Manganese, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.437	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 16:51		1.015	0.00369	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 16:51		1.015	2.46	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-13 Dup

Location Code: WMWBARAP
Collected: 5/24/22 15:55
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09983

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 16:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 16:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	0.0112	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	0.0130	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	0.0713	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	0.00632	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	0.00184	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	0.440	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	0.00350	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	2.28	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:27	5/26/22 13:27		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	182	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	259	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	182	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 18:58	5/31/22 18:58		1	23.4	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-13 Dup

Location Code: WMWBARAP
Collected: 5/24/22 15:55
Customer ID:
Submittal Date: 5/25/22 14:50

Laboratory ID Number: BC09983

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 13:49	5/31/22 13:49		4	38.2	mg/L	2.00	4	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:29	6/8/22 11:29		1	0.124	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:22	6/7/22 13:22		2	51.0	mg/L	1.2	4	R
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/24/22 15:52	5/24/22 15:52			445.45	uS/cm			FA
pH	5/24/22 15:52	5/24/22 15:52			5.50	SU			FA
Temperature	5/24/22 15:52	5/24/22 15:52			20.79	C			FA
Turbidity	5/24/22 15:52	5/24/22 15:52			4.94	NTU			FA
Sulfide	5/24/22 15:52	5/24/22 15:52			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:55

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13 Dup

Laboratory ID Number: BC09983

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.256	0.260	0.108	0.0850 to 0.115	125	70.0 to 130	1.55	20.0
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0
BC09983	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.0985	0.0989	0.0925	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BC09985	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0
BC09983	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.116	0.116	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09985	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0
BC09983	Barium, Total	mg/L	0.000	0.00100	0.100	0.173	0.173	0.0987	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC09983	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.109	0.110	0.105	0.0850 to 0.115	109	70.0 to 130	0.913	20.0
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0
BC09983	Boron, Total	mg/L	0.000087	0.0650	1.00	1.05	1.08	1.02	0.850 to 1.15	100	70.0 to 130	2.82	20.0
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC09983	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0994	0.0987	0.100	0.0850 to 0.115	99.4	70.0 to 130	0.707	20.0
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0
BC09983	Calcium, Total	mg/L	0.00617	0.152	5.00	23.9	24.2	4.91	4.25 to 5.75	98.0	70.0 to 130	1.25	20.0
BC09983	Chloride	mg/L	-0.129	1.00	40.0	74.3	75.5	9.80	9.00 to 11.0	90.2	80.0 to 120	1.60	20.0
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0
BC09983	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.108	0.109	0.101	0.0850 to 0.115	101	70.0 to 130	0.922	20.0
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0
BC09983	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BC09983	Fluoride	mg/L	-0.043	0.125	2.50	2.76	2.80	2.53	2.25 to 2.75	105	80.0 to 120	1.44	20.0
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:55

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13 Dup

Laboratory ID Number: BC09983

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
BC09983	Iron, Total	mg/L	0.000064	0.0176	0.2	27.0	28.1	0.203	0.170 to 0.230	450	70.0 to 130	3.99	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09983	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09983	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.198	0.204	0.206	0.170 to 0.230	99.0	70.0 to 130	2.99	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09983	Magnesium, Total	mg/L	0.00180	0.0462	5.00	11.7	11.9	5.21	4.25 to 5.75	98.2	70.0 to 130	1.69	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09983	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.541	0.545	0.103	0.0850 to 0.115	104	70.0 to 130	0.737	20.0
BC09983	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00335	0.00348	0.00362	0.00340 to 0.00460	83.8	70.0 to 130	3.81	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09983	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.101	0.102	0.0965	0.0850 to 0.115	97.3	70.0 to 130	0.985	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09983	Potassium, Total	mg/L	-0.0109	0.367	10.0	12.6	12.6	10.5	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09983	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.107	0.106	0.105	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09983	Silicon, Total	mg/L	0.00083	0.0440	1.00	8.26	8.42	1.04	0.850 to 1.15	114	70.0 to 130	1.92	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09983	Sodium, Total	mg/L	0.00067	0.0660	5.00	57.9	59.0	5.25	4.25 to 5.75	126	70.0 to 130	1.88	20.0
BC09983	Sulfate	mg/L	-0.231	2.0	20.0	66.4	66.7	18.9	18.0 to 22.0	77.0	80.0 to 120	0.451	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:55

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13 Dup

Laboratory ID Number: BC09983

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09983	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09983	Total Organic Carbon	mg/L	0.303	1.00	10.0	33.9	34.2	10.2		105	80.0 to 120	0.881	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:55

Customer ID:

Delivery Date: 5/25/22 14:50

Description: Barry Ash Pond - MW-13 Dup

Laboratory ID Number: BC09983

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09983	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	2.19	0.161	2.01	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC10001	Solids, Dissolved	mg/L	0.0000	25.0			40.0	53.0	40.0 to 60.0			1.73	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-18H

Location Code: WMWBARAP
Collected: 5/23/22 16:14
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09984

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 10:22		1.015	0.910	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 10:22		1.015	25.5	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 11:01		50.75	84.1	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 10:22		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 10:22		1.015	10.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:22		1	22.0	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 10:22		1.015	10.3	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 10:22		1.015	17.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 10:59		1.015	0.899	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 10:59		1.015	25.3	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:41		50.75	85.0	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 10:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 10:59		1.015	10.5	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 10:59		1	21.6	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 10:59		1.015	10.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 10:59		1.015	17.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 17:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 17:13		1.015	0.0211	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 17:13		1.015	0.0143	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 17:13		1.015	0.127	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 17:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 17:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 17:13		1.015	0.00133	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 17:13		1.015	0.00108	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 17:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 20:57		5.075	1.29	mg/L	0.000761	0.001015	
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:13		1.015	0.000361	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 17:13		1.015	1.28	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-18H

Location Code: WMWBARAP
Collected: 5/23/22 16:14
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09984

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	0.0142	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	0.128	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	0.00139	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	0.00114	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	6/1/22 17:11		5.075	1.30	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	0.000389	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	1.29	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:36	5/26/22 13:36		1	0.579	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/2/22 11:04	6/2/22 15:20		1	213	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	292	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	213	mg/L			
Carbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 20:30	5/31/22 20:30		1	14.4	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-18H

Location Code: WMWBARAP
Collected: 5/23/22 16:14
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09984

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:05	5/31/22 14:05		1	18.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:41	6/8/22 11:41		1	0.0857	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:36	6/7/22 13:36		1	9.46	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/23/22 16:12	5/23/22 16:12			495.93	uS/cm			FA
pH	5/23/22 16:12	5/23/22 16:12			6.24	SU			FA
Temperature	5/23/22 16:12	5/23/22 16:12			20.29	C			FA
Turbidity	5/23/22 16:12	5/23/22 16:12			1.58	NTU			FA
Sulfide	5/23/22 16:12	5/23/22 16:12			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 16:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-18H

Laboratory ID Number: BC09984

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09985	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09985	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 16:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-18H

Laboratory ID Number: BC09984

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 16:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-18H

Laboratory ID Number: BC09984

Sample	Analysis	Units	MB	MB				Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike	MS	MSD			Rec	Limit		
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 16:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-18H

Laboratory ID Number: BC09984

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09987	Alkalinity, Total as CaCO3	mg/L					34.9	51.7	45.0 to 55.0			4.39	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-11

Location Code: WMWBARAP
Collected: 5/23/22 17:20
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09985

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 10:25		1.015	0.0558	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 10:25		1.015	26.0	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:04		50.75	80.0	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 10:25		1.015	0.0269	mg/L	0.007105	0.01999956		
* Magnesium, Total	5/31/22 10:50	6/2/22 10:25		1.015	13.8	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:25		1	16.2	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 10:25		1.015	7.55	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 11:04		50.75	61.0	mg/L	1.5225	20.3		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:02		1.015	0.0560	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:02		1.015	26.6	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 11:44		50.75	71.7	mg/L	0.40600	2.03	RA	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:02		1.015	0.0248	mg/L	0.007105	0.01999956		
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:02		1.015	13.7	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:02		1	15.8	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:02		1.015	7.40	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:44		50.75	57.8	mg/L	1.5225	20.3		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 17:16		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.0586	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.0142	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.0691	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 17:16		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.00474	mg/L	0.000203	0.001015		
* Cobalt, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.00118	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.0000932	mg/L	0.000068	0.000203	J	
* Manganese, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.625	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:16		1.015	0.00141	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 17:16		1.015	9.56	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-11

Location Code: WMWBARAP
Collected: 5/23/22 17:20
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09985

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	0.0149	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	0.0697	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	0.00255	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	0.00121	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	0.000107	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	0.621	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	0.00149	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	8.89	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:38	5/26/22 13:38		1	0.279	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/2/22 11:04	6/2/22 15:20		1	318	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	404	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	318	mg/L			
Carbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 20:49	5/31/22 20:49		1	28.6	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-11

Location Code: WMWBARAP
Collected: 5/23/22 17:20
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09985

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:19	5/31/22 14:19		4	25.1	mg/L	2.00	4	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:42	6/8/22 11:42		1	0.0709	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:37	6/7/22 13:37		1	29.3	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/23/22 17:17	5/23/22 17:17			555.51	uS/cm			FA
pH	5/23/22 17:17	5/23/22 17:17			6.32	SU			FA
Temperature	5/23/22 17:17	5/23/22 17:17			21.18	C			FA
Turbidity	5/23/22 17:17	5/23/22 17:17			3.74	NTU			FA
Sulfide	5/23/22 17:17	5/23/22 17:17			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.

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/23/22 17:20
Customer ID:
Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-11

Laboratory ID Number: BC09985

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09985	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09985	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.101	0.0984	0.0949	0.0850 to 0.115	101	70.0 to 130	2.61	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09985	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.118	0.117	0.104	0.0850 to 0.115	103	70.0 to 130	0.851	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09985	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.167	0.168	0.102	0.0850 to 0.115	97.3	70.0 to 130	0.597	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09985	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.108	0.103	0.100	0.0850 to 0.115	108	70.0 to 130	4.74	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09985	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	103	70.0 to 130	0.922	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09985	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.104	0.103	0.101	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09985	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	31.2	31.0	4.87	4.25 to 5.75	92.0	70.0 to 130	0.643	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09985	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.104	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	3.92	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09985	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.107	0.104	0.104	0.0850 to 0.115	106	70.0 to 130	2.84	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09985	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	72.2	72.3	0.200	0.170 to 0.230	250	70.0 to 130	0.138	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:20

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-11

Laboratory ID Number: BC09985

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09985	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.105	0.103	0.104	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09985	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.234	0.233	0.205	0.170 to 0.230	105	70.0 to 130	0.428	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09985	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	18.8	18.6	5.09	4.25 to 5.75	102	70.0 to 130	1.07	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09985	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	0.716	0.708	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.12	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09985	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.100	0.101	0.0992	0.0850 to 0.115	98.5	70.0 to 130	0.995	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09985	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	18.7	18.6	10.3	8.50 to 11.5	98.1	70.0 to 130	0.536	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09985	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.105	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09985	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	8.38	8.34	0.999	0.850 to 1.15	98.0	70.0 to 130	0.478	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09985	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	63.1	63.0	5.14	4.25 to 5.75	106	70.0 to 130	0.159	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09985	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:20

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-11

Laboratory ID Number: BC09985

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0		
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0		

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:20

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-11

Laboratory ID Number: BC09985

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09987	Alkalinity, Total as CaCO3	mg/L					34.9	51.7	45.0 to 55.0			4.39	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-19H

Location Code: WMWBARAP
Collected: 5/24/22 09:27
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09986

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 10:28		1.015	0.159	mg/L	0.030000	0.1015		
* Calcium, Total	5/31/22 10:50	6/2/22 10:28		1.015	18.6	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:08		50.75	13.4	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 10:28		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 10:28		1.015	3.82	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:28		1	19.0	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 10:28		1.015	8.90	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 10:28		1.015	11.4	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:16		1.015	0.165	mg/L	0.030000	0.1015		
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:16		1.015	19.2	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:13		50.75	13.0	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:16		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:16		1.015	3.91	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:16		1	18.9	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:16		1.015	8.84	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:16		1.015	11.7	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 17:20		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 17:20		1.015	0.0482	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 17:20		1.015	0.000993	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 17:20		1.015	0.0796	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 17:20		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 17:20		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 17:20		1.015	0.000423	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 17:20		1.015	0.00513	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 17:20		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 17:20		1.015	1.11	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:20		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 17:20		1.015	1.19	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-19H

Location Code: WMWBARAP
Collected: 5/24/22 09:27
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09986

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	0.0155	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	0.00104	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	0.0819	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	0.000454	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	0.00546	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	1.16	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	1.17	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	0.000636	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 14:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:40	5/26/22 13:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/2/22 11:04	6/2/22 15:20		1	78.0	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	133	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	78.0	mg/L			
Carbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 21:10	5/31/22 21:10		1	3.99	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-19H

Location Code: WMWBARAP
Collected: 5/24/22 09:27
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09986

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:07	5/31/22 14:07		1	10.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:43	6/8/22 11:43		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:38	6/7/22 13:38		1	34.7	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/24/22 09:24	5/24/22 09:24			206.31	uS/cm			FA
pH	5/24/22 09:24	5/24/22 09:24			5.80	SU			FA
Temperature	5/24/22 09:24	5/24/22 09:24			20.19	C			FA
Turbidity	5/24/22 09:24	5/24/22 09:24			1.65	NTU			FA
Sulfide	5/24/22 09:24	5/24/22 09:24			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:27

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-19H

Laboratory ID Number: BC09986

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 09:27
Customer ID:
Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-19H

Laboratory ID Number: BC09986

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:27

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-19H

Laboratory ID Number: BC09986

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:27

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-19H

Laboratory ID Number: BC09986

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09987	Alkalinity, Total as CaCO3	mg/L					34.9	51.7	45.0 to 55.0			4.39	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09986	Solids, Dissolved	mg/L	1.00	25.0			130	49.0	40.0 to 60.0			2.28	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-15V

Location Code: WMWBARAP
Collected: 5/24/22 10:57
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09987

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 10:30		1.015	0.0376	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 10:30		1.015	8.10	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 11:11		50.75	53.7	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 10:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 10:30		1.015	5.58	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:30		1	17.2	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 10:30		1.015	8.04	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 11:11		50.75	77.9	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:19		1.015	0.0350	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:19		1.015	8.26	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:17		50.75	47.7	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:19		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:19		1.015	5.55	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:19		1	16.7	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:19		1.015	7.79	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:17		50.75	77.9	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 17:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.0497	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.0333	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.156	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 17:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.000180	mg/L	0.000068	0.000203	J
* Chromium, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.000234	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.0764	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.000111	mg/L	0.000068	0.000203	J
* Manganese, Total	6/1/22 11:30	6/1/22 17:23		1.015	1.13	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:23		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/1/22 11:30	6/1/22 17:23		1.015	3.25	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-15V

Location Code: WMWBARAP
Collected: 5/24/22 10:57
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09987

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:23		1.015	0.000140	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	0.0255	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	0.159	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	0.000201	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	0.000207	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	0.0788	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	1.09	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	3.20	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:45		1.015	0.000140	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 15:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:42	5/26/22 13:42		1	0.255	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/2/22 11:04	6/2/22 15:20		1	33.4	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	348	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	33.4	mg/L			
Carbonate Alkalinity, (calc.)	6/2/22 11:04	6/2/22 15:20		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 21:30	5/31/22 21:30		1	1.37	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-15V

Location Code: WMWBARAP
Collected: 5/24/22 10:57
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09987

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:21	5/31/22 14:21		20	191	mg/L	10.00	20	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:44	6/8/22 11:44		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:41	6/7/22 13:41		1	1.77	mg/L	0.6	2	J
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/24/22 10:54	5/24/22 10:54			594.35	uS/cm			FA
pH	5/24/22 10:54	5/24/22 10:54			5.70	SU			FA
Temperature	5/24/22 10:54	5/24/22 10:54			21.14	C			FA
Turbidity	5/24/22 10:54	5/24/22 10:54			6.89	NTU			FA
Sulfide	5/24/22 10:54	5/24/22 10:54			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:57

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-15V

Laboratory ID Number: BC09987

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 10:57
Customer ID:
Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-15V

Laboratory ID Number: BC09987

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:57

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-15V

Laboratory ID Number: BC09987

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 10:57
Customer ID:
Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-15V

Laboratory ID Number: BC09987

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09987	Alkalinity, Total as CaCO3	mg/L					34.9	51.7	45.0 to 55.0			4.39	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-7

Location Code: WMWBARAP
Collected: 5/24/22 13:10
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09988

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 10:33		1.015	0.0369	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 10:33		1.015	10.5	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:15		50.75	19.8	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 10:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 10:33		1.015	8.61	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:33		1	14.0	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 10:33		1.015	6.54	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 10:33		1.015	23.1	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:22		1.015	0.0371	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:22		1.015	10.9	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:20		50.75	18.4	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:22		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:22		1.015	8.61	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:22		1	14.0	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:22		1.015	6.52	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:22		1.015	22.9	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 17:27		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 17:27		1.015	0.00839	mg/L	0.006090	0.01015	J	
* Arsenic, Total	6/1/22 11:30	6/1/22 17:27		1.015	0.0197	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 17:27		1.015	0.0717	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 17:27		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 17:27		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 17:27		1.015	0.000584	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 17:27		1.015	0.0230	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 17:27		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 17:27		1.015	0.420	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:27		1.015	0.000178	mg/L	0.000102	0.000203	J	
* Potassium, Total	6/1/22 11:30	6/1/22 17:27		1.015	1.34	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-7

Location Code: WMWBARAP
Collected: 5/24/22 13:10
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09988

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	0.0195	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	0.0731	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	0.000340	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	0.0238	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	0.421	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	0.000223	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	1.28	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 15:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:44	5/26/22 13:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	124	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	148	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	124	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 21:48	5/31/22 21:48		1	5.15	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-7

Location Code: WMWBARAP
Collected: 5/24/22 13:10
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09988

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:10	5/31/22 14:10		1	13.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:46	6/8/22 11:46		1	0.0724	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:42	6/7/22 13:42		1	7.14	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/24/22 13:08	5/24/22 13:08			243.46	uS/cm			FA
pH	5/24/22 13:08	5/24/22 13:08			6.32	SU			FA
Temperature	5/24/22 13:08	5/24/22 13:08			21.47	C			FA
Turbidity	5/24/22 13:08	5/24/22 13:08			3.47	NTU			FA
Sulfide	5/24/22 13:08	5/24/22 13:08			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 13:10

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7

Laboratory ID Number: BC09988

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 13:10
Customer ID:
Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7

Laboratory ID Number: BC09988

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 13:10

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7

Laboratory ID Number: BC09988

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 13:10

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7

Laboratory ID Number: BC09988

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-7 Dup

Location Code: WMWBARAP
Collected: 5/24/22 13:10
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09989

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 10:36		1.015	0.0368	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 10:36		1.015	10.7	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 11:18		50.75	19.8	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 10:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 10:36		1.015	8.60	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:36		1	14.1	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 10:36		1.015	6.59	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 10:36		1.015	22.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:25		1.015	0.0366	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:25		1.015	10.9	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:24		50.75	18.1	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:25		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:25		1.015	8.66	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:25		1	13.8	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:25		1.015	6.47	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:25		1.015	22.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 17:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 17:30		1.015	0.00725	mg/L	0.006090	0.01015	J
* Arsenic, Total	6/1/22 11:30	6/1/22 17:30		1.015	0.0192	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 17:30		1.015	0.0715	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 17:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 17:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 17:30		1.015	0.000587	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 17:30		1.015	0.0234	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 17:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 17:30		1.015	0.421	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:30		1.015	0.000181	mg/L	0.000102	0.000203	J
* Potassium, Total	6/1/22 11:30	6/1/22 17:30		1.015	1.34	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-7 Dup

Location Code: WMWBARAP
Collected: 5/24/22 13:10
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09989

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	0.0204	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	0.0721	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	0.000295	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	0.0237	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	0.421	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	0.000176	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	1.25	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 15:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:46	5/26/22 13:46		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	117	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	154	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	117	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 22:06	5/31/22 22:06		1	5.24	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-7 Dup

Location Code: WMWBARAP
Collected: 5/24/22 13:10
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09989

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:11	5/31/22 14:11		1	12.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:47	6/8/22 11:47		1	0.0916	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:43	6/7/22 13:43		1	7.53	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/24/22 13:08	5/24/22 13:08			243.46	uS/cm			FA
pH	5/24/22 13:08	5/24/22 13:08			6.32	SU			FA
Temperature	5/24/22 13:08	5/24/22 13:08			21.47	C			FA
Turbidity	5/24/22 13:08	5/24/22 13:08			3.47	NTU			FA
Sulfide	5/24/22 13:08	5/24/22 13:08			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 13:10

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7 Dup

Laboratory ID Number: BC09989

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 13:10

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7 Dup

Laboratory ID Number: BC09989

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 13:10

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7 Dup

Laboratory ID Number: BC09989

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 13:10

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7 Dup

Laboratory ID Number: BC09989

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-3

Location Code: WMWBARAPFB
Collected: 5/24/22 14:05
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09990

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 10:39		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 10:39		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	5/31/22 10:50	6/2/22 10:39		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	5/31/22 10:50	6/2/22 10:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 10:39		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:39		1	Not Detected	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 10:39		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	5/31/22 10:50	6/2/22 10:39		1.015	Not Detected	mg/L	0.03045	0.406	U	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	6/1/22 11:30	6/1/22 17:34		1.015	Not Detected	mg/L	0.000068	0.000203	U	
Analytical Method: EPA 245.1		Analyst: CRB								
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 15:07		1	Not Detected	mg/L	0.0003	0.0005	U	
Analytical Method: EPA 353.2		Analyst: CES								
* Nitrogen, Nitrate/Nitrite	5/26/22 13:47	5/26/22 13:47		1	Not Detected	mg/L as N	0.20	0.3	U	
Analytical Method: SM 2540C		Analyst: CNJ								
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	Not Detected	mg/L		25	U	

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

Comments:

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-3

Location Code: WMWBARAPFB

Collected: 5/24/22 14:05

Customer ID:

Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09990

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 22:27	5/31/22 22:27		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:18	5/31/22 14:18		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:48	6/8/22 11:48		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:44	6/7/22 13:44		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/24/22 14:05

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond Field Blank-3

Laboratory ID Number: BC09990

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09993	Arsenic, Total	mg/L	0.0000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/24/22 14:05

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond Field Blank-3

Laboratory ID Number: BC09990

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0		
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0		
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0		

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/24/22 14:05

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond Field Blank-3

Laboratory ID Number: BC09990

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

Comments:

Certificate Of Analysis

Description: Barry Ash Pond - MW-7V

Location Code: WMWBARAP
Collected: 5/24/22 14:14
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09991

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 10:42		1.015	0.165	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 10:42		1.015	8.84	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 11:21		50.75	19.3	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 10:42		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 10:42		1.015	4.88	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:42		1	18.6	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 10:42		1.015	8.68	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 11:21		50.75	76.8	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:28		1.015	0.162	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:28		1.015	7.22	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:27		50.75	17.0	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:28		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:28		1.015	4.68	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:28		1	17.3	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:28		1.015	8.07	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:27		50.75	76.8	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 17:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 17:38		1.015	0.0309	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 17:38		1.015	0.00218	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 17:38		1.015	0.0803	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 17:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 17:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 17:38		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 17:38		1.015	0.000110	mg/L	0.000068	0.000203	J
* Lead, Total	6/1/22 11:30	6/1/22 17:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 17:38		1.015	0.245	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:38		1.015	0.000740	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 17:38		1.015	1.99	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-7V

Location Code: WMWBARAP
Collected: 5/24/22 14:14
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09991

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	0.00212	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	0.0797	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	0.000317	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	0.000106	mg/L	0.000068	0.000203	J
* Lead, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	0.0000813	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	0.239	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	0.000705	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	1.96	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 16:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 15:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:49	5/26/22 13:49		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	160	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	228	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	160	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 22:45	5/31/22 22:45		1	4.26	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-7V

Location Code: WMWBARAP
Collected: 5/24/22 14:14
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09991

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:22	5/31/22 14:22		10	40.4	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:49	6/8/22 11:49		1	0.0869	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:46	6/7/22 13:46		1	6.06	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/24/22 14:09	5/24/22 14:09			424.17	uS/cm			FA
pH	5/24/22 14:09	5/24/22 14:09			6.92	SU			FA
Temperature	5/24/22 14:09	5/24/22 14:09			22.25	C			FA
Turbidity	5/24/22 14:09	5/24/22 14:09			1.73	NTU			FA
Sulfide	5/24/22 14:09	5/24/22 14:09			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7V

Laboratory ID Number: BC09991

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7V

Laboratory ID Number: BC09991

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7V

Laboratory ID Number: BC09991

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 14:14

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-7V

Laboratory ID Number: BC09991

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09982	Solids, Dissolved	mg/L	0.0000	25.0			271	53.0	40.0 to 60.0			5.30	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-9

Location Code: WMWBARAP
Collected: 5/24/22 15:15
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09992

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 10:45		1.015	2.01	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 10:45		1.015	38.3	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 11:25		50.75	81.4	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 10:45		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 10:45		1.015	11.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:45		1	24.6	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 10:45		1.015	11.5	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 10:45		1.015	19.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:31		1.015	1.98	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:31		1.015	39.6	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:30		50.75	77.8	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:31		1.015	11.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:31		1	24.4	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:31		1.015	11.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 11:31		1.015	19.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 17:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 17:41		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	6/1/22 11:30	6/1/22 17:41		1.015	0.0404	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 17:41		1.015	0.117	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 17:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 17:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 17:41		1.015	0.000701	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 17:41		1.015	0.000695	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 17:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 21:01		5.075	2.16	mg/L	0.000761	0.001015	
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:41		1.015	0.000240	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 17:41		1.015	1.03	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-9

Location Code: WMWBARAP
Collected: 5/24/22 15:15
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09992

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	0.0414	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	0.122	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	0.000800	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	0.000753	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	6/1/22 17:15		5.075	2.12	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	0.000206	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	0.931	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 15:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:51	5/26/22 13:51		1	0.300	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	255	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	268	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	255	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 23:04	5/31/22 23:04		1	12.3	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-9

Location Code: WMWBARAP
Collected: 5/24/22 15:15
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09992

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:13	5/31/22 14:13		1	17.3	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:50	6/8/22 11:50		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:47	6/7/22 13:47		1	5.76	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/24/22 15:12	5/24/22 15:12			543.47	uS/cm			FA
pH	5/24/22 15:12	5/24/22 15:12			6.03	SU			FA
Temperature	5/24/22 15:12	5/24/22 15:12			22.35	C			FA
Turbidity	5/24/22 15:12	5/24/22 15:12			1.63	NTU			FA
Sulfide	5/24/22 15:12	5/24/22 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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:15

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-9

Laboratory ID Number: BC09992

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:15

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-9

Laboratory ID Number: BC09992

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:15

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-9

Laboratory ID Number: BC09992

Sample	Analysis	Units	MB	MB				Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike	MS	MSD			Rec	Limit		
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:15

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-9

Laboratory ID Number: BC09992

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC09982	Solids, Dissolved	mg/L	0.0000	25.0			271	53.0	40.0 to 60.0			5.30	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-14V

Location Code: WMWBARAP
Collected: 5/24/22 16:24
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09993

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 10:48		1.015	0.376	mg/L	0.030000	0.1015		
* Calcium, Total	5/31/22 10:50	6/2/22 10:48		1.015	7.03	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:28		50.75	25.5	mg/L	0.40600	2.03	RA	
* Lithium, Total	5/31/22 10:50	6/2/22 10:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 10:48		1.015	3.56	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 10:48		1	14.3	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 10:48		1.015	6.68	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 11:28		50.75	174	mg/L	1.5225	20.3	RA	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:34		1.015	0.377	mg/L	0.030000	0.1015		
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:34		1.015	6.83	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:34		50.75	22.9	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:34		1.015	3.43	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:34		1	14.1	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:34		1.015	6.60	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:34		50.75	171	mg/L	1.5225	20.3		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 17:45		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 17:45		1.015	0.0154	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 17:45		1.015	0.00572	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 17:45		1.015	0.0670	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 17:45		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 17:45		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 17:45		1.015	0.000602	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 17:45		1.015	0.00327	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 17:45		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 17:45		1.015	0.349	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 17:45		1.015	0.00310	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 17:45		1.015	7.91	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-14V

Location Code: WMWBARAP
Collected: 5/24/22 16:24
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09993

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 17:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 17:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	0.00532	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	0.0663	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	0.000605	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	0.00353	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	0.334	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	0.00275	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	6.52	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 11:40	6/6/22 15:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 13:53	5/26/22 13:53		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	171	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	508	mg/L		50	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	171	mg/L		1	A
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	5/31/22 23:25	5/31/22 23:25		1	4.37	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-14V

Location Code: WMWBARAP
Collected: 5/24/22 16:24
Customer ID:
Submittal Date: 5/25/22 14:54

Laboratory ID Number: BC09993

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:30	5/31/22 14:30		20	184	mg/L	10.00	20	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 11:52	6/8/22 11:52		1	0.291	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:48	6/7/22 13:48		1	13.6	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/24/22 16:21	5/24/22 16:21			969.26	uS/cm			FA
pH	5/24/22 16:21	5/24/22 16:21			6.71	SU			FA
Temperature	5/24/22 16:21	5/24/22 16:21			21.42	C			FA
Turbidity	5/24/22 16:21	5/24/22 16:21			1.07	NTU			FA
Sulfide	5/24/22 16:21	5/24/22 16:21			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 16:24

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-14V

Laboratory ID Number: BC09993

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC09993	Aluminum, Total	mg/L	0.000871	0.010	0.100	0.122	0.122	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC09993	Antimony, Total	mg/L	0.00026	0.00100	0.100	0.100	0.101	0.0925	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC09993	Arsenic, Total	mg/L	0.000031	0.000176	0.100	0.109	0.107	0.102	0.0850 to 0.115	103	70.0 to 130	1.85	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC09993	Barium, Total	mg/L	0.000	0.00100	0.100	0.169	0.169	0.0987	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC09993	Beryllium, Total	mg/L	0.0000087	0.000880	0.100	0.107	0.112	0.105	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC09993	Boron, Total	mg/L	0.000087	0.0650	1.00	1.40	1.41	1.02	0.850 to 1.15	102	70.0 to 130	0.712	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09993	Cadmium, Total	mg/L	0.0000062	0.000147	0.100	0.0990	0.100	0.100	0.0850 to 0.115	99.0	70.0 to 130	1.01	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC09993	Calcium, Total	mg/L	0.00617	0.152	5.00	11.7	11.8	4.91	4.25 to 5.75	93.4	70.0 to 130	0.851	20.0
BC09993	Chloride	mg/L	-0.137	1.00	200	391	388	10.3	9.00 to 11.0	104	80.0 to 120	0.770	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC09993	Chromium, Total	mg/L	-0.0000596	0.000440	0.100	0.101	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	1.30	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC09993	Cobalt, Total	mg/L	-0.000004	0.000147	0.100	0.105	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	1.92	20.0
BC09993	Fluoride	mg/L	-0.0283	0.125	2.50	3.11	3.13	2.58	2.25 to 2.75	113	80.0 to 120	0.641	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 16:24

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-14V

Laboratory ID Number: BC09993

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC09993	Iron, Total	mg/L	0.000064	0.0176	0.2	25.2	26.1	0.203	0.170 to 0.230	-150	70.0 to 130	3.51	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09993	Lead, Total	mg/L	0.0000003	0.000147	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC09993	Lithium, Total	mg/L	0.00031	0.0154	0.200	0.212	0.211	0.206	0.170 to 0.230	106	70.0 to 130	0.473	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC09993	Magnesium, Total	mg/L	0.00180	0.0462	5.00	8.62	8.57	5.21	4.25 to 5.75	101	70.0 to 130	0.582	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC09993	Manganese, Total	mg/L	0.0000087	0.0002	0.100	0.451	0.444	0.103	0.0850 to 0.115	102	70.0 to 130	1.56	20.0
BC09993	Mercury, Total by CVAA	mg/L	2.750E-05	0.000500	0.004	0.00341	0.00338	0.00362	0.00340 to 0.00460	85.2	70.0 to 130	0.884	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC09993	Molybdenum, Total	mg/L	0.0000114	0.0002	0.100	0.102	0.100	0.0965	0.0850 to 0.115	98.9	70.0 to 130	1.98	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC09993	Potassium, Total	mg/L	-0.0109	0.367	10.0	17.9	17.7	10.5	8.50 to 11.5	99.9	70.0 to 130	1.12	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09993	Selenium, Total	mg/L	0.000252	0.00100	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC09993	Silicon, Total	mg/L	0.00083	0.0440	1.00	7.62	7.60	1.04	0.850 to 1.15	94.0	70.0 to 130	0.263	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC09993	Sodium, Total	mg/L	0.00067	0.0660	5.00	176	180	5.25	4.25 to 5.75	40.0	70.0 to 130	2.25	20.0
BC09993	Sulfate	mg/L	-0.278	2.0	20.0	33.5	33.5	19.1	18.0 to 22.0	99.5	80.0 to 120	0.00	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 16:24

Customer ID:

Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-14V

Laboratory ID Number: BC09993

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09993	Thallium, Total	mg/L	-0.0000006	0.000147	0.100	0.103	0.105	0.107	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09993	Total Organic Carbon	mg/L	0.256	1.00	10.0	13.7	13.9	9.85		93.3	80.0 to 120	1.45	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 16:24
Customer ID:
Delivery Date: 5/25/22 14:54

Description: Barry Ash Pond - MW-14V

Laboratory ID Number: BC09993

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC09993	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.12	0.146	1.97	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BC10001	Solids, Dissolved	mg/L	0.0000	25.0			40.0	53.0	40.0 to 60.0			1.73	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-12

Location Code: WMWBARAP
Collected: 5/23/22 16:15
Customer ID:
Submittal Date: 5/25/22 14:56

Laboratory ID Number: BC09994

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 11:08		1.015	0.0626	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 11:08		1.015	20.6	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:47		50.75	74.0	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 11:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 11:08		1.015	15.3	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:08		1	16.0	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 11:08		1.015	7.48	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 11:47		50.75	44.8	mg/L	1.5225	20.3		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:37		1.015	0.0653	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:37		1.015	20.8	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:37		50.75	70.0	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:37		1.015	15.5	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:37		1	15.8	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:37		1.015	7.38	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:37		50.75	44.2	mg/L	1.5225	20.3		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.190	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.0245	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.0802	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 18:13		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.00374	mg/L	0.000203	0.001015		
* Cobalt, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.00428	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.000179	mg/L	0.000068	0.000203	J	
* Manganese, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.849	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:13		1.015	0.00109	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 18:13		1.015	2.76	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-12

Location Code: WMWBARAP
Collected: 5/23/22 16:15
Customer ID:
Submittal Date: 5/25/22 14:56

Laboratory ID Number: BC09994

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	0.0249	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	0.0787	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	0.00290	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	0.00414	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	0.825	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	0.000899	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	2.60	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:44	5/26/22 14:44		1	0.212	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/3/22 12:00	6/3/22 13:44		1	274	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	345	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	274	mg/L			
Carbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 00:56	6/1/22 00:56		1	20.1	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-12

Location Code: WMWBARAP

Collected: 5/23/22 16:15

Customer ID:

Submittal Date: 5/25/22 14:56

Laboratory ID Number: BC09994

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:00	5/31/22 15:00		3	26.2	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:03	6/8/22 12:03		1	0.0873	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 13:59	6/7/22 13:59		1	13.0	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/23/22 16:12	5/23/22 16:12			578.36	uS/cm			FA
pH	5/23/22 16:12	5/23/22 16:12			6.12	SU			FA
Temperature	5/23/22 16:12	5/23/22 16:12			20.85	C			FA
Turbidity	5/23/22 16:12	5/23/22 16:12			2.67	NTU			FA
Sulfide	5/23/22 16:12	5/23/22 16:12			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 16:15

Customer ID:

Delivery Date: 5/25/22 14:56

Description: Barry Ash Pond - MW-12

Laboratory ID Number: BC09994

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC10112	Arsenic, Total	mg/L	0.000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC10112	Barium, Total	mg/L	0.000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/23/22 16:15
Customer ID:
Delivery Date: 5/25/22 14:56

Description: Barry Ash Pond - MW-12

Laboratory ID Number: BC09994

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/23/22 16:15
Customer ID:
Delivery Date: 5/25/22 14:56

Description: Barry Ash Pond - MW-12

Laboratory ID Number: BC09994

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 16:15

Customer ID:

Delivery Date: 5/25/22 14:56

Description: Barry Ash Pond - MW-12

Laboratory ID Number: BC09994

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10005	Alkalinity, Total as CaCO3	mg/L					327	51.3	45.0 to 55.0			8.49	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-12V

Location Code: WMWBARAP
Collected: 5/23/22 17:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09995

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 11:11		1.015	0.0765	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 11:11		1.015	20.6	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:50		50.75	86.6	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 11:11		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 11:11		1.015	14.7	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:11		1	14.1	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 11:11		1.015	6.58	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 11:50		50.75	42.0	mg/L	1.5225	20.3		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:39		1.015	0.0799	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:39		1.015	20.6	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:41		50.75	85.6	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:39		1.015	15.0	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:39		1	13.9	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:39		1.015	6.51	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:41		50.75	42.6	mg/L	1.5225	20.3		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 18:17		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 18:17		1.015	0.00923	mg/L	0.006090	0.01015	J	
* Arsenic, Total	6/1/22 11:30	6/1/22 18:17		1.015	0.0257	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 18:17		1.015	0.103	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 18:17		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 18:17		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 18:17		1.015	0.000813	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 18:17		1.015	0.00255	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 18:17		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 21:15		5.075	1.18	mg/L	0.000761	0.001015		
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:17		1.015	0.00123	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 18:17		1.015	2.57	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-12V

Location Code: WMWBARAP
Collected: 5/23/22 17:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09995

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	0.0257	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	0.101	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	0.000905	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	0.00263	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	1.27	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	0.00112	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	2.47	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:45	5/26/22 14:45		1	0.259	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/3/22 12:00	6/3/22 13:44		1	295	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	352	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	295	mg/L			
Carbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 01:14	6/1/22 01:14		1	15.0	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-12V

Location Code: WMWBARAP
Collected: 5/23/22 17:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09995

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:01	5/31/22 15:01		3	25.6	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:05	6/8/22 12:05		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:01	6/7/22 14:01		1	6.64	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/23/22 17:02	5/23/22 17:02			616.65	uS/cm			FA
pH	5/23/22 17:02	5/23/22 17:02			6.22	SU			FA
Temperature	5/23/22 17:02	5/23/22 17:02			20.70	C			FA
Turbidity	5/23/22 17:02	5/23/22 17:02			1.04	NTU			FA
Sulfide	5/23/22 17:02	5/23/22 17:02			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-12V

Laboratory ID Number: BC09995

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC10112	Arsenic, Total	mg/L	0.000029	0.000176	0.100	0.122	0.121	0.101	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC10112	Barium, Total	mg/L	0.000218	0.00100	0.100	0.172	0.171	0.0996	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-12V

Laboratory ID Number: BC09995

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-12V

Laboratory ID Number: BC09995

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/23/22 17:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-12V

Laboratory ID Number: BC09995

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10005	Alkalinity, Total as CaCO3	mg/L					327	51.3	45.0 to 55.0			8.49	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-20V

Location Code: WMWBARAP
Collected: 5/24/22 09:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09996

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:14		1.015	0.0977	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 11:14		1.015	14.4	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 11:53		50.75	80.5	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 11:14		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 11:14		1.015	8.64	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:14		1	13.7	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:14		1.015	6.41	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 11:53		50.75	44.4	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 11:42		1.015	0.0955	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 11:42		1.015	14.5	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:44		50.75	79.9	mg/L	0.40600	2.03	RA
* Lithium, Dissolved	5/27/22 09:45	6/1/22 11:42		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 11:42		1.015	8.66	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 11:42		1	13.6	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 11:42		1.015	6.36	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:44		50.75	45.3	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 18:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 18:20		1.015	0.0357	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 18:20		1.015	0.0188	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 18:20		1.015	0.0906	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 18:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 18:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 18:20		1.015	0.000464	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 18:20		1.015	0.0264	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 18:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 21:04		5.075	1.92	mg/L	0.000761	0.001015	
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:20		1.015	0.00164	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 18:20		1.015	2.29	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-20V

Location Code: WMWBARAP
Collected: 5/24/22 09:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09996

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	0.0193	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	0.0918	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	0.000526	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	0.0269	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	6/1/22 17:18		5.075	1.95	mg/L	0.000761	0.001015	RA
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	0.00175	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	2.18	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:47	5/26/22 14:47		1	0.216	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/3/22 12:00	6/3/22 13:44		1	208	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	296	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	208	mg/L			
Carbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 01:32	6/1/22 01:32		1	8.66	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-20V

Location Code: WMWBARAP
Collected: 5/24/22 09:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09996

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:03	5/31/22 15:03		3	35.4	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:06	6/8/22 12:06		1	0.0811	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:02	6/7/22 14:02		1	3.79	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/24/22 09:02	5/24/22 09:02			549.97	uS/cm			FA
pH	5/24/22 09:02	5/24/22 09:02			6.28	SU			FA
Temperature	5/24/22 09:02	5/24/22 09:02			20.55	C			FA
Turbidity	5/24/22 09:02	5/24/22 09:02			1.01	NTU			FA
Sulfide	5/24/22 09:02	5/24/22 09:02			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V

Laboratory ID Number: BC09996

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC09996	Aluminum, Dissolved	mg/L	-0.000138	0.010	0.100	0.100	0.102	0.102	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC09996	Antimony, Dissolved	mg/L	0.000277	0.00100	0.100	0.0992	0.100	0.0949	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC09996	Arsenic, Dissolved	mg/L	0.000064	0.000176	0.100	0.124	0.119	0.104	0.0850 to 0.115	105	70.0 to 130	4.12	20.0
BC10112	Arsenic, Total	mg/L	0.000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC09996	Barium, Dissolved	mg/L	-0.000236	0.00100	0.100	0.189	0.186	0.102	0.0850 to 0.115	97.2	70.0 to 130	1.60	20.0
BC10112	Barium, Total	mg/L	0.000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC09996	Beryllium, Dissolved	mg/L	0.0000551	0.000880	0.100	0.115	0.106	0.100	0.0850 to 0.115	115	70.0 to 130	8.14	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09996	Boron, Dissolved	mg/L	-0.000095	0.0650	1.00	1.12	1.12	1.01	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC09996	Cadmium, Dissolved	mg/L	0.0000098	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC09996	Calcium, Dissolved	mg/L	0.000404	0.152	5.00	19.3	19.2	4.87	4.25 to 5.75	96.0	70.0 to 130	0.519	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC09996	Chromium, Dissolved	mg/L	0.0000501	0.000440	0.100	0.0986	0.0997	0.100	0.0850 to 0.115	98.1	70.0 to 130	1.11	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Cobalt, Dissolved	mg/L	0.0000055	0.000147	0.100	0.128	0.132	0.104	0.0850 to 0.115	101	70.0 to 130	3.08	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC09996	Iron, Dissolved	mg/L	0.000012	0.0176	0.2	79.1	79.2	0.200	0.170 to 0.230	-400	70.0 to 130	0.126	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V

Laboratory ID Number: BC09996

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC09996	Lead, Dissolved	mg/L	0.0000046	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09996	Lithium, Dissolved	mg/L	0.000152	0.0154	0.200	0.206	0.206	0.205	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC09996	Magnesium, Dissolved	mg/L	0.00610	0.0462	5.00	13.7	13.7	5.09	4.25 to 5.75	101	70.0 to 130	0.00	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC09996	Manganese, Dissolved	mg/L	-0.0000021	0.0002	0.100	2.10	2.03	0.103	0.0850 to 0.115	150	70.0 to 130	3.39	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC09996	Molybdenum, Dissolved	mg/L	-0.0000176	0.0002	0.100	0.103	0.102	0.0992	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC09996	Potassium, Dissolved	mg/L	-0.0103	0.367	10.0	11.9	12.1	10.3	8.50 to 11.5	97.2	70.0 to 130	1.67	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC09996	Selenium, Dissolved	mg/L	0.0000409	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC09996	Silicon, Dissolved	mg/L	-0.000431	0.0440	1.00	7.33	7.33	0.999	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC09996	Sodium, Dissolved	mg/L	0.00315	0.0660	5.00	49.6	49.7	5.14	4.25 to 5.75	86.0	70.0 to 130	0.201	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC09996	Thallium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 09:05
Customer ID:
Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V

Laboratory ID Number: BC09996

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V

Laboratory ID Number: BC09996

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Limit
BC10005	Alkalinity, Total as CaCO3	mg/L					327	51.3	45.0 to 55.0			8.49	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-20V Dup

Location Code: WMWBARAP
Collected: 5/24/22 09:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09997

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 11:17		1.015	0.0951	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 11:17		1.015	14.4	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:57		50.75	82.2	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 11:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 11:17		1.015	8.65	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:17		1	13.6	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 11:17		1.015	6.35	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 11:57		50.75	44.8	mg/L	1.5225	20.3		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:03		1.015	0.0950	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:03		1.015	14.6	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:03		50.75	83.3	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:03		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:03		1.015	8.67	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:03		1	13.5	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:03		1.015	6.33	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:03		50.75	47.6	mg/L	1.5225	20.3		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 18:24		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 18:24		1.015	0.0306	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 18:24		1.015	0.0186	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 18:24		1.015	0.0907	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 18:24		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 18:24		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 18:24		1.015	0.000530	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 18:24		1.015	0.0268	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 18:24		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 21:08		5.075	1.92	mg/L	0.000761	0.001015		
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:24		1.015	0.00161	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 18:24		1.015	2.34	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-20V Dup

Location Code: WMWBARAP
Collected: 5/24/22 09:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09997

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	0.0190	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	0.0932	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	0.000487	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	0.0276	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	6/1/22 17:29		5.075	2.00	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	0.00150	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	2.25	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:49	5/26/22 14:49		1	0.280	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/3/22 12:00	6/3/22 13:44		1	244	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	303	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	244	mg/L			
Carbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 01:50	6/1/22 01:50		1	8.63	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-20V Dup

Location Code: WMWBARAP
Collected: 5/24/22 09:05
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09997

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:04	5/31/22 15:04		3	37.5	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:07	6/8/22 12:07		1	0.0852	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:03	6/7/22 14:03		1	3.66	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/24/22 09:02	5/24/22 09:02			549.97	uS/cm			FA
pH	5/24/22 09:02	5/24/22 09:02			6.28	SU			FA
Temperature	5/24/22 09:02	5/24/22 09:02			20.55	C			FA
Turbidity	5/24/22 09:02	5/24/22 09:02			1.01	NTU			FA
Sulfide	5/24/22 09:02	5/24/22 09:02			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V Dup

Laboratory ID Number: BC09997

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10112	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10112	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V Dup

Laboratory ID Number: BC09997

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V Dup

Laboratory ID Number: BC09997

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 09:05

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-20V Dup

Laboratory ID Number: BC09997

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10005	Alkalinity, Total as CaCO3	mg/L					327	51.3	45.0 to 55.0			8.49	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-24H

Location Code: WMWBARAP
Collected: 5/24/22 10:33
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09998

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:20		1.015	0.351	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 11:20		1.015	17.9	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:00		50.75	113	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 11:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 11:20		1.015	16.7	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:20		1	23.8	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:20		1.015	11.1	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:00		50.75	71.9	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:06		1.015	0.347	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:06		1.015	17.5	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:06		50.75	111	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:06		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:06		1.015	16.7	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:06		1	23.8	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:06		1.015	11.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:06		50.75	73.7	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 18:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 18:27		1.015	0.0262	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 18:27		1.015	0.0718	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 18:27		1.015	0.245	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 18:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 18:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 18:27		1.015	0.000809	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 18:27		1.015	0.00571	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 18:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 18:27		1.015	0.220	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:27		1.015	0.000923	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 18:27		1.015	2.55	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-24H

Location Code: WMWBARAP
Collected: 5/24/22 10:33
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09998

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	0.0712	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	0.246	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	0.000881	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	0.00570	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	0.217	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	0.00118	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	2.42	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:51	5/26/22 14:51		1	0.287	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/3/22 12:00	6/3/22 13:44		1	334	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	486	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	334	mg/L			
Carbonate Alkalinity, (calc.)	6/3/22 12:00	6/3/22 13:44		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 02:09	6/1/22 02:09		1	25.8	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-24H

Location Code: WMWBARAP
Collected: 5/24/22 10:33
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09998

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:05	5/31/22 15:05		4	50.8	mg/L	2.00	4	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:08	6/8/22 12:08		1	0.135	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:04	6/7/22 14:04		1	24.3	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/24/22 10:29	5/24/22 10:29			792.50	uS/cm			FA
pH	5/24/22 10:29	5/24/22 10:29			6.22	SU			FA
Temperature	5/24/22 10:29	5/24/22 10:29			21.70	C			FA
Turbidity	5/24/22 10:29	5/24/22 10:29			2.5	NTU			FA
Sulfide	5/24/22 10:29	5/24/22 10:29			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:33

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-24H

Laboratory ID Number: BC09998

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10112	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10112	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 10:33
Customer ID:
Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-24H

Laboratory ID Number: BC09998

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 10:33
Customer ID:
Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-24H

Laboratory ID Number: BC09998

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard Limit	Rec		Prec Limit
				Limit	Spike	MS	MSD				Rec	Limit	
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 10:33

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-24H

Laboratory ID Number: BC09998

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Limit
BC10005	Alkalinity, Total as CaCO3	mg/L					327	51.3	45.0 to 55.0			8.49	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-1

Location Code: WMWBARAP
Collected: 5/24/22 12:58
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:23		1.015	2.08	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 12:03		50.75	43.9	mg/L	3.50175	20.3	
* Iron, Total	5/31/22 10:50	6/2/22 12:03		50.75	155	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 11:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 11:23		1.015	13.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:23		1	23.3	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:23		1.015	10.9	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 11:23		1.015	24.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:08		1.015	2.07	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:10		50.75	44.3	mg/L	3.50175	20.3	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:10		50.75	150	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:08		1.015	13.0	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:08		1	23.1	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:08		1.015	10.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:08		1.015	24.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 18:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 18:31		1.015	0.0257	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 18:31		1.015	0.0767	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 18:31		1.015	0.343	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 18:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 18:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 18:31		1.015	0.00238	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 18:31		1.015	0.000914	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 18:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 18:31		1.015	0.946	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/1/22 11:30	6/1/22 18:31		1.015	2.25	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-1

Location Code: WMWBARAP
Collected: 5/24/22 12:58
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	0.00828	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	0.0779	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	0.328	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	0.00250	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	0.00109	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	0.966	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	2.20	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:53	5/26/22 14:53		1	0.331	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	371	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/25/22 16:30	5/31/22 13:58		1	464	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	371	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 02:28	6/1/22 02:28		1	15.6	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-1

Location Code: WMWBARAP

Collected: 5/24/22 12:58

Customer ID:

Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC09999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:06	5/31/22 15:06		3	27.6	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:09	6/8/22 12:09		1	0.0801	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:05	6/7/22 14:05		1	8.45	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/24/22 12:55	5/24/22 12:55			758.26	uS/cm			FA
pH	5/24/22 12:55	5/24/22 12:55			5.44	SU			FA
Temperature	5/24/22 12:55	5/24/22 12:55			21.65	C			FA
Turbidity	5/24/22 12:55	5/24/22 12:55			2.83	NTU			FA
Sulfide	5/24/22 12:55	5/24/22 12:55			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.

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 12:58
Customer ID:
Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1

Laboratory ID Number: BC09999

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10112	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10112	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 12:58

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1

Laboratory ID Number: BC09999

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 12:58
Customer ID:
Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1

Laboratory ID Number: BC09999

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 12:58

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1

Laboratory ID Number: BC09999

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC09999	Solids, Dissolved	mg/L	1.00	25.0			468	49.0	40.0 to 60.0			0.858	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-1V

Location Code: WMWBARAP
Collected: 5/24/22 15:15
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC10000

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 11:26		1.015	0.0333	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 11:26		1.015	3.55	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 11:26		1.015	0.646	mg/L	0.008120	0.0406		
* Lithium, Total	5/31/22 10:50	6/2/22 11:26		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 11:26		1.015	2.25	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:26		1	15.2	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 11:26		1.015	7.08	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 12:07		50.75	65.4	mg/L	1.5225	20.3		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:11		1.015	0.0337	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:11		1.015	3.65	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:11		1.015	0.659	mg/L	0.008120	0.0406		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:11		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:11		1.015	2.26	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:11		1	15.2	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:11		1.015	7.08	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:13		50.75	65.8	mg/L	1.5225	20.3		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 18:35		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 18:35		1.015	0.0214	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 18:35		1.015	0.000793	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 18:35		1.015	0.0863	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 18:35		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 18:35		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 18:35		1.015	0.000381	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 18:35		1.015	0.00765	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 18:35		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 18:35		1.015	0.178	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:35		1.015	0.000108	mg/L	0.000102	0.000203	J	
* Potassium, Total	6/1/22 11:30	6/1/22 18:35		1.015	2.47	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-1V

Location Code: WMWBARAP
Collected: 5/24/22 15:15
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC10000

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	0.0123	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	0.000696	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	0.0886	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	0.000384	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	0.00779	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	0.178	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	2.37	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:54	5/26/22 14:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	21.8	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	176	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	21.8	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 02:47	6/1/22 02:47		1	1.04	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-1V

Location Code: WMWBARAP

Collected: 5/24/22 15:15

Customer ID:

Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC10000

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:07	5/31/22 15:07		10	95.1	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:11	6/8/22 12:11		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:07	6/7/22 14:07		1	21.1	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/24/22 15:12	5/24/22 15:12			375.09	uS/cm			FA
pH	5/24/22 15:12	5/24/22 15:12			4.90	SU			FA
Temperature	5/24/22 15:12	5/24/22 15:12			22.07	C			FA
Turbidity	5/24/22 15:12	5/24/22 15:12			0.51	NTU			FA
Sulfide	5/24/22 15:12	5/24/22 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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:15

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1V

Laboratory ID Number: BC10000

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10112	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10112	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/24/22 15:15
Customer ID:
Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1V

Laboratory ID Number: BC10000

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:15

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1V

Laboratory ID Number: BC10000

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 15:15

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-1V

Laboratory ID Number: BC10000

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC09982	Solids, Dissolved	mg/L	0.0000	25.0			271	53.0	40.0 to 60.0			5.30	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-2

Location Code: WMWBARAP
Collected: 5/24/22 16:58
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC10001

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:29		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/31/22 10:50	6/2/22 11:29		1.015	2.45	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 11:29		1.015	0.305	mg/L	0.008120	0.0406	
* Lithium, Total	5/31/22 10:50	6/2/22 11:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 11:29		1.015	1.62	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:29		1	16.4	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:29		1.015	7.65	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 11:29		1.015	4.38	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:14		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:14		1.015	2.45	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:14		1.015	0.303	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:14		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:14		1.015	1.65	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:14		1	16.3	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:14		1.015	7.60	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:14		1.015	4.58	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 18:38		1.015	0.0125	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 18:38		1.015	0.00115	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 18:38		1.015	0.0248	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	6/1/22 11:30	6/1/22 18:38		1.015	0.00582	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 18:38		1.015	0.272	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/1/22 11:30	6/1/22 18:38		1.015	0.969	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-2

Location Code: WMWBARAP
Collected: 5/24/22 16:58
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC10001

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	0.00114	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	0.0251	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	0.000233	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	0.00621	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	0.277	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	0.945	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: CES							
* Nitrogen, Nitrate/Nitrite	5/26/22 14:54	5/26/22 14:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/6/22 13:15	6/6/22 15:32		1	12.0	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: JS							
* Solids, Dissolved	5/27/22 11:00	6/2/22 15:15		1	40.7	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	12.0	mg/L			
Carbonate Alkalinity, (calc.)	6/6/22 13:15	6/6/22 15:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/1/22 03:09	6/1/22 03:09		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-2

Location Code: WMWBARAP
Collected: 5/24/22 16:58
Customer ID:
Submittal Date: 5/25/22 14:57

Laboratory ID Number: BC10001

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 14:54	5/31/22 14:54		1	9.21	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:12	6/8/22 12:12		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:08	6/7/22 14:08		1	0.615	mg/L	0.6	2	J
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/24/22 16:55	5/24/22 16:55			53.16	uS/cm			FA
pH	5/24/22 16:55	5/24/22 16:55			4.78	SU			FA
Temperature	5/24/22 16:55	5/24/22 16:55			22.12	C			FA
Turbidity	5/24/22 16:55	5/24/22 16:55			0.78	NTU			FA
Sulfide	5/24/22 16:55	5/24/22 16:55			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 16:58

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-2

Laboratory ID Number: BC10001

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10112	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10112	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 16:58

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-2

Laboratory ID Number: BC10001

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 16:58

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-2

Laboratory ID Number: BC10001

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10001	Total Organic Carbon	mg/L	0.234	1.00	10.0	10.3	10.2	9.74		103	80.0 to 120	0.976	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/24/22 16:58

Customer ID:

Delivery Date: 5/25/22 14:57

Description: Barry Ash Pond - MW-2

Laboratory ID Number: BC10001

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10001	Alkalinity, Total as CaCO3	mg/L					12.4	53.2	45.0 to 55.0			3.28	10.0
BC10001	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.18	0.074	2.04	1.80 to 2.20	109	90.0 to 110	0.00	15.0
BC10001	Solids, Dissolved	mg/L	0.0000	25.0			40.0	53.0	40.0 to 60.0			1.73	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-13V

Location Code: WMWBARAP
Collected: 5/25/22 10:52
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:31		1.015	0.0852	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 11:31		1.015	12.0	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:10		50.75	50.7	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 11:31		1.015	0.0318	mg/L	0.007105	0.01999956	
* Magnesium, Total	5/31/22 10:50	6/2/22 11:31		1.015	6.72	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:31		1	14.5	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:31		1.015	6.78	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:10		50.75	72.6	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:17		1.015	0.0867	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:17		1.015	11.9	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:17		50.75	49.8	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:17		1.015	0.0321	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:17		1.015	6.74	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:17		1	14.6	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:17		1.015	6.82	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:17		50.75	75.0	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 18:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 18:42		1.015	0.0133	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 18:42		1.015	0.0102	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 18:42		1.015	0.0888	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 18:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 18:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 18:42		1.015	0.00488	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 18:42		1.015	0.00119	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 18:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 18:42		1.015	0.794	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:42		1.015	0.000796	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 18:42		1.015	9.48	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-13V

Location Code: WMWBARAP
Collected: 5/25/22 10:52
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	0.00726	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	0.0106	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	0.0852	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	0.00379	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	0.00127	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	0.790	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	0.000703	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	9.09	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:37	5/31/22 09:37		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 08:59	6/8/22 10:23		1	174	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	343	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	174	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 16:30	6/7/22 16:30		1	20.4	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-13V

Location Code: WMWBARAP
Collected: 5/25/22 10:52
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:09	5/31/22 15:09		10	59.3	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:13	6/8/22 12:13		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:25	6/7/22 14:25		4	122	mg/L	2.4	8	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/25/22 10:50	5/25/22 10:50			561.68	uS/cm			FA
pH	5/25/22 10:50	5/25/22 10:50			6.30	SU			FA
Temperature	5/25/22 10:50	5/25/22 10:50			20.80	C			FA
Turbidity	5/25/22 10:50	5/25/22 10:50			2.04	NTU			FA
Sulfide	5/25/22 10:50	5/25/22 10:50			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:52

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-13V

Laboratory ID Number: BC10111

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10112	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10112	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:52

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-13V

Laboratory ID Number: BC10111

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:52

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-13V

Laboratory ID Number: BC10111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:52

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-13V

Laboratory ID Number: BC10111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10124	Alkalinity, Total as CaCO3	mg/L					8.28	52.0	45.0 to 55.0			2.94	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-14

Location Code: WMWBARAP
Collected: 5/25/22 11:55
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10112

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:34		1.015	0.0618	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 11:34		1.015	11.4	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:14		50.75	35.3	mg/L	0.40600	2.03	RA
* Lithium, Total	5/31/22 10:50	6/2/22 11:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 11:34		1.015	6.72	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:34		1	20.1	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:34		1.015	9.37	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:14		50.75	80.4	mg/L	1.5225	20.3	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:20		1.015	0.0649	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:20		1.015	11.0	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:20		50.75	34.2	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:20		1.015	6.70	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:20		1	19.6	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:20		1.015	9.14	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:20		50.75	81.2	mg/L	1.5225	20.3	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 18:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.195	mg/L	0.006090	0.01015	R
* Arsenic, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.0183	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.0693	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 18:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 18:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.00345	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.00125	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.000102	mg/L	0.000068	0.000203	J
* Manganese, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.316	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 18:45		1.015	0.000518	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 18:45		1.015	2.54	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-14

Location Code: WMWBARAP
Collected: 5/25/22 11:55
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10112

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 18:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 18:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	0.0102	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	0.0186	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	0.0692	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	0.00315	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	0.00117	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	0.314	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	0.000508	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	2.46	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 10:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:39	5/31/22 09:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 08:59	6/8/22 10:23		1	196	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	328	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	196	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 16:49	6/7/22 16:49		1	17.0	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-14

Location Code: WMWBARAP
Collected: 5/25/22 11:55
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10112

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:10	5/31/22 15:10		10	45.3	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:14	6/8/22 12:14		1	0.0733	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:26	6/7/22 14:26		8	105	mg/L	4.8	16	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/25/22 11:53	5/25/22 11:53			512.57	uS/cm			FA
pH	5/25/22 11:53	5/25/22 11:53			6.14	SU			FA
Temperature	5/25/22 11:53	5/25/22 11:53			20.59	C			FA
Turbidity	5/25/22 11:53	5/25/22 11:53			3.06	NTU			FA
Sulfide	5/25/22 11:53	5/25/22 11:53			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:55

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-14

Laboratory ID Number: BC10112

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10112	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.320	0.329	0.109	0.0850 to 0.115	125	70.0 to 130	2.77	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10112	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.100	0.0991	0.0923	0.0850 to 0.115	100	70.0 to 130	0.904	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10112	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.122	0.121	0.101	0.0850 to 0.115	104	70.0 to 130	0.823	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10112	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.172	0.171	0.0996	0.0850 to 0.115	103	70.0 to 130	0.583	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10112	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.103	0.105	0.100	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10112	Boron, Total	mg/L	0.000059	0.0650	1.00	1.12	1.08	1.03	0.850 to 1.15	106	70.0 to 130	3.64	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10112	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0993	0.0990	0.0989	0.0850 to 0.115	99.3	70.0 to 130	0.303	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10112	Calcium, Total	mg/L	0.00326	0.152	5.00	16.4	16.3	4.95	4.25 to 5.75	100	70.0 to 130	0.612	20.0
BC10112	Chloride	mg/L	-0.0683	1.00	100	142	153	9.80	9.00 to 11.0	96.7	80.0 to 120	7.46	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10112	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.105	0.105	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10112	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10112	Fluoride	mg/L	-0.0308	0.125	2.50	2.75	2.76	2.56	2.25 to 2.75	107	80.0 to 120	0.363	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/25/22 11:55
Customer ID:
Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-14

Laboratory ID Number: BC10112

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10112	Iron, Total	mg/L	0.00011	0.0176	0.2	35.5	35.6	0.200	0.170 to 0.230	100	70.0 to 130	0.281	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10112	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10112	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.201	0.193	0.201	0.170 to 0.230	100	70.0 to 130	4.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10112	Magnesium, Total	mg/L	0.00638	0.0462	5.00	11.8	11.6	5.20	4.25 to 5.75	102	70.0 to 130	1.71	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10112	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.420	0.426	0.103	0.0850 to 0.115	104	70.0 to 130	1.42	20.0
BC10112	Mercury, Total by CVAA	mg/L	0.000122	0.000500	0.004	0.00317	0.00332	0.00405	0.00340 to 0.00460	79.2	70.0 to 130	4.62	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10112	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0983	0.0974	0.0973	0.0850 to 0.115	97.8	70.0 to 130	0.920	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10112	Potassium, Total	mg/L	-0.0105	0.367	10.0	12.6	12.6	10.2	8.50 to 11.5	101	70.0 to 130	0.00	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10112	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10112	Silicon, Total	mg/L	0.000146	0.0440	1.00	10.5	10.4	1.02	0.850 to 1.15	113	70.0 to 130	0.957	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10112	Sodium, Total	mg/L	0.0212	0.0660	5.00	84.7	84.8	5.05	4.25 to 5.75	86.0	70.0 to 130	0.118	20.0
BC10112	Sulfate	mg/L	-0.192	2.0	160	251	253	18.8	18.0 to 22.0	91.2	80.0 to 120	0.794	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:55

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-14

Laboratory ID Number: BC10112

Sample	Analysis	Units	MB	MB				Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike	MS	MSD			Rec	Limit		
BC10112	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:55

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-14

Laboratory ID Number: BC10112

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC10124	Alkalinity, Total as CaCO3	mg/L					8.28	52.0	45.0 to 55.0			2.94	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-15

Location Code: WMWBARAP
Collected: 5/25/22 13:07
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10113

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 11:49		1.015	0.0826	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 11:49		1.015	6.41	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 12:35		50.75	105	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 11:49		1.015	0.0118	mg/L	0.007105	0.01999956	J	
* Magnesium, Total	5/31/22 10:50	6/2/22 13:17		1.015	5.31	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:49		1	12.9	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 11:49		1.015	6.03	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 11:49		1.015	36.0	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:23		1.015	0.0766	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:23		1.015	6.05	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:23		50.75	103	mg/L	0.40600	2.03		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:23		1.015	0.00893	mg/L	0.007105	0.01999956	J	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:23		1.015	5.16	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:23		1	12.8	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:23		1.015	6.00	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:23		1.015	39.0	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 19:07		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 19:07		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	6/1/22 11:30	6/1/22 19:07		1.015	0.0176	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 19:07		1.015	0.0846	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 19:07		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 19:07		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 19:07		1.015	0.000489	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 19:07		1.015	0.0364	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 19:07		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 19:07		1.015	0.741	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:07		1.015	0.00180	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 19:07		1.015	4.23	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-15

Location Code: WMWBARAP
Collected: 5/25/22 13:07
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10113

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	0.0186	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	0.0835	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	0.000498	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	0.0377	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	0.0000821	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	0.734	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	0.00214	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	3.39	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:41	5/31/22 09:41		1	0.283	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 10:59	6/8/22 11:32		1	101	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	255	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 10:59	6/8/22 11:32		1	101	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 10:59	6/8/22 11:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 17:07	6/7/22 17:07		1	4.99	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-15

Location Code: WMWBARAP
Collected: 5/25/22 13:07
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10113

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:38	5/31/22 15:38		10	80.7	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:28	6/8/22 12:28		1	0.214	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:44	6/7/22 14:44		1	1.80	mg/L	0.6	2	J
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/25/22 13:05	5/25/22 13:05			564.84	uS/cm			FA
pH	5/25/22 13:05	5/25/22 13:05			6.68	SU			FA
Temperature	5/25/22 13:05	5/25/22 13:05			21.92	C			FA
Turbidity	5/25/22 13:05	5/25/22 13:05			3.64	NTU			FA
Sulfide	5/25/22 13:05	5/25/22 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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:07

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15

Laboratory ID Number: BC10113

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0	
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0	
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0	
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0	
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0	
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0	
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0	
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0	
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0	
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0	
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0	
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0	
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0	
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0	
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0	
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0	
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0	
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0	
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0	
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0	
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0	
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0	

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:07

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15

Laboratory ID Number: BC10113

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/25/22 13:07
Customer ID:
Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15

Laboratory ID Number: BC10113

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:07

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15

Laboratory ID Number: BC10113

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC10125	Alkalinity, Total as CaCO3	mg/L					6.68	52.0	45.0 to 55.0			2.95	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-15 Dup

Location Code: WMWBARAP
Collected: 5/25/22 13:07
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10114

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:52		1.015	0.0794	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 11:52		1.015	6.35	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:38		50.75	102	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 11:52		1.015	0.0116	mg/L	0.007105	0.01999956	J
* Magnesium, Total	5/31/22 10:50	6/2/22 13:20		1.015	5.33	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:52		1	12.8	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:52		1.015	5.96	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 11:52		1.015	35.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:26		1.015	0.0765	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:26		1.015	6.11	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:27		50.75	109	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:26		1.015	0.00859	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:26		1.015	5.12	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:26		1	12.8	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:26		1.015	5.99	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:26		1.015	38.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 19:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 19:10		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	6/1/22 11:30	6/1/22 19:10		1.015	0.0163	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 19:10		1.015	0.0806	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 19:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 19:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 19:10		1.015	0.000424	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 19:10		1.015	0.0358	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 19:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 19:10		1.015	0.719	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:10		1.015	0.00157	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 19:10		1.015	4.13	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-15 Dup

Location Code: WMWBARAP
Collected: 5/25/22 13:07
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10114

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	0.0183	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	0.0819	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	0.000350	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	0.0373	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	0.725	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	0.00200	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	3.30	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:43	5/31/22 09:43		1	0.283	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 10:59	6/8/22 11:32		1	117	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	261	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 10:59	6/8/22 11:32		1	117	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 10:59	6/8/22 11:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 17:25	6/7/22 17:25		1	4.90	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-15 Dup

Location Code: WMWBARAP
Collected: 5/25/22 13:07
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10114

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:40	5/31/22 15:40		10	79.7	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:29	6/8/22 12:29		1	0.168	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:45	6/7/22 14:45		1	1.49	mg/L	0.6	2	J
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/25/22 13:05	5/25/22 13:05			564.84	uS/cm			FA
pH	5/25/22 13:05	5/25/22 13:05			6.68	SU			FA
Temperature	5/25/22 13:05	5/25/22 13:05			21.92	C			FA
Turbidity	5/25/22 13:05	5/25/22 13:05			3.64	NTU			FA
Sulfide	5/25/22 13:05	5/25/22 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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:07

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15 Dup

Laboratory ID Number: BC10114

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:07

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15 Dup

Laboratory ID Number: BC10114

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:07

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15 Dup

Laboratory ID Number: BC10114

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:07

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-15 Dup

Laboratory ID Number: BC10114

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC10125	Alkalinity, Total as CaCO3	mg/L					6.68	52.0	45.0 to 55.0			2.95	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-16V

Location Code: WMWBARAP
Collected: 5/25/22 14:06
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10115

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 11:55		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 11:55		1.015	1.80	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 12:42		20.3	4.18	mg/L	0.1624	0.812		
* Lithium, Total	5/31/22 10:50	6/2/22 11:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 13:23		1.015	1.77	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:55		1	14.0	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 11:55		1.015	6.54	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 12:42		20.3	57.0	mg/L	0.609	8.12		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:29		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:29		1.015	1.79	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:29		1.015	3.90	mg/L	0.008120	0.0406	RA	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:29		1.015	1.67	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:29		1	14.4	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:29		1.015	6.72	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:30		10.15	55.9	mg/L	0.3045	4.06	RA	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 19:14		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 19:14		1.015	0.0132	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 19:14		1.015	0.00112	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 19:14		1.015	0.0569	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 19:14		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 19:14		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 19:14		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	6/1/22 11:30	6/1/22 19:14		1.015	0.0139	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 19:14		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 19:14		1.015	0.150	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:14		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 19:14		1.015	2.00	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-16V

Location Code: WMWBARAP
Collected: 5/25/22 14:06
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10115

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:14		1.015	0.0000886	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	0.00126	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	0.0594	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	0.000278	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	0.0143	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	0.000127	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	0.151	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	2.01	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:16		1.015	0.0000919	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:45	5/31/22 09:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	22.6	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	188	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	22.6	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 17:50	6/7/22 17:50		1	1.64	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-16V

Location Code: WMWBARAP
Collected: 5/25/22 14:06
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10115

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:41	5/31/22 15:41		10	56.6	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:31	6/8/22 12:31		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:47	6/7/22 14:47		1	35.1	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/25/22 14:03	5/25/22 14:03			318.16	uS/cm			FA
pH	5/25/22 14:03	5/25/22 14:03			5.26	SU			FA
Temperature	5/25/22 14:03	5/25/22 14:03			22.23	C			FA
Turbidity	5/25/22 14:03	5/25/22 14:03			1.38	NTU			FA
Sulfide	5/25/22 14:03	5/25/22 14:03			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:06

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16V

Laboratory ID Number: BC10115

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10115	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.104	0.104	0.0988	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10115	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.0989	0.0976	0.0948	0.0850 to 0.115	98.9	70.0 to 130	1.32	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10115	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.103	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	0.966	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10115	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.163	0.160	0.0990	0.0850 to 0.115	104	70.0 to 130	1.86	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10115	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10115	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.01	1.02	1.02	0.850 to 1.15	101	70.0 to 130	0.985	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10115	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10115	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	6.58	6.68	5.03	4.25 to 5.75	95.8	70.0 to 130	1.51	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10115	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0994	0.101	0.0999	0.0850 to 0.115	99.1	70.0 to 130	1.60	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10115	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.118	0.119	0.103	0.0850 to 0.115	104	70.0 to 130	0.844	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10115	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	4.02	4.04	0.201	0.170 to 0.230	60.0	70.0 to 130	0.496	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:06

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16V

Laboratory ID Number: BC10115

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10115	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10115	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.205	0.203	0.203	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10115	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	6.72	6.76	5.17	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10115	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.250	0.252	0.102	0.0850 to 0.115	99.0	70.0 to 130	0.797	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10115	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.102	0.102	0.100	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10115	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.6	11.8	9.74	8.50 to 11.5	95.9	70.0 to 130	1.71	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10115	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10115	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	7.66	7.65	1.01	0.850 to 1.15	94.0	70.0 to 130	0.131	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10115	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	62.8	62.2	5.08	4.25 to 5.75	138	70.0 to 130	0.960	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10115	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:06

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16V

Laboratory ID Number: BC10115

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:06

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16V

Laboratory ID Number: BC10115

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-16

Location Code: WMWBARAP
Collected: 5/25/22 14:54
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10116

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 11:58		1.015	1.98	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 11:58		1.015	13.9	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:45		50.75	94.6	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 11:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 13:27		1.015	7.61	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 11:58		1	24.0	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 11:58		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 11:58		1.015	24.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:43		1.015	1.97	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:43		1.015	13.2	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:50		50.75	92.2	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:43		1.015	7.00	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:43		1	24.2	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:43		1.015	11.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:43		1.015	26.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 19:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 19:17		1.015	0.0137	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 19:17		1.015	0.0134	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 19:17		1.015	0.0977	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 19:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 19:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 19:17		1.015	0.00135	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 19:17		1.015	0.0155	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 19:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 19:17		1.015	0.845	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:17		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/1/22 11:30	6/1/22 19:17		1.015	2.11	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-16

Location Code: WMWBARAP
Collected: 5/25/22 14:54
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10116

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	0.00628	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	0.0144	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	0.0961	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	0.00139	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	0.0161	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	0.0000973	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	0.844	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	2.00	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:47	5/31/22 09:47		1	0.282	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	219	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	299	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	219	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 18:08	6/7/22 18:08		1	10.5	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-16

Location Code: WMWBARAP
Collected: 5/25/22 14:54
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10116

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:36	5/31/22 15:36		1	20.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:32	6/8/22 12:32		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:48	6/7/22 14:48		1	6.29	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/25/22 14:51	5/25/22 14:51			474.44	uS/cm			FA
pH	5/25/22 14:51	5/25/22 14:51			5.74	SU			FA
Temperature	5/25/22 14:51	5/25/22 14:51			22.27	C			FA
Turbidity	5/25/22 14:51	5/25/22 14:51			1.8	NTU			FA
Sulfide	5/25/22 14:51	5/25/22 14:51			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:54

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16

Laboratory ID Number: BC10116

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:54

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16

Laboratory ID Number: BC10116

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:54

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16

Laboratory ID Number: BC10116

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:54

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-16

Laboratory ID Number: BC10116

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-4

Location Code: WMWBARAP
Collected: 5/25/22 15:35
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10117

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 12:01		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 12:01		1.015	1.69	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 12:01		1.015	0.124	mg/L	0.008120	0.0406		
* Lithium, Total	5/31/22 10:50	6/2/22 12:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 13:30		1.015	1.38	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:01		1	14.5	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 12:01		1.015	6.79	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 12:01		1.015	6.87	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:46		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:46		1.015	1.54	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:46		1.015	0.0889	mg/L	0.008120	0.0406		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:46		1.015	1.22	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:46		1	14.7	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:46		1.015	6.85	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:46		1.015	7.70	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 19:21		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 19:21		1.015	0.0313	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 19:21		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	6/1/22 11:30	6/1/22 19:21		1.015	0.0399	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 19:21		1.015	0.000649	mg/L	0.000406	0.001015	J	
* Cadmium, Total	6/1/22 11:30	6/1/22 19:21		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 19:21		1.015	0.000257	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 19:21		1.015	0.00455	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 19:21		1.015	0.000176	mg/L	0.000068	0.000203	J	
* Manganese, Total	6/1/22 11:30	6/1/22 19:21		1.015	0.0207	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:21		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 19:21		1.015	1.44	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-4

Location Code: WMWBARAP
Collected: 5/25/22 15:35
Customer ID:
Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10117

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.0111	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.0000852	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.0381	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.000656	mg/L	0.000406	0.001015	J
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.000372	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.00431	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.000251	mg/L	0.000068	0.000203	
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	0.0187	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	1.43	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:48	5/31/22 09:48		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	1.76	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	48.7	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	1.76	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 18:31	6/7/22 18:31		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-4

Location Code: WMWBARAP

Collected: 5/25/22 15:35

Customer ID:

Submittal Date: 5/26/22 12:33

Laboratory ID Number: BC10117

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:37	5/31/22 15:37		1	16.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:33	6/8/22 12:33		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:49	6/7/22 14:49		1	1.97	mg/L	0.6	2	J
Analytical Method: Field Measurements		Analyst: AWG							
Conductivity	5/25/22 15:33	5/25/22 15:33			72.52	uS/cm			FA
pH	5/25/22 15:33	5/25/22 15:33			4.60	SU			FA
Temperature	5/25/22 15:33	5/25/22 15:33			22.57	C			FA
Turbidity	5/25/22 15:33	5/25/22 15:33			1.54	NTU			FA
Sulfide	5/25/22 15:33	5/25/22 15:33			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:35

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-4

Laboratory ID Number: BC10117

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec
				Limit					Standard	Limit	Rec	Limit	
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:35

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-4

Laboratory ID Number: BC10117

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:35

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-4

Laboratory ID Number: BC10117

Sample	Analysis	Units	MB	MB				Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike	MS	MSD			Rec	Limit		
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:35

Customer ID:

Delivery Date: 5/26/22 12:33

Description: Barry Ash Pond - MW-4

Laboratory ID Number: BC10117

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-17V

Location Code: WMWBARAP
Collected: 5/25/22 10:39
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10118

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 12:03		1.015	0.177	mg/L	0.030000	0.1015		
* Calcium, Total	5/31/22 10:50	6/2/22 12:49		20.3	49.6	mg/L	1.4007	8.12		
* Iron, Total	5/31/22 10:50	6/2/22 12:03		1.015	0.608	mg/L	0.008120	0.0406		
* Lithium, Total	5/31/22 10:50	6/2/22 12:03		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 13:34		1.015	35.1	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:03		1	12.2	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 12:03		1.015	5.70	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 12:49		20.3	407	mg/L	0.609	8.12		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:49		1.015	0.175	mg/L	0.030000	0.1015		
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:53		20.3	50.2	mg/L	1.4007	8.12		
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:49		1.015	0.412	mg/L	0.008120	0.0406		
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:49		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:49		1.015	32.9	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:49		1	12.2	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:49		1.015	5.70	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:53		20.3	412	mg/L	0.609	8.12		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 19:25		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.0639	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.00192	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.698	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 19:25		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 19:25		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.000477	mg/L	0.000203	0.001015	J	
* Cobalt, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.0685	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.0000737	mg/L	0.000068	0.000203	J	
* Manganese, Total	6/1/22 11:30	6/1/22 21:12		5.075	2.34	mg/L	0.000761	0.001015		
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.000428	mg/L	0.000102	0.000203		
* Potassium, Total	6/1/22 11:30	6/1/22 19:25		1.015	6.70	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-17V

Location Code: WMWBARAP
Collected: 5/25/22 10:39
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10118

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:25		1.015	0.000103	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	0.00158	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	0.683	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	0.000236	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	0.0717	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	6/1/22 17:33		5.075	2.48	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	0.000574	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	6.43	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:45		1.015	0.0000964	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:50	5/31/22 09:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 08:59	6/8/22 10:23		1	91.8	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	1270	mg/L		125	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	91.7	mg/L		1	A
Carbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 18:55	6/7/22 18:55		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-17V

Location Code: WMWBARAP
Collected: 5/25/22 10:39
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10118

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:42	5/31/22 15:42		40	649	mg/L	20.00	40	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:34	6/8/22 12:34		1	0.0799	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:59	6/7/22 14:59		2	49.1	mg/L	1.2	4	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/25/22 10:36	5/25/22 10:36			2332.61	uS/cm			FA
pH	5/25/22 10:36	5/25/22 10:36			6.34	SU			FA
Temperature	5/25/22 10:36	5/25/22 10:36			21.85	C			FA
Turbidity	5/25/22 10:36	5/25/22 10:36			1.38	NTU			FA
Sulfide	5/25/22 10:36	5/25/22 10:36			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:39

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17V

Laboratory ID Number: BC10118

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:39

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17V

Laboratory ID Number: BC10118

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/25/22 10:39
Customer ID:
Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17V

Laboratory ID Number: BC10118

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:39

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17V

Laboratory ID Number: BC10118

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10124	Alkalinity, Total as CaCO3	mg/L					8.28	52.0	45.0 to 55.0			2.94	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10116	Solids, Dissolved	mg/L	1.00	25.0			299	52.0	40.0 to 60.0			0.00	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-17H

Location Code: WMWBARAP
Collected: 5/25/22 11:23
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10119

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 12:06		1.015	0.0597	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 12:06		1.015	11.6	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:52		50.75	78.2	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 12:06		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 13:37		1.015	5.30	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:06		1	15.6	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 12:06		1.015	7.31	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:06		1.015	16.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:52		1.015	0.0559	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:52		1.015	10.7	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:57		50.75	75.1	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:52		1.015	5.08	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:52		1	15.6	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:52		1.015	7.30	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:52		1.015	18.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 19:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 19:28		1.015	0.0401	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 19:28		1.015	0.0300	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 19:28		1.015	0.126	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 19:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 19:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 19:28		1.015	0.000334	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 19:28		1.015	0.00130	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 19:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 19:28		1.015	0.357	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:28		1.015	0.000454	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 19:28		1.015	1.37	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-17H

Location Code: WMWBARAP
Collected: 5/25/22 11:23
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10119

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	0.0307	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	0.125	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	0.000324	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	0.00140	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	0.354	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	0.000372	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	1.37	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:52	5/31/22 09:52		1	0.251	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 08:59	6/8/22 10:23		1	143	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	194	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	143	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 19:13	6/7/22 19:13		1	5.77	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-17H

Location Code: WMWBARAP
Collected: 5/25/22 11:23
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10119

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:29	5/31/22 15:29		1	16.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:35	6/8/22 12:35		1	0.138	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:51	6/7/22 14:51		1	3.58	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/25/22 11:20	5/25/22 11:20			388.95	uS/cm			FA
pH	5/25/22 11:20	5/25/22 11:20			6.21	SU			FA
Temperature	5/25/22 11:20	5/25/22 11:20			21.46	C			FA
Turbidity	5/25/22 11:20	5/25/22 11:20			2.84	NTU			FA
Sulfide	5/25/22 11:20	5/25/22 11:20			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.

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/25/22 11:23
Customer ID:
Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17H

Laboratory ID Number: BC10119

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec
				Limit					Standard	Limit	Rec	Limit	
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/25/22 11:23
Customer ID:
Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17H

Laboratory ID Number: BC10119

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:23

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17H

Laboratory ID Number: BC10119

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3		99.9	80.0 to 120	0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:23

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-17H

Laboratory ID Number: BC10119

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard Standard	Standard Limit	Rec Rec	Rec Limit	Prec	Prec Limit
BC10124	Alkalinity, Total as CaCO3	mg/L					8.28	52.0	45.0 to 55.0			2.94	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-23V

Location Code: WMWBARAP
Collected: 5/25/22 12:50
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10120

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 12:09		1.015	0.307	mg/L	0.030000	0.1015	
* Calcium, Total	5/31/22 10:50	6/2/22 12:09		1.015	0.899	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:09		1.015	0.605	mg/L	0.008120	0.0406	
* Lithium, Total	5/31/22 10:50	6/2/22 12:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 13:40		1.015	0.527	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:09		1	12.7	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 12:09		1.015	5.94	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:55		20.3	139	mg/L	0.609	8.12	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:55		1.015	0.308	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:55		1.015	0.873	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 12:55		1.015	0.467	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:55		1.015	0.485	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:55		1	12.8	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:55		1.015	5.99	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 14:00		20.3	144	mg/L	0.609	8.12	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 19:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 19:32		1.015	0.0466	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 19:32		1.015	0.00149	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 19:32		1.015	0.00735	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 19:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 19:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 19:32		1.015	0.000455	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 19:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	6/1/22 11:30	6/1/22 19:32		1.015	0.000124	mg/L	0.000068	0.000203	J
* Manganese, Total	6/1/22 11:30	6/1/22 19:32		1.015	0.0258	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:32		1.015	0.00142	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 19:32		1.015	1.50	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-23V

Location Code: WMWBARAP
Collected: 5/25/22 12:50
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10120

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	0.00158	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	0.00729	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	0.000286	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	0.0263	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	0.00151	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	1.51	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 09:54	5/31/22 09:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 08:59	6/8/22 10:23		1	168	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	359	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	166	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	2.01	mg/L			
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 19:36	6/7/22 19:36		1	1.11	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-23V

Location Code: WMWBARAP
Collected: 5/25/22 12:50
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10120

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:43	5/31/22 15:43		20	106	mg/L	10.00	20	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:36	6/8/22 12:36		1	0.385	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:53	6/7/22 14:53		1	4.25	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/25/22 12:47	5/25/22 12:47			636.87	uS/cm			FA
pH	5/25/22 12:47	5/25/22 12:47			7.44	SU			FA
Temperature	5/25/22 12:47	5/25/22 12:47			20.55	C			FA
Turbidity	5/25/22 12:47	5/25/22 12:47			2.11	NTU			FA
Sulfide	5/25/22 12:47	5/25/22 12:47			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 12:50

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23V

Laboratory ID Number: BC10120

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 12:50

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23V

Laboratory ID Number: BC10120

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 12:50

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23V

Laboratory ID Number: BC10120

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115		105	70.0 to 130		0.957	20.0
BC10120	Total Organic Carbon	mg/L	0.240	1.00	10.0	11.1	11.2	25.3			99.9	80.0 to 120		0.897	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 12:50

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23V

Laboratory ID Number: BC10120

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Limit
BC10124	Alkalinity, Total as CaCO3	mg/L					8.28	52.0	45.0 to 55.0			2.94	10.0
BC10120	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.96	-0.009	1.97	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-23H

Location Code: WMWBARAP
Collected: 5/25/22 13:53
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10121

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 12:12		1.015	0.0526	mg/L	0.030000	0.1015	J
* Calcium, Total	5/31/22 10:50	6/2/22 12:12		1.015	24.5	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 13:00		50.75	56.4	mg/L	0.40600	2.03	
* Lithium, Total	5/31/22 10:50	6/2/22 12:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 13:44		1.015	7.30	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:12		1	34.2	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 12:12		1.015	16.0	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:12		1.015	18.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 12:58		1.015	0.0467	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/27/22 09:45	6/1/22 12:58		1.015	22.4	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 14:04		50.75	54.7	mg/L	0.40600	2.03	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 12:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 12:58		1.015	6.48	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 12:58		1	33.2	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 12:58		1.015	15.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 12:58		1.015	20.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 19:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 19:35		1.015	0.0145	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 19:35		1.015	0.00518	mg/L	0.000081	0.000203	
* Barium, Total	6/1/22 11:30	6/1/22 19:35		1.015	0.174	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 19:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 19:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 19:35		1.015	0.000514	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 19:35		1.015	0.00200	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 19:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 19:35		1.015	0.988	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:35		1.015	0.000131	mg/L	0.000102	0.000203	J
* Potassium, Total	6/1/22 11:30	6/1/22 19:35		1.015	1.06	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-23H

Location Code: WMWBARAP
Collected: 5/25/22 13:53
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10121

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	0.00478	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	0.176	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	0.000604	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	0.00189	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	0.937	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	0.000157	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	0.973	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 10:03	5/31/22 10:03		1	0.246	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	194	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	236	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	194	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 21:09	6/7/22 21:09		1	5.68	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-23H

Location Code: WMWBARAP
Collected: 5/25/22 13:53
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10121

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:31	5/31/22 15:31		1	6.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:38	6/8/22 12:38		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:54	6/7/22 14:54		1	4.01	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/25/22 13:50	5/25/22 13:50			411.87	uS/cm			FA
pH	5/25/22 13:50	5/25/22 13:50			5.92	SU			FA
Temperature	5/25/22 13:50	5/25/22 13:50			20.16	C			FA
Turbidity	5/25/22 13:50	5/25/22 13:50			1.45	NTU			FA
Sulfide	5/25/22 13:50	5/25/22 13:50			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:53

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23H

Laboratory ID Number: BC10121

Sample	Analysis	Units	MB	MB		MS	MSD	Standard		Rec		Prec	Limit
				Limit	Spike			Standard	Limit	Rec	Limit		
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:53

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23H

Laboratory ID Number: BC10121

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:53

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23H

Laboratory ID Number: BC10121

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:53

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-23H

Laboratory ID Number: BC10121

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-3

Location Code: WMWBARAP
Collected: 5/25/22 15:05
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10122

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 12:15		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 12:15		1.015	1.29	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 12:15		1.015	0.00821	mg/L	0.008120	0.0406	J	
* Lithium, Total	5/31/22 10:50	6/2/22 12:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 13:47		1.015	1.11	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:15		1	13.3	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 12:15		1.015	6.22	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 12:15		1.015	7.98	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 13:01		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:01		1.015	1.28	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:01		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 13:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 13:01		1.015	1.05	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 13:01		1	13.7	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 13:01		1.015	6.39	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:01		1.015	8.96	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 19:39		1.015	0.0130	mg/L	0.006090	0.01015		
* Arsenic, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	6/1/22 11:30	6/1/22 19:39		1.015	0.0494	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 19:39		1.015	0.00104	mg/L	0.000203	0.001015		
* Cobalt, Total	6/1/22 11:30	6/1/22 19:39		1.015	0.000279	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 19:39		1.015	0.00891	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 19:39		1.015	1.24	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-3

Location Code: WMWBARAP
Collected: 5/25/22 15:05
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10122

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 19:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	0.0515	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	0.00108	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	0.000284	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	0.00888	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	1.25	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 19:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 12:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 10:05	5/31/22 10:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	2.52	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	50.7	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	2.52	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 21:28	6/7/22 21:28		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-3

Location Code: WMWBARAP
Collected: 5/25/22 15:05
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10122

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	5/31/22 15:32	5/31/22 15:32		1	15.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:39	6/8/22 12:39		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 14:55	6/7/22 14:55		1	1.41	mg/L	0.6	2	J
Analytical Method: Field Measurements		Analyst: DKG							
Conductivity	5/25/22 15:02	5/25/22 15:02			65.47	uS/cm			FA
pH	5/25/22 15:02	5/25/22 15:02			4.64	SU			FA
Temperature	5/25/22 15:02	5/25/22 15:02			21.52	C			FA
Turbidity	5/25/22 15:02	5/25/22 15:02			0.66	NTU			FA
Sulfide	5/25/22 15:02	5/25/22 15:02			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.

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/25/22 15:05
Customer ID:
Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-3

Laboratory ID Number: BC10122

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10122	Aluminum, Total	mg/L	0.000904	0.010	0.100	0.120	0.118	0.109	0.0850 to 0.115	107	70.0 to 130	1.68	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10122	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0924	0.0920	0.0923	0.0850 to 0.115	92.4	70.0 to 130	0.434	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10122	Arsenic, Total	mg/L	0.0000029	0.000176	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10122	Barium, Total	mg/L	0.0000218	0.00100	0.100	0.149	0.148	0.0996	0.0850 to 0.115	99.6	70.0 to 130	0.673	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.104	0.100	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10122	Boron, Total	mg/L	0.000059	0.0650	1.00	1.01	1.00	1.03	0.850 to 1.15	101	70.0 to 130	0.995	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10122	Cadmium, Total	mg/L	0.0000031	0.000147	0.100	0.0995	0.0988	0.0989	0.0850 to 0.115	99.5	70.0 to 130	0.706	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10122	Calcium, Total	mg/L	0.00326	0.152	5.00	6.24	6.04	4.95	4.25 to 5.75	99.0	70.0 to 130	3.26	20.0
BC10122	Chloride	mg/L	-0.111	1.00	10.0	23.6	23.7	9.52	9.00 to 11.0	84.0	80.0 to 120	0.423	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10122	Chromium, Total	mg/L	-0.0000481	0.000440	0.100	0.102	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10122	Cobalt, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.100	0.101	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10122	Fluoride	mg/L	0.0243	0.125	2.50	2.50	2.49	2.57	2.25 to 2.75	100	80.0 to 120	0.401	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:05

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-3

Laboratory ID Number: BC10122

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10122	Iron, Total	mg/L	0.00011	0.0176	0.2	0.210	0.207	0.200	0.170 to 0.230	101	70.0 to 130	1.44	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10122	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10122	Lithium, Total	mg/L	0.00014	0.0154	0.200	0.190	0.188	0.201	0.170 to 0.230	95.0	70.0 to 130	1.06	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10122	Magnesium, Total	mg/L	0.00638	0.0462	5.00	6.53	6.48	5.20	4.25 to 5.75	108	70.0 to 130	0.769	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10122	Manganese, Total	mg/L	0.0000074	0.0002	0.100	0.113	0.111	0.103	0.0850 to 0.115	104	70.0 to 130	1.79	20.0
BC10122	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00422	0.00420	0.00424	0.00340 to 0.00460	106	70.0 to 130	0.475	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10122	Molybdenum, Total	mg/L	0.00001	0.0002	0.100	0.0995	0.0962	0.0973	0.0850 to 0.115	99.5	70.0 to 130	3.37	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10122	Potassium, Total	mg/L	-0.0105	0.367	10.0	11.5	11.3	10.2	8.50 to 11.5	103	70.0 to 130	1.75	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10122	Selenium, Total	mg/L	0.000162	0.00100	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10122	Silicon, Total	mg/L	0.000146	0.0440	1.00	7.33	7.32	1.02	0.850 to 1.15	111	70.0 to 130	0.137	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10122	Sodium, Total	mg/L	0.0212	0.0660	5.00	12.5	12.5	5.05	4.25 to 5.75	90.4	70.0 to 130	0.00	20.0
BC10122	Sulfate	mg/L	-0.244	2.0	20.0	20.8	20.8	18.8	18.0 to 22.0	97.0	80.0 to 120	0.00	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:05

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-3

Laboratory ID Number: BC10122

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
BC10122	Thallium, Total	mg/L	0.000001	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:05

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond - MW-3

Laboratory ID Number: BC10122

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-4

Location Code: WMWBARAPFB
Collected: 5/25/22 15:20
Customer ID:
Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10123

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 12:36		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 12:36		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	5/31/22 10:50	6/2/22 12:36		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	5/31/22 10:50	6/2/22 12:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 14:11		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:36		1	Not Detected	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 12:36		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	5/31/22 10:50	6/2/22 12:36		1.015	Not Detected	mg/L	0.03045	0.406	U	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	6/1/22 11:30	6/1/22 20:07		1.015	Not Detected	mg/L	0.000068	0.000203	U	
Analytical Method: EPA 245.1		Analyst: CRB								
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 11:38		1	Not Detected	mg/L	0.0003	0.0005	U	
Analytical Method: EPA 353.2		Analyst: ELH								
* Nitrogen, Nitrate/Nitrite	5/31/22 10:07	5/31/22 10:07		1	Not Detected	mg/L as N	0.20	0.3	U	
Analytical Method: SM 2540C		Analyst: CNJ								
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	Not Detected	mg/L		25	U	

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

Comments:

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-4

Location Code: WMWBARAPFB

Collected: 5/25/22 15:20

Customer ID:

Submittal Date: 5/26/22 12:36

Laboratory ID Number: BC10123

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 21:43	6/7/22 21:43		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	6/3/22 12:47	6/3/22 12:47		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:51	6/8/22 12:51		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 15:08	6/7/22 15:08		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/25/22 15:20

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond Field Blank-4

Laboratory ID Number: BC10123

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10129	Aluminum, Total	mg/L	0.00104	0.010	0.100	0.111	0.110	0.105	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BC10129	Antimony, Total	mg/L	0.000293	0.00100	0.100	0.0932	0.0905	0.0899	0.0850 to 0.115	93.2	70.0 to 130	2.94	20.0
BC10129	Arsenic, Total	mg/L	0.0000146	0.000176	0.100	0.101	0.102	0.0997	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10129	Barium, Total	mg/L	0.000	0.00100	0.100	0.102	0.0995	0.0984	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BC10129	Beryllium, Total	mg/L	0.0000199	0.000880	0.100	0.107	0.105	0.106	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC10129	Boron, Total	mg/L	0.00291	0.0650	1.00	0.980	0.976	0.994	0.850 to 1.15	98.0	70.0 to 130	0.409	20.0
BC10129	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.101	0.100	0.0980	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10129	Calcium, Total	mg/L	0.00594	0.152	5.00	4.77	4.72	4.79	4.25 to 5.75	95.4	70.0 to 130	1.05	20.0
BC10129	Chloride	mg/L	0.117	1.00	10.0	10.5	10.5	9.33	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BC10129	Chromium, Total	mg/L	-0.0000922	0.000440	0.100	0.102	0.102	0.0986	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10129	Cobalt, Total	mg/L	-0.0000048	0.000147	0.100	0.103	0.102	0.0985	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10129	Fluoride	mg/L	0.0162	0.125	2.50	2.60	2.65	2.53	2.25 to 2.75	104	80.0 to 120	1.90	20.0
BC10129	Iron, Total	mg/L	0.000506	0.0176	0.2	0.196	0.194	0.200	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BC10129	Lead, Total	mg/L	0.0000043	0.000147	0.100	0.104	0.105	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10129	Lithium, Total	mg/L	0.000146	0.0154	0.200	0.188	0.186	0.187	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BC10129	Magnesium, Total	mg/L	0.000221	0.0462	5.00	5.30	5.32	5.44	4.25 to 5.75	106	70.0 to 130	0.377	20.0
BC10129	Manganese, Total	mg/L	0.0000009	0.0002	0.100	0.105	0.104	0.101	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00419	0.00431	0.00424	0.00340 to 0.00460	105	70.0 to 130	2.82	20.0
BC10129	Molybdenum, Total	mg/L	0.0000005	0.0002	0.100	0.0979	0.0985	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.611	20.0
BC10129	Potassium, Total	mg/L	-0.00785	0.367	10.0	10.1	10.2	9.95	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BC10129	Selenium, Total	mg/L	0.0000943	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10129	Silicon, Total	mg/L	0.000536	0.0440	1.00	0.976	0.974	0.980	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC10129	Sodium, Total	mg/L	0.0170	0.0660	5.00	4.63	4.58	4.63	4.25 to 5.75	92.6	70.0 to 130	1.09	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/25/22 15:20

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond Field Blank-4

Laboratory ID Number: BC10123

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC10129	Sulfate	mg/L	-0.251	2.0	20.0	19.5	19.7	18.7	18.0 to 22.0	97.5	80.0 to 120	1.02	20.0		
BC10129	Thallium, Total	mg/L	0.0000041	0.000147	0.100	0.106	0.108	0.107	0.0850 to 0.115	106	70.0 to 130	1.87	20.0		
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0		

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/25/22 15:20

Customer ID:

Delivery Date: 5/26/22 12:36

Description: Barry Ash Pond Field Blank-4

Laboratory ID Number: BC10123

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

Comments:

Certificate Of Analysis

Description: Barry Ash Pond - MW-25V

Location Code: WMWBARAP
Collected: 5/25/22 10:50
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10124

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 12:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/31/22 10:50	6/2/22 12:39		1.015	0.573	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:39		1.015	0.0431	mg/L	0.008120	0.0406	
* Lithium, Total	5/31/22 10:50	6/2/22 12:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 14:14		1.015	0.353	mg/L	0.021315	0.406	J
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:39		1	13.5	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 12:39		1.015	6.33	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:39		1.015	4.55	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 13:04		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:04		1.015	0.478	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:04		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/27/22 09:45	6/1/22 13:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 13:04		1.015	0.298	mg/L	0.021315	0.406	J
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 13:04		1	13.7	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 13:04		1.015	6.42	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:04		1.015	5.16	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 20:11		1.015	0.0129	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	6/1/22 11:30	6/1/22 20:11		1.015	0.00993	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 20:11		1.015	0.00126	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 20:11		1.015	0.000277	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 20:11		1.015	0.00466	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/1/22 11:30	6/1/22 20:11		1.015	0.730	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-25V

Location Code: WMWBARAP
Collected: 5/25/22 10:50
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10124

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 20:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	0.00947	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	0.00120	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	0.000260	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	0.00381	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	0.749	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 19:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 11:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 10:09	5/31/22 10:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 08:59	6/8/22 10:23		1	8.04	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	29.3	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	8.02	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 08:59	6/8/22 10:23		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 22:02	6/7/22 22:02		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-25V

Location Code: WMWBARAP
Collected: 5/25/22 10:50
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10124

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	6/3/22 12:48	6/3/22 12:48		1	3.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:52	6/8/22 12:52		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 15:09	6/7/22 15:09		1	2.13	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/25/22 10:48	5/25/22 10:48			29.82	uS/cm			FA
pH	5/25/22 10:48	5/25/22 10:48			5.45	SU			FA
Temperature	5/25/22 10:48	5/25/22 10:48			22.35	C			FA
Turbidity	5/25/22 10:48	5/25/22 10:48			1.53	NTU			FA
Sulfide	5/25/22 10:48	5/25/22 10:48			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:50

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25V

Laboratory ID Number: BC10124

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0	
BC10129	Aluminum, Total	mg/L	0.00104	0.010	0.100	0.111	0.110	0.105	0.0850 to 0.115	111	70.0 to 130	0.905	20.0	
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC10129	Antimony, Total	mg/L	0.000293	0.00100	0.100	0.0932	0.0905	0.0899	0.0850 to 0.115	93.2	70.0 to 130	2.94	20.0	
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0	
BC10129	Arsenic, Total	mg/L	0.0000146	0.000176	0.100	0.101	0.102	0.0997	0.0850 to 0.115	101	70.0 to 130	0.985	20.0	
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0	
BC10129	Barium, Total	mg/L	0.000	0.00100	0.100	0.102	0.0995	0.0984	0.0850 to 0.115	102	70.0 to 130	2.48	20.0	
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0	
BC10129	Beryllium, Total	mg/L	0.0000199	0.000880	0.100	0.107	0.105	0.106	0.0850 to 0.115	107	70.0 to 130	1.89	20.0	
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0	
BC10129	Boron, Total	mg/L	0.00291	0.0650	1.00	0.980	0.976	0.994	0.850 to 1.15	98.0	70.0 to 130	0.409	20.0	
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0	
BC10129	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.101	0.100	0.0980	0.0850 to 0.115	101	70.0 to 130	0.995	20.0	
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0	
BC10129	Calcium, Total	mg/L	0.00594	0.152	5.00	4.77	4.72	4.79	4.25 to 5.75	95.4	70.0 to 130	1.05	20.0	
BC10129	Chloride	mg/L	0.117	1.00	10.0	10.5	10.5	9.33	9.00 to 11.0	105	80.0 to 120	0.00	20.0	
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0	
BC10129	Chromium, Total	mg/L	-0.0000922	0.000440	0.100	0.102	0.102	0.0986	0.0850 to 0.115	102	70.0 to 130	0.00	20.0	
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0	
BC10129	Cobalt, Total	mg/L	-0.0000048	0.000147	0.100	0.103	0.102	0.0985	0.0850 to 0.115	103	70.0 to 130	0.976	20.0	
BC10129	Fluoride	mg/L	0.0162	0.125	2.50	2.60	2.65	2.53	2.25 to 2.75	104	80.0 to 120	1.90	20.0	
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0	

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:50

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25V

Laboratory ID Number: BC10124

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
BC10129	Iron, Total	mg/L	0.000506	0.0176	0.2	0.196	0.194	0.200	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10129	Lead, Total	mg/L	0.0000043	0.000147	0.100	0.104	0.105	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10129	Lithium, Total	mg/L	0.000146	0.0154	0.200	0.188	0.186	0.187	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10129	Magnesium, Total	mg/L	0.000221	0.0462	5.00	5.30	5.32	5.44	4.25 to 5.75	106	70.0 to 130	0.377	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10129	Manganese, Total	mg/L	0.0000009	0.0002	0.100	0.105	0.104	0.101	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00419	0.00431	0.00424	0.00340 to 0.00460	105	70.0 to 130	2.82	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10129	Molybdenum, Total	mg/L	0.0000005	0.0002	0.100	0.0979	0.0985	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.611	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10129	Potassium, Total	mg/L	-0.00785	0.367	10.0	10.1	10.2	9.95	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10129	Selenium, Total	mg/L	0.0000943	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10129	Silicon, Total	mg/L	0.000536	0.0440	1.00	0.976	0.974	0.980	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10129	Sodium, Total	mg/L	0.0170	0.0660	5.00	4.63	4.58	4.63	4.25 to 5.75	92.6	70.0 to 130	1.09	20.0
BC10129	Sulfate	mg/L	-0.251	2.0	20.0	19.5	19.7	18.7	18.0 to 22.0	97.5	80.0 to 120	1.02	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:50

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25V

Laboratory ID Number: BC10124

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10129	Thallium, Total	mg/L	0.0000041	0.000147	0.100	0.106	0.108	0.107	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 10:50

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25V

Laboratory ID Number: BC10124

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10124	Alkalinity, Total as CaCO3	mg/L					8.28	52.0	45.0 to 55.0			2.94	10.0
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-25H

Location Code: WMWBARAP
Collected: 5/25/22 11:40
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10125

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 12:42		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/31/22 10:50	6/2/22 12:42		1.015	0.949	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:42		1.015	0.0796	mg/L	0.008120	0.0406	
* Lithium, Total	5/31/22 10:50	6/2/22 12:42		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 14:18		1.015	0.787	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:42		1	15.9	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 12:42		1.015	7.42	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:42		1.015	5.34	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 13:07		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:07		1.015	0.857	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:07		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/27/22 09:45	6/1/22 13:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 13:07		1.015	0.679	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 13:07		1	16.0	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 13:07		1.015	7.50	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:07		1.015	6.16	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 20:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.0135	mg/L	0.006090	0.01015	
* Arsenic, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.000196	mg/L	0.000081	0.000203	J
* Barium, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.0197	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 20:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 20:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.00103	mg/L	0.000203	0.001015	
* Cobalt, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.00132	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 20:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.00351	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.000103	mg/L	0.000102	0.000203	J
* Potassium, Total	6/1/22 11:30	6/1/22 20:14		1.015	0.958	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-25H

Location Code: WMWBARAP
Collected: 5/25/22 11:40
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10125

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 20:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 20:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	0.000157	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	0.0178	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	0.00104	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	0.00119	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	0.0000752	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	0.00297	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	0.950	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 19:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 11:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 10:11	5/31/22 10:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 10:59	6/8/22 11:32		1	6.88	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	37.3	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 10:59	6/8/22 11:32		1	6.88	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 10:59	6/8/22 11:32		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 22:24	6/7/22 22:24		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-25H

Location Code: WMWBARAP
Collected: 5/25/22 11:40
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10125

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	6/3/22 12:49	6/3/22 12:49		1	5.32	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:53	6/8/22 12:53		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 15:11	6/7/22 15:11		1	4.24	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/25/22 11:36	5/25/22 11:36			43.00	uS/cm			FA
pH	5/25/22 11:36	5/25/22 11:36			5.23	SU			FA
Temperature	5/25/22 11:36	5/25/22 11:36			22.54	C			FA
Turbidity	5/25/22 11:36	5/25/22 11:36			0.93	NTU			FA
Sulfide	5/25/22 11:36	5/25/22 11:36			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:40

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25H

Laboratory ID Number: BC10125

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
				Limit					Standard	Limit	Rec	Limit		
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0	
BC10129	Aluminum, Total	mg/L	0.00104	0.010	0.100	0.111	0.110	0.105	0.0850 to 0.115	111	70.0 to 130	0.905	20.0	
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0	
BC10129	Antimony, Total	mg/L	0.000293	0.00100	0.100	0.0932	0.0905	0.0899	0.0850 to 0.115	93.2	70.0 to 130	2.94	20.0	
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0	
BC10129	Arsenic, Total	mg/L	0.0000146	0.000176	0.100	0.101	0.102	0.0997	0.0850 to 0.115	101	70.0 to 130	0.985	20.0	
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0	
BC10129	Barium, Total	mg/L	0.000	0.00100	0.100	0.102	0.0995	0.0984	0.0850 to 0.115	102	70.0 to 130	2.48	20.0	
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0	
BC10129	Beryllium, Total	mg/L	0.0000199	0.000880	0.100	0.107	0.105	0.106	0.0850 to 0.115	107	70.0 to 130	1.89	20.0	
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0	
BC10129	Boron, Total	mg/L	0.00291	0.0650	1.00	0.980	0.976	0.994	0.850 to 1.15	98.0	70.0 to 130	0.409	20.0	
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0	
BC10129	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.101	0.100	0.0980	0.0850 to 0.115	101	70.0 to 130	0.995	20.0	
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0	
BC10129	Calcium, Total	mg/L	0.00594	0.152	5.00	4.77	4.72	4.79	4.25 to 5.75	95.4	70.0 to 130	1.05	20.0	
BC10129	Chloride	mg/L	0.117	1.00	10.0	10.5	10.5	9.33	9.00 to 11.0	105	80.0 to 120	0.00	20.0	
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0	
BC10129	Chromium, Total	mg/L	-0.0000922	0.000440	0.100	0.102	0.102	0.0986	0.0850 to 0.115	102	70.0 to 130	0.00	20.0	
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0	
BC10129	Cobalt, Total	mg/L	-0.0000048	0.000147	0.100	0.103	0.102	0.0985	0.0850 to 0.115	103	70.0 to 130	0.976	20.0	
BC10129	Fluoride	mg/L	0.0162	0.125	2.50	2.60	2.65	2.53	2.25 to 2.75	104	80.0 to 120	1.90	20.0	
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0	

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:40

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25H

Laboratory ID Number: BC10125

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10129	Iron, Total	mg/L	0.000506	0.0176	0.2	0.196	0.194	0.200	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10129	Lead, Total	mg/L	0.0000043	0.000147	0.100	0.104	0.105	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10129	Lithium, Total	mg/L	0.000146	0.0154	0.200	0.188	0.186	0.187	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10129	Magnesium, Total	mg/L	0.000221	0.0462	5.00	5.30	5.32	5.44	4.25 to 5.75	106	70.0 to 130	0.377	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10129	Manganese, Total	mg/L	0.0000009	0.0002	0.100	0.105	0.104	0.101	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00419	0.00431	0.00424	0.00340 to 0.00460	105	70.0 to 130	2.82	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10129	Molybdenum, Total	mg/L	0.0000005	0.0002	0.100	0.0979	0.0985	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.611	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10129	Potassium, Total	mg/L	-0.00785	0.367	10.0	10.1	10.2	9.95	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10129	Selenium, Total	mg/L	0.0000943	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10129	Silicon, Total	mg/L	0.000536	0.0440	1.00	0.976	0.974	0.980	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10129	Sodium, Total	mg/L	0.0170	0.0660	5.00	4.63	4.58	4.63	4.25 to 5.75	92.6	70.0 to 130	1.09	20.0
BC10129	Sulfate	mg/L	-0.251	2.0	20.0	19.5	19.7	18.7	18.0 to 22.0	97.5	80.0 to 120	1.02	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:40

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25H

Laboratory ID Number: BC10125

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10129	Thallium, Total	mg/L	0.0000041	0.000147	0.100	0.106	0.108	0.107	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 11:40

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-25H

Laboratory ID Number: BC10125

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10125	Alkalinity, Total as CaCO3	mg/L					6.68	52.0	45.0 to 55.0			2.95	10.0
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-5

Location Code: WMWBARAP
Collected: 5/25/22 13:05
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10126

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 12:45		1.015	0.0630	mg/L	0.030000	0.1015	J	
* Calcium, Total	5/31/22 10:50	6/2/22 12:45		1.015	14.6	mg/L	0.070035	0.406		
* Iron, Total	5/31/22 10:50	6/2/22 13:03		50.75	84.9	mg/L	0.40600	2.03		
* Lithium, Total	5/31/22 10:50	6/2/22 12:45		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 14:21		1.015	5.50	mg/L	0.021315	0.406		
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:45		1	26.1	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 12:45		1.015	12.2	mg/L	0.02030	0.25375		
* Sodium, Total	5/31/22 10:50	6/2/22 12:45		1.015	19.8	mg/L	0.03045	0.406		
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Dissolved	5/27/22 09:45	6/1/22 13:09		1.015	0.0565	mg/L	0.030000	0.1015	J	
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:09		1.015	14.4	mg/L	0.070035	0.406		
* Iron, Dissolved	5/27/22 09:45	6/1/22 14:07		50.75	81.0	mg/L	0.40600	2.03	RA	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 13:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 13:09		1.015	5.19	mg/L	0.021315	0.406		
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 13:09		1	26.8	mg/L				
Silicon, Dissolved	5/27/22 09:45	6/1/22 13:09		1.015	12.5	mg/L	0.02030	0.25375		
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:09		1.015	22.4	mg/L	0.03045	0.406		
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 20:18		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 20:18		1.015	0.00862	mg/L	0.006090	0.01015	J	
* Arsenic, Total	6/1/22 11:30	6/1/22 20:18		1.015	0.0316	mg/L	0.000081	0.000203		
* Barium, Total	6/1/22 11:30	6/1/22 20:18		1.015	0.155	mg/L	0.000508	0.001015		
* Beryllium, Total	6/1/22 11:30	6/1/22 20:18		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 20:18		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 20:18		1.015	0.00103	mg/L	0.000203	0.001015		
* Cobalt, Total	6/1/22 11:30	6/1/22 20:18		1.015	0.00184	mg/L	0.000068	0.000203		
* Lead, Total	6/1/22 11:30	6/1/22 20:18		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 20:18		1.015	0.670	mg/L	0.000152	0.000203		
* Molybdenum, Total	6/1/22 11:30	6/1/22 20:18		1.015	0.000114	mg/L	0.000102	0.000203	J	
* Potassium, Total	6/1/22 11:30	6/1/22 20:18		1.015	1.46	mg/L	0.169505	0.5075		

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-5

Location Code: WMWBARAP

Collected: 5/25/22 13:05

Customer ID:

Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10126

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 20:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 20:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	0.0334	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	0.164	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	0.00110	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	0.00188	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	0.674	mg/L	0.000152	0.000203	RA
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	0.000234	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	1.49	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 19:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 11:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 10:11	5/31/22 10:11		1	0.230	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	193	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	252	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	193	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 22:43	6/7/22 22:43		1	14.5	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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-5

Location Code: WMWBARAP
Collected: 5/25/22 13:05
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10126

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	6/3/22 12:51	6/3/22 12:51		1	20.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:54	6/8/22 12:54		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 15:12	6/7/22 15:12		1	5.53	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/25/22 13:02	5/25/22 13:02			426.36	uS/cm			FA
pH	5/25/22 13:02	5/25/22 13:02			5.99	SU			FA
Temperature	5/25/22 13:02	5/25/22 13:02			22.21	C			FA
Turbidity	5/25/22 13:02	5/25/22 13:02			1.77	NTU			FA
Sulfide	5/25/22 13:02	5/25/22 13:02			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:05

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5

Laboratory ID Number: BC10126

Sample	Analysis	Units	MB	MB		Spike	MS	MSD	Standard		Rec		Prec
				Limit					Standard	Limit	Rec	Limit	
BC10126	Aluminum, Dissolved	mg/L	0.000156	0.010	0.100	0.102	0.102	0.0988	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10129	Aluminum, Total	mg/L	0.00104	0.010	0.100	0.111	0.110	0.105	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BC10126	Antimony, Dissolved	mg/L	0.000293	0.00100	0.100	0.101	0.101	0.0948	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC10129	Antimony, Total	mg/L	0.000293	0.00100	0.100	0.0932	0.0905	0.0899	0.0850 to 0.115	93.2	70.0 to 130	2.94	20.0
BC10126	Arsenic, Dissolved	mg/L	0.0000287	0.000176	0.100	0.136	0.131	0.103	0.0850 to 0.115	103	70.0 to 130	3.75	20.0
BC10129	Arsenic, Total	mg/L	0.0000146	0.000176	0.100	0.101	0.102	0.0997	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10126	Barium, Dissolved	mg/L	-0.0000115	0.00100	0.100	0.264	0.257	0.0990	0.0850 to 0.115	100	70.0 to 130	2.69	20.0
BC10129	Barium, Total	mg/L	0.000	0.00100	0.100	0.102	0.0995	0.0984	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BC10126	Beryllium, Dissolved	mg/L	0.000136	0.000880	0.100	0.104	0.0996	0.101	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10129	Beryllium, Total	mg/L	0.0000199	0.000880	0.100	0.107	0.105	0.106	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC10126	Boron, Dissolved	mg/L	-0.000139	0.0650	1.00	1.08	1.06	1.02	0.850 to 1.15	102	70.0 to 130	1.87	20.0
BC10129	Boron, Total	mg/L	0.00291	0.0650	1.00	0.980	0.976	0.994	0.850 to 1.15	98.0	70.0 to 130	0.409	20.0
BC10126	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC10129	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.101	0.100	0.0980	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10126	Calcium, Dissolved	mg/L	0.000808	0.152	5.00	19.2	19.2	5.03	4.25 to 5.75	96.0	70.0 to 130	0.00	20.0
BC10129	Calcium, Total	mg/L	0.00594	0.152	5.00	4.77	4.72	4.79	4.25 to 5.75	95.4	70.0 to 130	1.05	20.0
BC10129	Chloride	mg/L	0.117	1.00	10.0	10.5	10.5	9.33	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BC10126	Chromium, Dissolved	mg/L	0.0000163	0.000440	0.100	0.0993	0.0994	0.0999	0.0850 to 0.115	98.2	70.0 to 130	0.101	20.0
BC10129	Chromium, Total	mg/L	-0.0000922	0.000440	0.100	0.102	0.102	0.0986	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10126	Cobalt, Dissolved	mg/L	0.0000016	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC10129	Cobalt, Total	mg/L	-0.0000048	0.000147	0.100	0.103	0.102	0.0985	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10129	Fluoride	mg/L	0.0162	0.125	2.50	2.60	2.65	2.53	2.25 to 2.75	104	80.0 to 120	1.90	20.0
BC10126	Iron, Dissolved	mg/L	0.000179	0.0176	0.2	78.8	79.0	0.201	0.170 to 0.230	-1100	70.0 to 130	0.253	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:05

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5

Laboratory ID Number: BC10126

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10129	Iron, Total	mg/L	0.000506	0.0176	0.2	0.196	0.194	0.200	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BC10126	Lead, Dissolved	mg/L	0.0000088	0.000147	0.100	0.104	0.0996	0.104	0.0850 to 0.115	104	70.0 to 130	4.32	20.0
BC10129	Lead, Total	mg/L	0.0000043	0.000147	0.100	0.104	0.105	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10126	Lithium, Dissolved	mg/L	0.000048	0.0154	0.200	0.213	0.211	0.203	0.170 to 0.230	106	70.0 to 130	0.943	20.0
BC10129	Lithium, Total	mg/L	0.000146	0.0154	0.200	0.188	0.186	0.187	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BC10126	Magnesium, Dissolved	mg/L	0.00696	0.0462	5.00	10.2	10.2	5.17	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BC10129	Magnesium, Total	mg/L	0.000221	0.0462	5.00	5.30	5.32	5.44	4.25 to 5.75	106	70.0 to 130	0.377	20.0
BC10126	Manganese, Dissolved	mg/L	0.0000609	0.0002	0.100	0.745	0.742	0.102	0.0850 to 0.115	71.0	70.0 to 130	0.403	20.0
BC10129	Manganese, Total	mg/L	0.0000009	0.0002	0.100	0.105	0.104	0.101	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00419	0.00431	0.00424	0.00340 to 0.00460	105	70.0 to 130	2.82	20.0
BC10126	Molybdenum, Dissolved	mg/L	0.0000009	0.0002	0.100	0.0992	0.0985	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.708	20.0
BC10129	Molybdenum, Total	mg/L	0.0000005	0.0002	0.100	0.0979	0.0985	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.611	20.0
BC10126	Potassium, Dissolved	mg/L	-0.0279	0.367	10.0	11.1	10.8	9.74	8.50 to 11.5	96.1	70.0 to 130	2.74	20.0
BC10129	Potassium, Total	mg/L	-0.00785	0.367	10.0	10.1	10.2	9.95	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BC10126	Selenium, Dissolved	mg/L	-0.0000585	0.00100	0.100	0.104	0.103	0.102	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BC10129	Selenium, Total	mg/L	0.0000943	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10126	Silicon, Dissolved	mg/L	0.000042	0.0440	1.00	13.4	13.4	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BC10129	Silicon, Total	mg/L	0.000536	0.0440	1.00	0.976	0.974	0.980	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC10126	Sodium, Dissolved	mg/L	0.0124	0.0660	5.00	27.4	27.6	5.08	4.25 to 5.75	100	70.0 to 130	0.727	20.0
BC10129	Sodium, Total	mg/L	0.0170	0.0660	5.00	4.63	4.58	4.63	4.25 to 5.75	92.6	70.0 to 130	1.09	20.0
BC10129	Sulfate	mg/L	-0.251	2.0	20.0	19.5	19.7	18.7	18.0 to 22.0	97.5	80.0 to 120	1.02	20.0
BC10126	Thallium, Dissolved	mg/L	0.0000014	0.000147	0.100	0.103	0.0988	0.102	0.0850 to 0.115	103	70.0 to 130	4.16	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:05

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5

Laboratory ID Number: BC10126

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10129	Thallium, Total	mg/L	0.0000041	0.000147	0.100	0.106	0.108	0.107	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 13:05

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5

Laboratory ID Number: BC10126

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-5V

Location Code: WMWBARAP
Collected: 5/25/22 14:03
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10127

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 12:48		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/31/22 10:50	6/2/22 12:48		1.015	2.62	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:48		1.015	0.543	mg/L	0.008120	0.0406	
* Lithium, Total	5/31/22 10:50	6/2/22 12:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 14:24		1.015	1.97	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:48		1	13.8	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 12:48		1.015	6.46	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:48		1.015	18.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 13:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:30		1.015	2.58	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:30		1.015	0.328	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/27/22 09:45	6/1/22 13:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 13:30		1.015	1.90	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 13:30		1	14.3	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 13:30		1.015	6.69	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:30		1.015	20.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 20:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 20:22		1.015	0.00715	mg/L	0.006090	0.01015	J
* Arsenic, Total	6/1/22 11:30	6/1/22 20:22		1.015	0.000171	mg/L	0.000081	0.000203	J
* Barium, Total	6/1/22 11:30	6/1/22 20:22		1.015	0.0574	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 20:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 20:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	6/1/22 11:30	6/1/22 20:22		1.015	0.000476	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 20:22		1.015	0.00106	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 20:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	6/1/22 11:30	6/1/22 20:22		1.015	0.0325	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 20:22		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	6/1/22 11:30	6/1/22 20:22		1.015	1.04	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-5V

Location Code: WMWBARAP
Collected: 5/25/22 14:03
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10127

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 20:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 20:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	0.0578	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	0.000438	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	0.00106	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	0.0312	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	1.06	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 19:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 11:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 10:12	5/31/22 10:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	28.1	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	75.3	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	28.0	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 23:07	6/7/22 23:07		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-5V

Location Code: WMWBARAP
Collected: 5/25/22 14:03
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10127

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	6/3/22 12:58	6/3/22 12:58		3	22.6	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:56	6/8/22 12:56		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 15:13	6/7/22 15:13		1	2.91	mg/L	0.6	2	
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/25/22 14:00	5/25/22 14:00			114.39	uS/cm			FA
pH	5/25/22 14:00	5/25/22 14:00			5.88	SU			FA
Temperature	5/25/22 14:00	5/25/22 14:00			22.54	C			FA
Turbidity	5/25/22 14:00	5/25/22 14:00			1.64	NTU			FA
Sulfide	5/25/22 14:00	5/25/22 14:00			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:03

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5V

Laboratory ID Number: BC10127

Sample	Analysis	Units	MB	MB		MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike					Rec	Limit		
BC10128	Aluminum, Dissolved	mg/L	0.0000617	0.010	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10129	Aluminum, Total	mg/L	0.00104	0.010	0.100	0.111	0.110	0.105	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BC10128	Antimony, Dissolved	mg/L	0.000254	0.00100	0.100	0.0972	0.0969	0.0953	0.0850 to 0.115	97.2	70.0 to 130	0.309	20.0
BC10129	Antimony, Total	mg/L	0.000293	0.00100	0.100	0.0932	0.0905	0.0899	0.0850 to 0.115	93.2	70.0 to 130	2.94	20.0
BC10128	Arsenic, Dissolved	mg/L	0.0000147	0.000176	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.9	70.0 to 130	0.995	20.0
BC10129	Arsenic, Total	mg/L	0.0000146	0.000176	0.100	0.101	0.102	0.0997	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10128	Barium, Dissolved	mg/L	-0.0000108	0.00100	0.100	0.128	0.123	0.105	0.0850 to 0.115	101	70.0 to 130	3.98	20.0
BC10129	Barium, Total	mg/L	0.000	0.00100	0.100	0.102	0.0995	0.0984	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BC10128	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.100	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	0.300	20.0
BC10129	Beryllium, Total	mg/L	0.0000199	0.000880	0.100	0.107	0.105	0.106	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC10128	Boron, Dissolved	mg/L	-0.00005	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC10129	Boron, Total	mg/L	0.00291	0.0650	1.00	0.980	0.976	0.994	0.850 to 1.15	98.0	70.0 to 130	0.409	20.0
BC10128	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10129	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.101	0.100	0.0980	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10128	Calcium, Dissolved	mg/L	0.00171	0.152	5.00	6.14	6.22	4.66	4.25 to 5.75	91.8	70.0 to 130	1.29	20.0
BC10129	Calcium, Total	mg/L	0.00594	0.152	5.00	4.77	4.72	4.79	4.25 to 5.75	95.4	70.0 to 130	1.05	20.0
BC10129	Chloride	mg/L	0.117	1.00	10.0	10.5	10.5	9.33	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BC10128	Chromium, Dissolved	mg/L	0.0000018	0.000440	0.100	0.101	0.0985	0.103	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BC10129	Chromium, Total	mg/L	-0.0000922	0.000440	0.100	0.102	0.102	0.0986	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10128	Cobalt, Dissolved	mg/L	0.0000036	0.000147	0.100	0.106	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	1.90	20.0
BC10129	Cobalt, Total	mg/L	-0.0000048	0.000147	0.100	0.103	0.102	0.0985	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10129	Fluoride	mg/L	0.0162	0.125	2.50	2.60	2.65	2.53	2.25 to 2.75	104	80.0 to 120	1.90	20.0
BC10128	Iron, Dissolved	mg/L	0.000109	0.0176	0.2	0.205	0.206	0.197	0.170 to 0.230	96.8	70.0 to 130	0.487	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:03

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5V

Laboratory ID Number: BC10127

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10129	Iron, Total	mg/L	0.000506	0.0176	0.2	0.196	0.194	0.200	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BC10128	Lead, Dissolved	mg/L	0.0000165	0.000147	0.100	0.112	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	5.50	20.0
BC10129	Lead, Total	mg/L	0.0000043	0.000147	0.100	0.104	0.105	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10128	Lithium, Dissolved	mg/L	0.000111	0.0154	0.200	0.221	0.221	0.214	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC10129	Lithium, Total	mg/L	0.000146	0.0154	0.200	0.188	0.186	0.187	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BC10128	Magnesium, Dissolved	mg/L	0.00724	0.0462	5.00	6.28	6.31	5.16	4.25 to 5.75	104	70.0 to 130	0.477	20.0
BC10129	Magnesium, Total	mg/L	0.000221	0.0462	5.00	5.30	5.32	5.44	4.25 to 5.75	106	70.0 to 130	0.377	20.0
BC10128	Manganese, Dissolved	mg/L	0.0000281	0.0002	0.100	0.109	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	1.85	20.0
BC10129	Manganese, Total	mg/L	0.0000009	0.0002	0.100	0.105	0.104	0.101	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00419	0.00431	0.00424	0.00340 to 0.00460	105	70.0 to 130	2.82	20.0
BC10128	Molybdenum, Dissolved	mg/L	0.0000013	0.0002	0.100	0.102	0.0980	0.103	0.0850 to 0.115	102	70.0 to 130	4.00	20.0
BC10129	Molybdenum, Total	mg/L	0.0000005	0.0002	0.100	0.0979	0.0985	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.611	20.0
BC10128	Potassium, Dissolved	mg/L	-0.0248	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	97.7	70.0 to 130	0.930	20.0
BC10129	Potassium, Total	mg/L	-0.00785	0.367	10.0	10.1	10.2	9.95	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BC10128	Selenium, Dissolved	mg/L	-0.0000481	0.00100	0.100	0.100	0.0999	0.102	0.0850 to 0.115	100	70.0 to 130	0.100	20.0
BC10129	Selenium, Total	mg/L	0.0000943	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10128	Silicon, Dissolved	mg/L	-0.000059	0.0440	1.00	7.84	7.85	0.994	0.850 to 1.15	104	70.0 to 130	0.127	20.0
BC10129	Silicon, Total	mg/L	0.000536	0.0440	1.00	0.976	0.974	0.980	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC10128	Sodium, Dissolved	mg/L	0.0164	0.0660	5.00	13.2	13.1	5.30	4.25 to 5.75	108	70.0 to 130	0.760	20.0
BC10129	Sodium, Total	mg/L	0.0170	0.0660	5.00	4.63	4.58	4.63	4.25 to 5.75	92.6	70.0 to 130	1.09	20.0
BC10129	Sulfate	mg/L	-0.251	2.0	20.0	19.5	19.7	18.7	18.0 to 22.0	97.5	80.0 to 120	1.02	20.0
BC10128	Thallium, Dissolved	mg/L	0.0000059	0.000147	0.100	0.104	0.0986	0.103	0.0850 to 0.115	104	70.0 to 130	5.33	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:03

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5V

Laboratory ID Number: BC10127

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10129	Thallium, Total	mg/L	0.0000041	0.000147	0.100	0.106	0.108	0.107	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 14:03

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-5V

Laboratory ID Number: BC10127

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond - MW-6

Location Code: WMWBARAP
Collected: 5/25/22 15:22
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10128

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Total	5/31/22 10:50	6/2/22 12:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/31/22 10:50	6/2/22 12:51		1.015	1.62	mg/L	0.070035	0.406	
* Iron, Total	5/31/22 10:50	6/2/22 12:51		1.015	0.00905	mg/L	0.008120	0.0406	J
* Lithium, Total	5/31/22 10:50	6/2/22 12:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/31/22 10:50	6/2/22 14:28		1.015	1.20	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:51		1	14.2	mg/L			
Silicon, Total	5/31/22 10:50	6/2/22 12:51		1.015	6.62	mg/L	0.02030	0.25375	
* Sodium, Total	5/31/22 10:50	6/2/22 12:51		1.015	6.62	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7			Analyst: RDA		Preparation Method: EPA 1638				
* Boron, Dissolved	5/27/22 09:45	6/1/22 13:33		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/27/22 09:45	6/1/22 13:33		1.015	1.55	mg/L	0.070035	0.406	
* Iron, Dissolved	5/27/22 09:45	6/1/22 13:33		1.015	0.0113	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	5/27/22 09:45	6/1/22 13:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/27/22 09:45	6/1/22 13:33		1.015	1.09	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/27/22 09:45	6/1/22 13:33		1	14.6	mg/L			
Silicon, Dissolved	5/27/22 09:45	6/1/22 13:33		1.015	6.80	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/27/22 09:45	6/1/22 13:33		1.015	7.78	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8			Analyst: DLJ		Preparation Method: EPA 1638				
* Antimony, Total	6/1/22 11:30	6/1/22 20:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.00926	mg/L	0.006090	0.01015	J
* Arsenic, Total	6/1/22 11:30	6/1/22 20:25		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.0268	mg/L	0.000508	0.001015	
* Beryllium, Total	6/1/22 11:30	6/1/22 20:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.000306	mg/L	0.000068	0.000203	
* Chromium, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.000286	mg/L	0.000203	0.001015	J
* Cobalt, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.000977	mg/L	0.000068	0.000203	
* Lead, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.0112	mg/L	0.000068	0.000203	
* Manganese, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.00532	mg/L	0.000152	0.000203	
* Molybdenum, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.000325	mg/L	0.000102	0.000203	
* Potassium, Total	6/1/22 11:30	6/1/22 20:25		1.015	0.987	mg/L	0.169505	0.5075	

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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-6

Location Code: WMWBARAP
Collected: 5/25/22 15:22
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10128

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	6/1/22 11:30	6/1/22 20:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	6/1/22 11:30	6/1/22 20:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		Analyst: DLJ							
* Antimony, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.000105	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.0272	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.000197	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.000245	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.000938	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.00662	mg/L	0.000068	0.000203	
* Manganese, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.00511	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	0.000319	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	1.03	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/31/22 14:15	5/31/22 19:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		Analyst: CRB							
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 11:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		Analyst: ELH							
* Nitrogen, Nitrate/Nitrite	5/31/22 10:13	5/31/22 10:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		Analyst: ALH							
Alkalinity, Total as CaCO3	6/8/22 11:53	6/8/22 13:41		1	16.0	mg/L		0.1	
Analytical Method: SM 2540C		Analyst: CNJ							
* Solids, Dissolved	5/31/22 11:22	6/1/22 14:18		1	40.7	mg/L		25	
Analytical Method: SM 4500CO2 D		Analyst: ALH							
Bicarbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	16.0	mg/L			
Carbonate Alkalinity, (calc.)	6/8/22 11:53	6/8/22 13:41		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 23:23	6/7/22 23:23		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.

Certificate Of Analysis

Description: Barry Ash Pond - MW-6

Location Code: WMWBARAP
Collected: 5/25/22 15:22
Customer ID:
Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10128

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	6/3/22 12:53	6/3/22 12:53		1	6.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:57	6/8/22 12:57		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 15:14	6/7/22 15:14		1	1.27	mg/L	0.6	2	J
Analytical Method: Field Measurements		Analyst: TJD							
Conductivity	5/25/22 15:18	5/25/22 15:18			52.89	uS/cm			FA
pH	5/25/22 15:18	5/25/22 15:18			4.57	SU			FA
Temperature	5/25/22 15:18	5/25/22 15:18			21.47	C			FA
Turbidity	5/25/22 15:18	5/25/22 15:18			0.87	NTU			FA
Sulfide	5/25/22 15:18	5/25/22 15:18			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.

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:22

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-6

Laboratory ID Number: BC10128

Sample	Analysis	Units	MB	MB		MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
				Limit	Spike					Rec	Limit		
BC10128	Aluminum, Dissolved	mg/L	0.0000617	0.010	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC10129	Aluminum, Total	mg/L	0.00104	0.010	0.100	0.111	0.110	0.105	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BC10128	Antimony, Dissolved	mg/L	0.000254	0.00100	0.100	0.0972	0.0969	0.0953	0.0850 to 0.115	97.2	70.0 to 130	0.309	20.0
BC10129	Antimony, Total	mg/L	0.000293	0.00100	0.100	0.0932	0.0905	0.0899	0.0850 to 0.115	93.2	70.0 to 130	2.94	20.0
BC10128	Arsenic, Dissolved	mg/L	0.0000147	0.000176	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.9	70.0 to 130	0.995	20.0
BC10129	Arsenic, Total	mg/L	0.0000146	0.000176	0.100	0.101	0.102	0.0997	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10128	Barium, Dissolved	mg/L	-0.0000108	0.00100	0.100	0.128	0.123	0.105	0.0850 to 0.115	101	70.0 to 130	3.98	20.0
BC10129	Barium, Total	mg/L	0.000	0.00100	0.100	0.102	0.0995	0.0984	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BC10128	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.100	0.0997	0.101	0.0850 to 0.115	100	70.0 to 130	0.300	20.0
BC10129	Beryllium, Total	mg/L	0.0000199	0.000880	0.100	0.107	0.105	0.106	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC10128	Boron, Dissolved	mg/L	-0.00005	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BC10129	Boron, Total	mg/L	0.00291	0.0650	1.00	0.980	0.976	0.994	0.850 to 1.15	98.0	70.0 to 130	0.409	20.0
BC10128	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BC10129	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.101	0.100	0.0980	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10128	Calcium, Dissolved	mg/L	0.00171	0.152	5.00	6.14	6.22	4.66	4.25 to 5.75	91.8	70.0 to 130	1.29	20.0
BC10129	Calcium, Total	mg/L	0.00594	0.152	5.00	4.77	4.72	4.79	4.25 to 5.75	95.4	70.0 to 130	1.05	20.0
BC10129	Chloride	mg/L	0.117	1.00	10.0	10.5	10.5	9.33	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BC10128	Chromium, Dissolved	mg/L	0.0000018	0.000440	0.100	0.101	0.0985	0.103	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BC10129	Chromium, Total	mg/L	-0.0000922	0.000440	0.100	0.102	0.102	0.0986	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10128	Cobalt, Dissolved	mg/L	0.0000036	0.000147	0.100	0.106	0.104	0.106	0.0850 to 0.115	105	70.0 to 130	1.90	20.0
BC10129	Cobalt, Total	mg/L	-0.0000048	0.000147	0.100	0.103	0.102	0.0985	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10129	Fluoride	mg/L	0.0162	0.125	2.50	2.60	2.65	2.53	2.25 to 2.75	104	80.0 to 120	1.90	20.0
BC10128	Iron, Dissolved	mg/L	0.000109	0.0176	0.2	0.205	0.206	0.197	0.170 to 0.230	96.8	70.0 to 130	0.487	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:22

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-6

Laboratory ID Number: BC10128

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10129	Iron, Total	mg/L	0.000506	0.0176	0.2	0.196	0.194	0.200	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BC10128	Lead, Dissolved	mg/L	0.0000165	0.000147	0.100	0.112	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	5.50	20.0
BC10129	Lead, Total	mg/L	0.0000043	0.000147	0.100	0.104	0.105	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10128	Lithium, Dissolved	mg/L	0.000111	0.0154	0.200	0.221	0.221	0.214	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC10129	Lithium, Total	mg/L	0.000146	0.0154	0.200	0.188	0.186	0.187	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BC10128	Magnesium, Dissolved	mg/L	0.00724	0.0462	5.00	6.28	6.31	5.16	4.25 to 5.75	104	70.0 to 130	0.477	20.0
BC10129	Magnesium, Total	mg/L	0.000221	0.0462	5.00	5.30	5.32	5.44	4.25 to 5.75	106	70.0 to 130	0.377	20.0
BC10128	Manganese, Dissolved	mg/L	0.0000281	0.0002	0.100	0.109	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	1.85	20.0
BC10129	Manganese, Total	mg/L	0.0000009	0.0002	0.100	0.105	0.104	0.101	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00419	0.00431	0.00424	0.00340 to 0.00460	105	70.0 to 130	2.82	20.0
BC10128	Molybdenum, Dissolved	mg/L	0.0000013	0.0002	0.100	0.102	0.0980	0.103	0.0850 to 0.115	102	70.0 to 130	4.00	20.0
BC10129	Molybdenum, Total	mg/L	0.0000005	0.0002	0.100	0.0979	0.0985	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.611	20.0
BC10128	Potassium, Dissolved	mg/L	-0.0248	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	97.7	70.0 to 130	0.930	20.0
BC10129	Potassium, Total	mg/L	-0.00785	0.367	10.0	10.1	10.2	9.95	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BC10128	Selenium, Dissolved	mg/L	-0.0000481	0.00100	0.100	0.100	0.0999	0.102	0.0850 to 0.115	100	70.0 to 130	0.100	20.0
BC10129	Selenium, Total	mg/L	0.0000943	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10128	Silicon, Dissolved	mg/L	-0.000059	0.0440	1.00	7.84	7.85	0.994	0.850 to 1.15	104	70.0 to 130	0.127	20.0
BC10129	Silicon, Total	mg/L	0.000536	0.0440	1.00	0.976	0.974	0.980	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC10128	Sodium, Dissolved	mg/L	0.0164	0.0660	5.00	13.2	13.1	5.30	4.25 to 5.75	108	70.0 to 130	0.760	20.0
BC10129	Sodium, Total	mg/L	0.0170	0.0660	5.00	4.63	4.58	4.63	4.25 to 5.75	92.6	70.0 to 130	1.09	20.0
BC10129	Sulfate	mg/L	-0.251	2.0	20.0	19.5	19.7	18.7	18.0 to 22.0	97.5	80.0 to 120	1.02	20.0
BC10128	Thallium, Dissolved	mg/L	0.0000059	0.000147	0.100	0.104	0.0986	0.103	0.0850 to 0.115	104	70.0 to 130	5.33	20.0

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

Batch QC Summary

Customer Account: WMWBARAP
Sample Date: 5/25/22 15:22
Customer ID:
Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-6

Laboratory ID Number: BC10128

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10129	Thallium, Total	mg/L	0.0000041	0.000147	0.100	0.106	0.108	0.107	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0

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

Batch QC Summary

Customer Account: WMWBARAP

Sample Date: 5/25/22 15:22

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond - MW-6

Laboratory ID Number: BC10128

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC10128	Alkalinity, Total as CaCO3	mg/L					16.6	52.0	45.0 to 55.0			3.68	10.0
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10126	Solids, Dissolved	mg/L	1.00	25.0			258	52.0	40.0 to 60.0			2.35	10.0

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

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-2

Location Code: WMWBARAPFB

Collected: 5/25/22 15:45

Customer ID:

Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10129

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q	
Analytical Method: EPA 200.7		Analyst: RDA			Preparation Method: EPA 1638					
* Boron, Total	5/31/22 10:50	6/2/22 12:54		1.015	Not Detected	mg/L	0.030000	0.1015	U	
* Calcium, Total	5/31/22 10:50	6/2/22 12:54		1.015	Not Detected	mg/L	0.070035	0.406	U	
* Iron, Total	5/31/22 10:50	6/2/22 12:54		1.015	Not Detected	mg/L	0.008120	0.0406	U	
* Lithium, Total	5/31/22 10:50	6/2/22 12:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U	
* Magnesium, Total	5/31/22 10:50	6/2/22 14:31		1.015	Not Detected	mg/L	0.021315	0.406	U	
Silica, Total (calc.)	5/31/22 10:50	6/2/22 12:54		1	Not Detected	mg/L				
Silicon, Total	5/31/22 10:50	6/2/22 12:54		1.015	Not Detected	mg/L	0.02030	0.25375	U	
* Sodium, Total	5/31/22 10:50	6/2/22 12:54		1.015	Not Detected	mg/L	0.03045	0.406	U	
Analytical Method: EPA 200.8		Analyst: DLJ			Preparation Method: EPA 1638					
* Antimony, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Aluminum, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.006090	0.01015	U	
* Arsenic, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000081	0.000203	U	
* Barium, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Beryllium, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000406	0.001015	U	
* Cadmium, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Chromium, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000203	0.001015	U	
* Cobalt, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Lead, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
* Manganese, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000152	0.000203	U	
* Molybdenum, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000102	0.000203	U	
* Potassium, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.169505	0.5075	U	
* Selenium, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000508	0.001015	U	
* Thallium, Total	6/1/22 11:30	6/1/22 20:29		1.015	Not Detected	mg/L	0.000068	0.000203	U	
Analytical Method: EPA 245.1		Analyst: CRB								
* Mercury, Total by CVAA	6/6/22 13:52	6/7/22 11:52		1	Not Detected	mg/L	0.0003	0.0005	U	
Analytical Method: EPA 353.2		Analyst: ELH								
* Nitrogen, Nitrate/Nitrite	5/31/22 10:14	5/31/22 10:14		1	Not Detected	mg/L as N	0.20	0.3	U	
Analytical Method: SM 2540C		Analyst: CNJ								
* Solids, Dissolved	6/1/22 10:39	6/2/22 13:18		1	Not Detected	mg/L		25	U	

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

Comments:

Certificate Of Analysis

Description: Barry Ash Pond Field Blank-2

Location Code: WMWBARAPFB

Collected: 5/25/22 15:45

Customer ID:

Submittal Date: 5/26/22 12:38

Laboratory ID Number: BC10129

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		Analyst: ELH							
* Total Organic Carbon	6/7/22 23:45	6/7/22 23:45		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		Analyst: CES							
* Chloride	6/3/22 12:54	6/3/22 12:54		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		Analyst: JCC							
* Fluoride	6/8/22 12:58	6/8/22 12:58		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		Analyst: JCC							
* Sulfate	6/7/22 15:15	6/7/22 15:15		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/25/22 15:45

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond Field Blank-2

Laboratory ID Number: BC10129

Sample	Analysis	Units	MB	MB				Standard		Rec		Prec	Limit
				Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
BC10129	Aluminum, Total	mg/L	0.00104	0.010	0.100	0.111	0.110	0.105	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BC10129	Antimony, Total	mg/L	0.000293	0.00100	0.100	0.0932	0.0905	0.0899	0.0850 to 0.115	93.2	70.0 to 130	2.94	20.0
BC10129	Arsenic, Total	mg/L	0.0000146	0.000176	0.100	0.101	0.102	0.0997	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC10129	Barium, Total	mg/L	0.000	0.00100	0.100	0.102	0.0995	0.0984	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BC10129	Beryllium, Total	mg/L	0.0000199	0.000880	0.100	0.107	0.105	0.106	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC10129	Boron, Total	mg/L	0.00291	0.0650	1.00	0.980	0.976	0.994	0.850 to 1.15	98.0	70.0 to 130	0.409	20.0
BC10129	Cadmium, Total	mg/L	0.000	0.000147	0.100	0.101	0.100	0.0980	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC10129	Calcium, Total	mg/L	0.00594	0.152	5.00	4.77	4.72	4.79	4.25 to 5.75	95.4	70.0 to 130	1.05	20.0
BC10129	Chloride	mg/L	0.117	1.00	10.0	10.5	10.5	9.33	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BC10129	Chromium, Total	mg/L	-0.0000922	0.000440	0.100	0.102	0.102	0.0986	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC10129	Cobalt, Total	mg/L	-0.0000048	0.000147	0.100	0.103	0.102	0.0985	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC10129	Fluoride	mg/L	0.0162	0.125	2.50	2.60	2.65	2.53	2.25 to 2.75	104	80.0 to 120	1.90	20.0
BC10129	Iron, Total	mg/L	0.000506	0.0176	0.2	0.196	0.194	0.200	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BC10129	Lead, Total	mg/L	0.0000043	0.000147	0.100	0.104	0.105	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC10129	Lithium, Total	mg/L	0.000146	0.0154	0.200	0.188	0.186	0.187	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BC10129	Magnesium, Total	mg/L	0.000221	0.0462	5.00	5.30	5.32	5.44	4.25 to 5.75	106	70.0 to 130	0.377	20.0
BC10129	Manganese, Total	mg/L	0.0000009	0.0002	0.100	0.105	0.104	0.101	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BC10129	Mercury, Total by CVAA	mg/L	0.000124	0.000500	0.004	0.00419	0.00431	0.00424	0.00340 to 0.00460	105	70.0 to 130	2.82	20.0
BC10129	Molybdenum, Total	mg/L	0.0000005	0.0002	0.100	0.0979	0.0985	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.611	20.0
BC10129	Potassium, Total	mg/L	-0.00785	0.367	10.0	10.1	10.2	9.95	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BC10129	Selenium, Total	mg/L	0.0000943	0.00100	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC10129	Silicon, Total	mg/L	0.000536	0.0440	1.00	0.976	0.974	0.980	0.850 to 1.15	97.6	70.0 to 130	0.205	20.0
BC10129	Sodium, Total	mg/L	0.0170	0.0660	5.00	4.63	4.58	4.63	4.25 to 5.75	92.6	70.0 to 130	1.09	20.0

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB

Sample Date: 5/25/22 15:45

Customer ID:

Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond Field Blank-2

Laboratory ID Number: BC10129

Sample	Analysis	Units	MB	MB				MSD	Standard	Standard		Rec		Prec	Limit
				Limit	Spike	MS	Standard			Limit	Rec	Limit	Prec		
BC10129	Sulfate	mg/L	-0.251	2.0	20.0	19.5	19.7	18.7	18.0 to 22.0	97.5	80.0 to 120	1.02	20.0		
BC10129	Thallium, Total	mg/L	0.0000041	0.000147	0.100	0.106	0.108	0.107	0.0850 to 0.115	106	70.0 to 130	1.87	20.0		
BC10129	Total Organic Carbon	mg/L	0.217	1.00	10.0	10.3	10.4	25.1		103	80.0 to 120	0.966	20.0		

Comments:

Batch QC Summary

Customer Account: WMWBARAPFB
Sample Date: 5/25/22 15:45
Customer ID:
Delivery Date: 5/26/22 12:38

Description: Barry Ash Pond Field Blank-2

Laboratory ID Number: BC10129

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec Limit	Prec	Prec Limit	
BC10129	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.90	-0.030	1.90	1.80 to 2.20	95.0	90.0 to 110	0.00	15.0
BC10129	Solids, Dissolved	mg/L	1.00	25.0			0.0000	51.0	40.0 to 60.0			0.00	10.0

Comments:

Definitions

Project Number: WMWBARAP_1367

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.
R	Matrix spike recovery and/or matrix spike duplicate recovery is outside of specification 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
 Lab Complete

Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
	Collector: Dallas Gentry		Requested By
		Location	Barry Ash Pond

Bottles	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC pH < 2 SU. BC 05/25/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-20H	05/23/2022	15:48	7	Groundwater		BC09974
MW-8V	05/23/2022	17:26	7	Groundwater		BC09975
MW-22H	05/24/2022	09:14	7	Groundwater		BC09976
MW-8	05/24/2022	10:50	7	Groundwater		BC09977
FB-1	05/24/2022	11:15	5	Field Blank		BC09978
MW-10	05/24/2022	12:46	7	Groundwater		BC09979
EB-1	05/24/2022	13:43	5	Equipment Blank		BC09980
MW-10V	05/24/2022	14:44	7	Groundwater		BC09981
MW-13	05/24/2022	15:55	7	Groundwater		BC09982
MW-13 dup	05/24/2022	15:55	7	Sample Duplicate		BC09983

Relinquished By	Received By	Date/Time
		05/25/2022 09:35
		05/25/2022 13:53

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Turbidity ID	3901-20010-2-2		
Sample Event	1367		
		Cooler Temp	1.6 °C
		Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL



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
		Location	Barry Ash Pond

Bottles	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrite/Nitrate; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC pH < 2 SU. BC 05/25/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-18H	05/23/2022	16:14	7	Groundwater		BC09984
MW-11	05/23/2022	17:20	7	Groundwater		BC09985
MW-19H	05/24/2022	09:27	7	Groundwater		BC09986
MW-15V	05/24/2022	10:57	7	Groundwater		BC09987
MW-7	05/24/2022	13:10	7	Groundwater		BC09988
MW-7 DUP	05/24/2022	13:10	7	Sample Duplicate		BC09989
FB-3	05/24/2022	14:05	5	Field Blank		BC09990
MW-7V	05/24/2022	14:14	7	Groundwater		BC09991
MW-9	05/24/2022	15:15	7	Groundwater		BC09992
MW-14V	05/24/2022	16:24	7	Groundwater		BC09993

Relinquished By	Received By	Date/Time
		05/25/2022 09:50
		05/25/2022 13:41

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	
Sample Event	1367	
Cooler Temp	1.6 °C	
Thermometer ID	7044-38281-2-1	
pH Strip ID	9772-56585-100-7	

Bottles/Pre-Preserved Bottles are provided by the GTL



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: TJ Daugherty		Requested By: Greg Dyer
		Location	Barry Ash Pond

Bottles	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC pH < 2 SU. BC 05/25/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-12	05/23/2022	16:15	7	Groundwater		BC09994
MW-12V	05/23/2022	17:05	7	Groundwater		BC09995
MW-20V	05/24/2022	09:05	7	Groundwater		BC09996
MW-20V Dup	05/24/2022	09:05	7	Sample Duplicate		BC09997
MW-24H	05/24/2022	10:33	7	Groundwater		BC09998
MW-1	05/24/2022	12:58	7	Groundwater		BC09999
MW-1V	05/24/2022	15:15	7	Groundwater		BC10000
MW-2	05/24/2022	16:58	7	Groundwater		BC10001

Relinquished By	Received By	Date/Time
		05/25/2022 10:00
		05/25/2022 13:40

SmarTroll ID: 7586-41446-5-5
 Turbidity ID: 4677-23342-4-1
 Sample Event: 1367

All metals and radiological bottles have pH < 2
 Cooler Temp: 1.7 °C
 Thermometer ID: 7044-38281-2-1
 pH Strip ID: 9772-56585-100-7



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	Barry Ash Pond

Bottles	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrite/Nitrate;TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: N/N, TOC pH < 2 SU. BC 05/26/2022

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-13V	05/25/2022	10:52	7	Groundwater		BC10111
MW-14	05/25/2022	11:55	7	Groundwater		BC10112
MW-15	05/25/2022	13:07	7	Groundwater		BC10113
MW-15DUP	05/25/2022	13:07	7	Sample Duplicate		BC10114
MW-16V	05/25/2022	14:06	7	Groundwater		BC10115
MW-16	05/25/2022	14:54	7	Groundwater		BC10116
MW-4	05/25/2022	15:35	7	Groundwater		BC10117

Relinquished By <i>Anthony Goggins</i>	Received By <i>Bushy Cotton</i>	Date/Time 05/26/2022 11:54

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	
Sample Event	1367	
Cooler Temp	2.2 °C	
Thermometer ID	7044-38281-2-1	
pH Strip ID	10275-59506-10-2	

Bottles/Pre-Preserved Bottles are provided by the GTL



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	Barry Ash Pond	

Bottles	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17V	05/25/2022	10:39	7	Groundwater		BC10118
MW-17H	05/25/2022	11:23	7	Groundwater		BC10119
MW-23V	05/25/2022	12:50	7	Groundwater		BC10120
MW-23H	05/25/2022	13:53	7	Groundwater		BC10121
MW-3	05/25/2022	15:05	7	Groundwater		BC10122
FB-4	05/25/2022	15:20	5	Field Blank		BC10123

Relinquished By	Received By	Date/Time
<i>Dallas Gentry</i>	<i>Bushy Cotton</i>	05/26/2022 11:55

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2 <input checked="checked" type="checkbox"/>
Turbidity ID	3901-20010-2-2	
Sample Event	1367	
	Cooler Temp	1.3 °C
	Thermometer ID	7044-38281-2-1
	pH Strip ID	10275-59506-10-2



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	TJ Daugherty	Requested By	Greg Dyer
		Location	Barry Ash Pond

Bottles	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments	N/N, TOC pH < 2 SU. BC 05/26/2022
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Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-25V	05/25/2022	10:50	7	Groundwater		BC10124
MW-25H	05/25/2022	11:40	7	Groundwater		BC10125
MW-5	05/25/2022	13:05	7	Groundwater		BC10126
MW-5V	05/25/2022	14:03	7	Groundwater		BC10127
MW-6	05/25/2022	15:22	7	Groundwater		BC10128
FB-2	05/25/2022	15:45	5	Field Blank		BC10129

Relinquished By 	Received By 	Date/Time 05/26/2022 11:54

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	
Sample Event	1367	Cooler Temp
		Thermometer ID
		pH Strip ID
		1.2 °C
		7044-38281-2-1
		9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL



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
		Location	Barry 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-8V
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Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-20H	05/23/2022	15:48	1	Groundwater		BC10007
MW-8V	05/23/2022	17:26	3	Groundwater		BC10008
MW-22H	05/24/2022	09:14	1	Groundwater		BC10009
MW-8	05/24/2022	10:50	1	Groundwater		BC10010
FB-1	05/24/2022	11:15	1	Field Blank		BC10011
MW-10	05/24/2022	12:46	1	Groundwater		BC10012
EB-1	05/24/2022	13:43	1	Equipment Blank		BC10013
MW-10V	05/24/2022	14:44	1	Groundwater		BC10014
MW-13	05/24/2022	15:55	1	Groundwater		BC10015
MW-13 dup	05/24/2022	15:55	1	Sample Duplicate		BC10016

Relinquished By	Received By	Date/Time
		05/25/2022 09:35
		05/25/2022 13:43

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Turbidity ID	3901-20010-2-2		
Sample Event	1367		
		Cooler Temp	NA
		Thermometer ID	NA
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL



Chain of Custody
Groundwater
APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To Requested By Location	Dustin Brooks, Greg Dyer
	Collector: Anthony Goggins		Greg Dyer
			Barry 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: MS/MSD collected @ MW-11

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-18H	05/23/2022	16:14	1	Groundwater		BC10017
MW-11	05/23/2022	17:20	3	Groundwater		BC10018
MW-19H	05/24/2022	09:27	1	Groundwater		BC10019
MW-15V	05/24/2022	10:57	1	Groundwater		BC10020
MW-7	05/24/2022	13:10	1	Groundwater		BC10021
MW-7 DUP	05/24/2022	13:10	1	Sample Duplicate		BC10022
FB-3	05/24/2022	14:05	1	Field Blank		BC10023
MW-7V	05/24/2022	14:14	1	Groundwater		BC10024
MW-9	05/24/2022	15:15	1	Groundwater		BC10025
MW-14V	05/24/2022	16:24	1	Groundwater		BC10026

Relinquished By	Received By	Date/Time
		05/25/2022 09:50
		05/25/2022 13:40

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-2-2	
Sample Event	1367	
Cooler Temp	NA	
Thermometer ID	NA	
pH Strip ID	9772-56585-100-7	

Bottles/Pre-Preserved Bottles are provided by the GTL



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	TJ Daugherty	Requested By	Greg Dyer
		Location	Barry 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 MS/MSD collected @ MW-1V

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-12	05/23/2022	16:15	1	Groundwater		BC10027
MW-12V	05/23/2022	17:05	1	Groundwater		BC10028
MW-20V	05/24/2022	09:05	1	Groundwater		BC10029
MW-20V Dup	05/24/2022	09:05	1	Sample Duplicate		BC10030
MW-24H	05/24/2022	10:33	1	Groundwater		BC10031
MW-1	05/24/2022	12:58	1	Groundwater		BC10032
MW-1V	05/24/2022	15:15	3	Groundwater		BC10033
MW-2	05/24/2022	16:58	1	Groundwater		BC10034

Relinquished By	Received By	Date/Time
		05/25/2022 10:00
		05/25/2022 13:40

SmarTroll ID 7586-41446-5-5
 Turbidity ID 4677-23342-4-1
 Sample Event 1367

All metals and radiological bottles have pH < 2
 Cooler Temp NA
 Thermometer ID NA
 pH Strip ID 9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL



Chain of Custody Groundwater APC General Testing Laboratory

Field Complete
 Lab Complete

Outside Lab

Lab ETA

Requested Complete Date Collector	Routine	Results To Requested By Location	Dustin Brooks, Greg Dyer
	Anthony Goggins		Greg Dyer
			Barry 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
MW-13V	05/25/2022	10:52	1	Groundwater		BC10130
MW-14	05/25/2022	11:55	1	Groundwater		BC10131
MW-15	05/25/2022	13:07	1	Groundwater		BC10132
MW-15DUP	05/25/2022	13:07	1	Sample Duplicate		BC10133
MW-16V	05/25/2022	14:06	1	Groundwater		BC10134
MW-16	05/25/2022	14:54	1	Groundwater		BC10135
MW-4	05/25/2022	15:35	1	Groundwater		BC10136

Relinquished By	Received By	Date/Time
<i>Anthony Goggins</i>	<i>Barry Ash</i>	05/26/2022 11:53

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	Cooler Temp	N/A
Sample Event	1367	Thermometer ID	N/A
		pH Strip ID	10275-59506-10-2

Bottles/Pre-Preserved Bottles are provided by the GTL



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	Barry 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
MW-17V	05/25/2022	10:39	1	Groundwater		BC10137
MW-17H	05/25/2022	11:23	1	Groundwater		BC10138
MW-23V	05/25/2022	12:50	1	Groundwater		BC10139
MW-23H	05/25/2022	13:53	1	Groundwater		BC10140
MW-3	05/25/2022	15:05	1	Groundwater		BC10141
FB-4	05/25/2022	15:20	1	Field Blank		BC10142

Relinquished By	Received By	Date/Time
<i>Dallas Gentry</i>	<i>Bubba Cotton</i>	05/26/2022 11:55

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	
Sample Event	1367	
Cooler Temp	N/A	
Thermometer ID	N/A	
pH Strip ID	10275-59506-10-2	

Bottles/Pre-Preserved Bottles are provided by the GTL



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	TJ Daugherty	Requested By	Greg Dyer
		Location	Barry 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
MW-25V	05/25/2022	10:50	1	Groundwater		BC10143
MW-25H	05/25/2022	11:40	1	Groundwater		BC10144
MW-5	05/25/2022	13:05	1	Groundwater		BC10145
MW-5V	05/25/2022	14:03	1	Groundwater		BC10146
MW-6	05/25/2022	15:22	1	Groundwater		BC10147
FB-2	05/25/2022	15:45	1	Field Blank		BC10148

Relinquished By	Received By	Date/Time
<i>HAB</i>	<i>Bushie Cation</i>	05/26/2022 11:54

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	
Sample Event	1367	
	Cooler Temp	N/A
	Thermometer ID	N/A
	pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

July 13, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWBARAP_1367
Pace Project No.: 30494074

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on June 02, 2022. 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

(Greensburg, PA) - Revision 1 - This report replaces the 7/12/22 report. This project was revised on 7/13/22 to revise a sample ID per client request.

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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: WMWBARAP_1367
Pace Project No.: 30494074

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30494074001	BC10007 MW-20H	Water	05/23/22 15:48	06/02/22 10:15
30494074002	BC10008 MW-8V	Water	05/23/22 17:26	06/02/22 10:15
30494074003	BC10008 MW-8V MS	Water	05/23/22 17:26	06/02/22 10:15
30494074004	BC10008 MW-8V MSD	Water	05/23/22 17:26	06/02/22 10:15
30494074005	BC10009 MW-22H	Water	05/24/22 09:14	06/02/22 10:15
30494074006	BC10010 MW-8	Water	05/24/22 10:50	06/02/22 10:15
30494074007	BC10011 FB-1	Water	05/24/22 11:15	06/02/22 10:15
30494074008	BC10012 MW-10	Water	05/24/22 12:46	06/02/22 10:15
30494074009	BC10013 EB-1	Water	05/24/22 13:43	06/02/22 10:15
30494074010	BC10014 MW-10V	Water	05/24/22 14:44	06/02/22 10:15
30494074011	BC10015 MW-13	Water	05/24/22 15:55	06/02/22 10:15
30494074012	BC10016 MW-13 Dup	Water	05/24/22 15:55	06/02/22 10:15
30494074013	BC10017 MW-18H	Water	05/23/22 16:14	06/02/22 10:15
30494074014	BC10018 MW-11	Water	05/23/22 17:20	06/02/22 10:15
30494074015	BC10018 MW-11 MS	Water	05/23/22 17:20	06/02/22 10:15
30494074016	BC10018 MW-11 MSD	Water	05/23/22 17:20	06/02/22 10:15
30494074017	BC10019 MW-19H	Water	05/24/22 09:27	06/02/22 10:15
30494074018	BC10020 MW-15V	Water	05/24/22 10:57	06/02/22 10:15
30494074019	BC10021 MW-7	Water	05/24/22 13:10	06/02/22 10:15
30494074020	BC10022 MW-7 DUP	Water	05/24/22 13:10	06/02/22 10:15
30494074021	BC10023 FB-3	Water	05/24/22 14:05	06/02/22 10:15
30494074022	BC10024 MW-7V	Water	05/24/22 14:14	06/02/22 10:15
30494074023	BC10025 MW-9	Water	05/24/22 15:15	06/02/22 10:15
30494074024	BC10026 MW-14V	Water	05/24/22 16:24	06/02/22 10:15
30494074025	BC10027 MW-12	Water	05/23/22 16:15	06/02/22 10:15
30494074026	BC10028 MW-12V	Water	05/23/22 17:05	06/02/22 10:15
30494074027	BC10029 MW-20V	Water	05/24/22 09:05	06/02/22 10:15
30494074028	BC10030 MW-20V Dup	Water	05/24/22 09:05	06/02/22 10:15
30494074029	BC10031 MW-24H	Water	05/24/22 10:33	06/02/22 10:15
30494074030	BC10032 MW-1	Water	05/24/22 12:58	06/02/22 10:15
30494074031	BC10033 MW-1V	Water	05/24/22 15:15	06/02/22 10:15
30494074032	BC10033 MW-1V MS	Water	05/24/22 15:15	06/02/22 10:15
30494074033	BC10033 MW-1V MSD	Water	05/24/22 15:15	06/02/22 10:15
30494074034	BC10034 MW-2	Water	05/24/22 16:58	06/02/22 10:15
30494074035	BC10130 MW-13V	Water	05/25/22 10:52	06/02/22 10:15
30494074036	BC10131 MW-14	Water	05/25/22 11:55	06/02/22 10:15
30494074037	BC10132 MW-15	Water	05/25/22 13:07	06/02/22 10:15

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: WMWBARAP_1367
Pace Project No.: 30494074

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30494074038	BC10133 MW-15 Dup	Water	05/25/22 13:07	06/02/22 10:15
30494074039	BC10134 MW-16V	Water	05/25/22 14:06	06/02/22 10:15
30494074040	BC10135 MW-16	Water	05/25/22 14:54	06/02/22 10:15
30494074041	BC10136 MW-4	Water	05/25/22 15:35	06/02/22 10:15
30494074042	BC10137 MW-17V	Water	05/25/22 10:39	06/02/22 10:15
30494074043	BC10138 MW-17H	Water	05/25/22 11:23	06/02/22 10:15
30494074044	BC10139 MW-23V	Water	05/25/22 12:50	06/02/22 10:15
30494074045	BC10140 MW-23H	Water	05/25/22 13:53	06/02/22 10:15
30494074046	BC10141 MW-3	Water	05/25/22 15:05	06/02/22 10:15
30494074047	BC10142 FB-4	Water	05/25/22 15:20	06/02/22 10:15
30494074048	BC10143 MW-25V	Water	05/25/22 10:50	06/02/22 10:15
30494074049	BC10144 MW-25H	Water	05/25/22 11:40	06/02/22 10:15
30494074050	BC10145 MW-5	Water	05/25/22 13:05	06/02/22 10:15
30494074051	BC10146 MW-5V	Water	05/25/22 14:03	06/02/22 10:15
30494074052	BC10147 MW-6	Water	05/25/22 15:22	06/02/22 10:15
30494074053	BC10148 FB-2	Water	05/25/22 15:45	06/02/22 10:15

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWBARAP_1367
Pace Project No.: 30494074

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30494074001	BC10007 MW-20H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074002	BC10008 MW-8V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074003	BC10008 MW-8V MS	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30494074004	BC10008 MW-8V MSD	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30494074005	BC10009 MW-22H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074006	BC10010 MW-8	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074007	BC10011 FB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074008	BC10012 MW-10	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074009	BC10013 EB-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074010	BC10014 MW-10V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074011	BC10015 MW-13	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074012	BC10016 MW-13 Dup	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074013	BC10017 MW-18H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWBARAP_1367
Pace Project No.: 30494074

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30494074014	BC10018 MW-11	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074015	BC10018 MW-11 MS	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30494074016	BC10018 MW-11 MSD	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30494074017	BC10019 MW-19H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074018	BC10020 MW-15V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074019	BC10021 MW-7	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074020	BC10022 MW-7 DUP	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074021	BC10023 FB-3	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074022	BC10024 MW-7V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074023	BC10025 MW-9	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074024	BC10026 MW-14V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074025	BC10027 MW-12	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074026	BC10028 MW-12V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWBARAP_1367
Pace Project No.: 30494074

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30494074027	BC10029 MW-20V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074028	BC10030 MW-20V Dup	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074029	BC10031 MW-24H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074030	BC10032 MW-1	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074031	BC10033 MW-1V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074032	BC10033 MW-1V MS	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30494074033	BC10033 MW-1V MSD	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30494074034	BC10034 MW-2	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074035	BC10130 MW-13V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074036	BC10131 MW-14	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074037	BC10132 MW-15	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074038	BC10133 MW-15 Dup	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074039	BC10134 MW-16V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWBARAP_1367
Pace Project No.: 30494074

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30494074040	BC10135 MW-16	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074041	BC10136 MW-4	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074042	BC10137 MW-17V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074043	BC10138 MW-17H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074044	BC10139 MW-23V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074045	BC10140 MW-23H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074046	BC10141 MW-3	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074047	BC10142 FB-4	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074048	BC10143 MW-25V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074049	BC10144 MW-25H	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074050	BC10145 MW-5	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074051	BC10146 MW-5V	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30494074052	BC10147 MW-6	EPA 9315	JC2	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWBARAP_1367
Pace Project No.: 30494074

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30494074053	BC10148 FB-2	EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WMWBARAP_1367

Pace Project No.: 30494074

Method: EPA 9315

Description: 9315 Total Radium

Client: Alabama Power

Date: July 13, 2022

General Information:

53 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:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WMWBARAP_1367

Pace Project No.: 30494074

Method: EPA 9320

Description: 9320 Radium 228

Client: Alabama Power

Date: July 13, 2022

General Information:

53 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:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WMWBARAP_1367

Pace Project No.: 30494074

Method: Total Radium Calculation

Description: Total Radium 228+226

Client: Alabama Power

Date: July 13, 2022

General Information:

47 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: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10007 MW-20H **Lab ID: 30494074001** Collected: 05/23/22 15:48 Received: 06/02/22 10:15 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	0.242U ± 0.172 (0.282) C:89% T:NA	pCi/L	07/08/22 16:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.415U ± 0.362 (0.726) C:68% T:91%	pCi/L	07/07/22 14:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.657U ± 0.534 (1.01)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10008 MW-8V **Lab ID: 30494074002** Collected: 05/23/22 17:26 Received: 06/02/22 10:15 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	0.449 ± 0.218 (0.268) C:89% T:NA	pCi/L	07/08/22 16:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.684U ± 0.391 (0.706) C:65% T:97%	pCi/L	07/07/22 14:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.13 ± 0.609 (0.974)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10008 MW-8V MS **Lab ID: 30494074003** Collected: 05/23/22 17:26 Received: 06/02/22 10:15 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	98.21 %REC ± NA (NA) C:NA T:NA	pCi/L	07/08/22 16:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	107.38 %REC ± NA (NA) C:NA T:NA	pCi/L	07/07/22 14:31	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10008 MW-8V MSD **Lab ID: 30494074004** Collected: 05/23/22 17:26 Received: 06/02/22 10:15 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	102.23 %REC 4.01 RPD ± NA (NA) C:NA T:NA	pCi/L	07/08/22 16:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	91.99 %REC 15.43 RPD ± NA (NA) C:NA T:NA	pCi/L	07/07/22 14:31	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10009 MW-22H **Lab ID: 30494074005** Collected: 05/24/22 09:14 Received: 06/02/22 10:15 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	0.368 ± 0.205 (0.297) C:85% T:NA	pCi/L	07/08/22 16:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.288U ± 0.322 (0.669) C:65% T:95%	pCi/L	07/07/22 14:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.656U ± 0.527 (0.966)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10010 MW-8 **Lab ID: 30494074006** Collected: 05/24/22 10:50 Received: 06/02/22 10:15 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	0.203U ± 0.201 (0.398) C:87% T:NA	pCi/L	07/08/22 16:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.530U ± 0.364 (0.692) C:73% T:88%	pCi/L	07/07/22 14:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.733U ± 0.565 (1.09)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10011 FB-1 **Lab ID: 30494074007** Collected: 05/24/22 11:15 Received: 06/02/22 10:15 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	-0.00931U ± 0.104 (0.301) C:80% T:NA	pCi/L	07/08/22 16:40	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.00434U ± 0.280 (0.655) C:72% T:97%	pCi/L	07/07/22 14:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.00434U ± 0.384 (0.956)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10012 MW-10 **Lab ID: 30494074008** Collected: 05/24/22 12:46 Received: 06/02/22 10:15 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	0.739U ± 0.465 (0.763) C:84% T:NA	pCi/L	07/10/22 11:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.625U ± 0.370 (0.673) C:69% T:94%	pCi/L	07/07/22 14:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.36U ± 0.835 (1.44)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10013 EB-1 **Lab ID: 30494074009** Collected: 05/24/22 13:43 Received: 06/02/22 10:15 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	0.148U ± 0.161 (0.317) C:85% T:NA	pCi/L	07/10/22 11:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.572U ± 0.361 (0.672) C:71% T:95%	pCi/L	07/07/22 14:31	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.720U ± 0.522 (0.989)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10014 MW-10V **Lab ID: 30494074010** Collected: 05/24/22 14:44 Received: 06/02/22 10:15 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	0.708 ± 0.282 (0.296) C:88% T:NA	pCi/L	07/10/22 11:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.495U ± 0.337 (0.637) C:71% T:97%	pCi/L	07/07/22 14:32	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.20 ± 0.619 (0.933)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367
Pace Project No.: 30494074

Sample: BC10015 MW-13 **Lab ID: 30494074011** Collected: 05/24/22 15:55 Received: 06/02/22 10:15 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	0.241U ± 0.199 (0.368) C:94% T:NA	pCi/L	07/10/22 11:00	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.674 ± 0.358 (0.624) C:73% T:98%	pCi/L	07/07/22 14:32	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.915U ± 0.557 (0.992)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10016 MW-13 Dup **Lab ID: 30494074012** Collected: 05/24/22 15:55 Received: 06/02/22 10:15 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	0.314U ± 0.204 (0.347) C:98% T:NA	pCi/L	07/10/22 11:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.0312U ± 0.312 (0.721) C:68% T:97%	pCi/L	07/07/22 14:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.345U ± 0.516 (1.07)	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10017 MW-18H **Lab ID: 30494074013** Collected: 05/23/22 16:14 Received: 06/02/22 10:15 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	0.358 ± 0.218 (0.318) C:85% T:NA	pCi/L	07/10/22 11:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.669U ± 0.535 (1.07) C:58% T:90%	pCi/L	07/05/22 13:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.03U ± 0.753 (1.39)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10018 MW-11 **Lab ID: 30494074014** Collected: 05/23/22 17:20 Received: 06/02/22 10:15 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	0.0967U ± 0.159 (0.354) C:88% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.355U ± 0.433 (0.917) C:61% T:98%	pCi/L	07/05/22 13:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.452U ± 0.592 (1.27)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10018 MW-11 MS **Lab ID: 30494074015** Collected: 05/23/22 17:20 Received: 06/02/22 10:15 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	91.63 %REC ± NA (NA) C:NA T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	103.18 %REC ± NA (NA) C:NA T:NA	pCi/L	07/05/22 13:42	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10018 MW-11 MSD **Lab ID: 30494074016** Collected: 05/23/22 17:20 Received: 06/02/22 10:15 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	92.18 %REC 0.61 RPD ± NA (NA) C:NA T:NA	pCi/L	07/10/22 11:07	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	127.91 %REC 21.40 RPD ± NA (NA) C:NA T:NA	pCi/L	07/05/22 13:42	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10019 MW-19H **Lab ID: 30494074017** Collected: 05/24/22 09:27 Received: 06/02/22 10:15 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	0.164U ± 0.159 (0.292) C:82% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.898U ± 0.543 (1.02) C:64% T:84%	pCi/L	07/05/22 13:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.06U ± 0.702 (1.31)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10020 MW-15V **Lab ID: 30494074018** Collected: 05/24/22 10:57 Received: 06/02/22 10:15 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	0.618U ± 0.500 (0.856) C:76% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.23 ± 0.576 (0.987) C:69% T:91%	pCi/L	07/05/22 13:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.85 ± 1.08 (1.84)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10021 MW-7 **Lab ID: 30494074019** Collected: 05/24/22 13:10 Received: 06/02/22 10:15 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	0.297U ± 0.214 (0.346) C:83% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.754U ± 0.437 (0.804) C:75% T:87%	pCi/L	07/05/22 13:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.05U ± 0.651 (1.15)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10022 MW-7 DUP **Lab ID: 30494074020** Collected: 05/24/22 13:10 Received: 06/02/22 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	0.138U ± 0.154 (0.300) C:82% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.709U ± 0.560 (1.12) C:64% T:81%	pCi/L	07/05/22 13:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.847U ± 0.714 (1.42)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10023 FB-3 **Lab ID: 30494074021** Collected: 05/24/22 14:05 Received: 06/02/22 10:15 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	0.0957U ± 0.169 (0.382) C:83% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.707U ± 0.458 (0.871) C:62% T:96%	pCi/L	07/05/22 13:43	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.803U ± 0.627 (1.25)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10024 MW-7V **Lab ID: 30494074022** Collected: 05/24/22 14:14 Received: 06/02/22 10:15 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	0.304 ± 0.181 (0.239) C:81% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.315U ± 0.332 (0.685) C:66% T:95%	pCi/L	07/05/22 13:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.619U ± 0.513 (0.924)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10025 MW-9 **Lab ID: 30494074023** Collected: 05/24/22 15:15 Received: 06/02/22 10:15 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	0.481 ± 0.227 (0.273) C:84% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.63 ± 0.648 (1.03) C:67% T:84%	pCi/L	07/05/22 13:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	2.11 ± 0.875 (1.30)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10026 MW-14V **Lab ID: 30494074024** Collected: 05/24/22 16:24 Received: 06/02/22 10:15 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	0.172U ± 0.167 (0.311) C:81% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.09 ± 0.531 (0.922) C:67% T:86%	pCi/L	07/05/22 13:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.26 ± 0.698 (1.23)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10027 MW-12 **Lab ID: 30494074025** Collected: 05/23/22 16:15 Received: 06/02/22 10:15 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	0.503 ± 0.248 (0.290) C:81% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.897 ± 0.443 (0.770) C:78% T:87%	pCi/L	07/05/22 13:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.40 ± 0.691 (1.06)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10028 MW-12V **Lab ID: 30494074026** Collected: 05/23/22 17:05 Received: 06/02/22 10:15 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	0.234U ± 0.195 (0.352) C:83% T:NA	pCi/L	07/10/22 11:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.728U ± 0.434 (0.802) C:63% T:100%	pCi/L	07/05/22 13:44	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.962U ± 0.629 (1.15)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10029 MW-20V **Lab ID: 30494074027** Collected: 05/24/22 09:05 Received: 06/02/22 10:15 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	0.332U ± 0.220 (0.352) C:85% T:NA	pCi/L	07/10/22 11:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.638U ± 0.435 (0.799) C:79% T:90%	pCi/L	07/10/22 19:04	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.970U ± 0.655 (1.15)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10030 MW-20V Dup **Lab ID: 30494074028** Collected: 05/24/22 09:05 Received: 06/02/22 10:15 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	0.324U ± 0.208 (0.333) C:83% T:NA	pCi/L	07/10/22 11:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.993 ± 0.437 (0.677) C:69% T:85%	pCi/L	07/05/22 13:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.32 ± 0.645 (1.01)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10031 MW-24H **Lab ID: 30494074029** Collected: 05/24/22 10:33 Received: 06/02/22 10:15 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	0.733 ± 0.363 (0.484) C:70% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.351U ± 0.355 (0.728) C:71% T:87%	pCi/L	07/05/22 13:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.08U ± 0.718 (1.21)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10032 MW-1 **Lab ID: 30494074030** Collected: 05/24/22 12:58 Received: 06/02/22 10:15 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	0.950 ± 0.375 (0.351) C:85% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	1.17 ± 0.482 (0.747) C:74% T:96%	pCi/L	07/05/22 17:30	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	2.12 ± 0.857 (1.10)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10033 MW-1V **Lab ID: 30494074031** Collected: 05/24/22 15:15 Received: 06/02/22 10:15 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	0.426 ± 0.197 (0.213) C:92% T:NA	pCi/L	07/10/22 11:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.57 ± 0.549 (0.772) C:74% T:88%	pCi/L	07/05/22 13:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	2.00 ± 0.746 (0.985)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10033 MW-1V MS **Lab ID: 30494074032** Collected: 05/24/22 15:15 Received: 06/02/22 10:15 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	103.74 %REC ± NA (NA) C:NA T:NA	pCi/L	07/10/22 11:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	95.46 %REC ± NA (NA) C:NA T:NA	pCi/L	07/05/22 13:45	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10033 MW-1V MSD **Lab ID: 30494074033** Collected: 05/24/22 15:15 Received: 06/02/22 10:15 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	97.40 %REC 6.31 RPD ± NA (NA) C:NA T:NA	pCi/L	07/10/22 11:13	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	82.96 %REC 14.01 RPD ± NA (NA) C:NA T:NA	pCi/L	07/05/22 13:45	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10034 MW-2 **Lab ID: 30494074034** Collected: 05/24/22 16:58 Received: 06/02/22 10:15 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	0.231U ± 0.199 (0.352) C:89% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.501U ± 0.480 (0.996) C:75% T:90%	pCi/L	07/05/22 13:51	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.732U ± 0.679 (1.35)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10130 MW-13V **Lab ID: 30494074035** Collected: 05/25/22 10:52 Received: 06/02/22 10:15 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	0.341U ± 0.227 (0.346) C:99% T:NA	pCi/L	07/10/22 11:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.610U ± 0.530 (1.09) C:73% T:94%	pCi/L	07/05/22 13:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.951U ± 0.757 (1.44)	pCi/L	07/11/22 22:43	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10131 MW-14 **Lab ID: 30494074036** Collected: 05/25/22 11:55 Received: 06/02/22 10:15 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 ± 0.232 (0.347) C:100% T:NA	pCi/L	07/10/22 11:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.871 ± 0.477 (0.829) C:74% T:86%	pCi/L	07/05/22 17:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.25 ± 0.709 (1.18)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10132 MW-15 **Lab ID: 30494074037** Collected: 05/25/22 13:07 Received: 06/02/22 10:15 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	0.397 ± 0.206 (0.249) C:95% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.906 ± 0.425 (0.686) C:77% T:93%	pCi/L	07/10/22 19:04	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.30 ± 0.631 (0.935)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10133 MW-15 Dup **Lab ID: 30494074038** Collected: 05/25/22 13:07 Received: 06/02/22 10:15 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	0.478 ± 0.248 (0.291) C:91% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.03 ± 0.486 (0.798) C:71% T:91%	pCi/L	07/05/22 17:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.51 ± 0.734 (1.09)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10134 MW-16V **Lab ID: 30494074039** Collected: 05/25/22 14:06 Received: 06/02/22 10:15 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	0.185U ± 0.161 (0.275) C:88% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.846 ± 0.458 (0.788) C:72% T:91%	pCi/L	07/05/22 17:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.03U ± 0.619 (1.06)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10135 MW-16 **Lab ID: 30494074040** Collected: 05/25/22 14:54 Received: 06/02/22 10:15 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 ± 0.154 (0.234) C:98% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.711U ± 0.457 (0.829) C:70% T:87%	pCi/L	07/05/22 17:22	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.927U ± 0.611 (1.06)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10136 MW-4 **Lab ID: 30494074041** Collected: 05/25/22 15:35 Received: 06/02/22 10:15 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	0.219U ± 0.173 (0.278) C:94% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.602U ± 0.398 (0.745) C:73% T:92%	pCi/L	07/05/22 17:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.821U ± 0.571 (1.02)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10137 MW-17V **Lab ID: 30494074042** Collected: 05/25/22 10:39 Received: 06/02/22 10:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	1.98 ± 0.478 (0.203) C:93% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	3.39 ± 0.910 (0.911) C:69% T:84%	pCi/L	07/05/22 17:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	5.37 ± 1.39 (1.11)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10138 MW-17H **Lab ID: 30494074043** Collected: 05/25/22 11:23 Received: 06/02/22 10:15 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	0.480 ± 0.217 (0.245) C:95% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.23 ± 0.489 (0.772) C:71% T:94%	pCi/L	07/05/22 17:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.71 ± 0.706 (1.02)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10139 MW-23V **Lab ID: 30494074044** Collected: 05/25/22 12:50 Received: 06/02/22 10:15 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	-0.143U ± 0.220 (0.807) C:28% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.285U ± 0.389 (0.832) C:74% T:87%	pCi/L	07/05/22 17:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.285U ± 0.609 (1.64)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10140 MW-23H **Lab ID: 30494074045** Collected: 05/25/22 13:53 Received: 06/02/22 10:15 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	0.430 ± 0.213 (0.266) C:97% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.244U ± 0.382 (0.826) C:71% T:88%	pCi/L	07/05/22 17:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.674U ± 0.595 (1.09)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10141 MW-3 **Lab ID: 30494074046** Collected: 05/25/22 15:05 Received: 06/02/22 10:15 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	0.354 ± 0.216 (0.324) C:91% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.37 ± 0.555 (0.872) C:69% T:83%	pCi/L	07/05/22 17:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.72 ± 0.771 (1.20)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10142 FB-4 **Lab ID: 30494074047** Collected: 05/25/22 15:20 Received: 06/02/22 10:15 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	0.0289U ± 0.117 (0.299) C:94% T:NA	pCi/L	07/10/22 11:14	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.506U ± 0.419 (0.833) C:73% T:88%	pCi/L	07/05/22 17:53	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.535U ± 0.536 (1.13)	pCi/L	07/11/22 22:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10143 MW-25V **Lab ID: 30494074048** Collected: 05/25/22 10:50 Received: 06/02/22 10:15 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	0.105U ± 0.135 (0.278) C:91% T:NA	pCi/L	07/10/22 11:18	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.422U ± 0.410 (0.836) C:74% T:84%	pCi/L	07/05/22 17:49	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.527U ± 0.545 (1.11)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10144 MW-25H **Lab ID: 30494074049** Collected: 05/25/22 11:40 Received: 06/02/22 10:15 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	0.182U ± 0.141 (0.216) C:96% T:NA	pCi/L	07/10/22 11:18	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.500U ± 0.428 (0.845) C:72% T:81%	pCi/L	07/05/22 17:55	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.682U ± 0.569 (1.06)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10145 MW-5 **Lab ID: 30494074050** Collected: 05/25/22 13:05 Received: 06/02/22 10:15 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	0.487 ± 0.228 (0.244) C:100% T:NA	pCi/L	07/10/22 11:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.22 ± 0.502 (0.791) C:69% T:89%	pCi/L	07/05/22 17:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.71 ± 0.730 (1.04)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10146 MW-5V **Lab ID: 30494074051** Collected: 05/25/22 14:03 Received: 06/02/22 10:15 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	0.167U ± 0.149 (0.268) C:98% T:NA	pCi/L	07/10/22 11:18	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	0.860 ± 0.439 (0.768) C:73% T:92%	pCi/L	07/05/22 17:51	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.03U ± 0.588 (1.04)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10147 MW-6 **Lab ID: 30494074052** Collected: 05/25/22 15:22 Received: 06/02/22 10:15 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	0.0338U ± 0.113 (0.286) C:100% T:NA	pCi/L	07/10/22 11:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	1.03 ± 0.483 (0.826) C:76% T:86%	pCi/L	07/05/22 17:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	1.06U ± 0.596 (1.11)	pCi/L	07/11/22 22:44	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

Sample: BC10148 FB-2 **Lab ID: 30494074053** Collected: 05/25/22 15:45 Received: 06/02/22 10:15 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	0.0878U ± 0.116 (0.237) C:89% T:NA	pCi/L	07/11/22 09:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	0.714 ± 0.333 (0.531) C:69% T:95%	pCi/L	07/07/22 11:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	0.802 ± 0.449 (0.768)	pCi/L	07/11/22 22:45	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

QC Batch: 511756

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074053

METHOD BLANK: 2480257

Matrix: Water

Associated Lab Samples: 30494074053

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.215 ± 0.115 (0.148) C:93% T:NA	pCi/L	07/11/22 09:59	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

QC Batch:	510506	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074001, 30494074002, 30494074003, 30494074004, 30494074005, 30494074006, 30494074007, 30494074008, 30494074009, 30494074010, 30494074011, 30494074012

METHOD BLANK:	2474498	Matrix:	Water
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Associated Lab Samples: 30494074001, 30494074002, 30494074003, 30494074004, 30494074005, 30494074006, 30494074007, 30494074008, 30494074009, 30494074010, 30494074011, 30494074012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0487 ± 0.230 (0.530) C:76% T:89%	pCi/L	07/07/22 11:29	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367
Pace Project No.: 30494074

QC Batch:	510507	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074001, 30494074002, 30494074003, 30494074004, 30494074005, 30494074006, 30494074007, 30494074008, 30494074009, 30494074010, 30494074011, 30494074012

METHOD BLANK: 2474499 Matrix: Water

Associated Lab Samples: 30494074001, 30494074002, 30494074003, 30494074004, 30494074005, 30494074006, 30494074007, 30494074008, 30494074009, 30494074010, 30494074011, 30494074012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0236 ± 0.0549 (0.132) C:86% T:NA	pCi/L	07/08/22 16:28	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

QC Batch: 510510

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074013, 30494074014, 30494074015, 30494074016, 30494074017, 30494074018, 30494074019, 30494074020, 30494074021, 30494074022, 30494074023, 30494074024, 30494074025, 30494074026, 30494074027, 30494074028, 30494074029, 30494074030, 30494074034, 30494074035

METHOD BLANK: 2474504

Matrix: Water

Associated Lab Samples: 30494074013, 30494074014, 30494074015, 30494074016, 30494074017, 30494074018, 30494074019, 30494074020, 30494074021, 30494074022, 30494074023, 30494074024, 30494074025, 30494074026, 30494074027, 30494074028, 30494074029, 30494074030, 30494074034, 30494074035

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0306 ± 0.0468 (0.172) C:85% T:NA	pCi/L	07/10/22 11:06	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

QC Batch: 511755

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074053

METHOD BLANK: 2480254

Matrix: Water

Associated Lab Samples: 30494074053

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.729 ± 0.340 (0.552) C:70% T:96%	pCi/L	07/07/22 11:25	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

QC Batch: 510512

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074031, 30494074032, 30494074033, 30494074036, 30494074037, 30494074038, 30494074039, 30494074040, 30494074041, 30494074042, 30494074043, 30494074044, 30494074045, 30494074046, 30494074047, 30494074048, 30494074049, 30494074050, 30494074051, 30494074052

METHOD BLANK: 2474506

Matrix: Water

Associated Lab Samples: 30494074031, 30494074032, 30494074033, 30494074036, 30494074037, 30494074038, 30494074039, 30494074040, 30494074041, 30494074042, 30494074043, 30494074044, 30494074045, 30494074046, 30494074047, 30494074048, 30494074049, 30494074050, 30494074051, 30494074052

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.706 ± 0.431 (0.805) C:71% T:90%	pCi/L	07/05/22 13:44	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367

Pace Project No.: 30494074

QC Batch:	510509	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074013, 30494074014, 30494074015, 30494074016, 30494074017, 30494074018, 30494074019, 30494074020, 30494074021, 30494074022, 30494074023, 30494074024, 30494074025, 30494074026, 30494074027, 30494074028, 30494074029, 30494074030, 30494074034, 30494074035

METHOD BLANK:	2474503	Matrix:	Water
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Associated Lab Samples: 30494074013, 30494074014, 30494074015, 30494074016, 30494074017, 30494074018, 30494074019, 30494074020, 30494074021, 30494074022, 30494074023, 30494074024, 30494074025, 30494074026, 30494074027, 30494074028, 30494074029, 30494074030, 30494074034, 30494074035

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.365 ± 0.353 (0.714) C:59% T:91%	pCi/L	07/05/22 13:44	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWBARAP_1367
Pace Project No.: 30494074

QC Batch:	510513	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30494074031, 30494074032, 30494074033, 30494074036, 30494074037, 30494074038, 30494074039, 30494074040, 30494074041, 30494074042, 30494074043, 30494074044, 30494074045, 30494074046, 30494074047, 30494074048, 30494074049, 30494074050, 30494074051, 30494074052

METHOD BLANK: 2474508 Matrix: Water

Associated Lab Samples: 30494074031, 30494074032, 30494074033, 30494074036, 30494074037, 30494074038, 30494074039, 30494074040, 30494074041, 30494074042, 30494074043, 30494074044, 30494074045, 30494074046, 30494074047, 30494074048, 30494074049, 30494074050, 30494074051, 30494074052

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0166 ± 0.0585 (0.149) C:90% T:NA	pCi/L	07/10/22 11:13	

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QUALIFIERS

Project: WMWBARAP_1367
Pace Project No.: 30494074

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: WMWBARAP_1367

Pace Project No.: 30494074

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30494074001	BC10007 MW-20H	EPA 9315	510507		
30494074002	BC10008 MW-8V	EPA 9315	510507		
30494074003	BC10008 MW-8V MS	EPA 9315	510507		
30494074004	BC10008 MW-8V MSD	EPA 9315	510507		
30494074005	BC10009 MW-22H	EPA 9315	510507		
30494074006	BC10010 MW-8	EPA 9315	510507		
30494074007	BC10011 FB-1	EPA 9315	510507		
30494074008	BC10012 MW-10	EPA 9315	510507		
30494074009	BC10013 EB-1	EPA 9315	510507		
30494074010	BC10014 MW-10V	EPA 9315	510507		
30494074011	BC10015 MW-13	EPA 9315	510507		
30494074012	BC10016 MW-13 Dup	EPA 9315	510507		
30494074013	BC10017 MW-18H	EPA 9315	510510		
30494074014	BC10018 MW-11	EPA 9315	510510		
30494074015	BC10018 MW-11 MS	EPA 9315	510510		
30494074016	BC10018 MW-11 MSD	EPA 9315	510510		
30494074017	BC10019 MW-19H	EPA 9315	510510		
30494074018	BC10020 MW-15V	EPA 9315	510510		
30494074019	BC10021 MW-7	EPA 9315	510510		
30494074020	BC10022 MW-7 DUP	EPA 9315	510510		
30494074021	BC10023 FB-3	EPA 9315	510510		
30494074022	BC10024 MW-7V	EPA 9315	510510		
30494074023	BC10025 MW-9	EPA 9315	510510		
30494074024	BC10026 MW-14V	EPA 9315	510510		
30494074025	BC10027 MW-12	EPA 9315	510510		
30494074026	BC10028 MW-12V	EPA 9315	510510		
30494074027	BC10029 MW-20V	EPA 9315	510510		
30494074028	BC10030 MW-20V Dup	EPA 9315	510510		
30494074029	BC10031 MW-24H	EPA 9315	510510		
30494074030	BC10032 MW-1	EPA 9315	510510		
30494074031	BC10033 MW-1V	EPA 9315	510513		
30494074032	BC10033 MW-1V MS	EPA 9315	510513		
30494074033	BC10033 MW-1V MSD	EPA 9315	510513		
30494074034	BC10034 MW-2	EPA 9315	510510		
30494074035	BC10130 MW-13V	EPA 9315	510510		
30494074036	BC10131 MW-14	EPA 9315	510513		
30494074037	BC10132 MW-15	EPA 9315	510513		
30494074038	BC10133 MW-15 Dup	EPA 9315	510513		
30494074039	BC10134 MW-16V	EPA 9315	510513		
30494074040	BC10135 MW-16	EPA 9315	510513		
30494074041	BC10136 MW-4	EPA 9315	510513		
30494074042	BC10137 MW-17V	EPA 9315	510513		
30494074043	BC10138 MW-17H	EPA 9315	510513		
30494074044	BC10139 MW-23V	EPA 9315	510513		
30494074045	BC10140 MW-23H	EPA 9315	510513		
30494074046	BC10141 MW-3	EPA 9315	510513		
30494074047	BC10142 FB-4	EPA 9315	510513		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWBARAP_1367

Pace Project No.: 30494074

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30494074048	BC10143 MW-25V	EPA 9315	510513		
30494074049	BC10144 MW-25H	EPA 9315	510513		
30494074050	BC10145 MW-5	EPA 9315	510513		
30494074051	BC10146 MW-5V	EPA 9315	510513		
30494074052	BC10147 MW-6	EPA 9315	510513		
30494074053	BC10148 FB-2	EPA 9315	511756		
30494074001	BC10007 MW-20H	EPA 9320	510506		
30494074002	BC10008 MW-8V	EPA 9320	510506		
30494074003	BC10008 MW-8V MS	EPA 9320	510506		
30494074004	BC10008 MW-8V MSD	EPA 9320	510506		
30494074005	BC10009 MW-22H	EPA 9320	510506		
30494074006	BC10010 MW-8	EPA 9320	510506		
30494074007	BC10011 FB-1	EPA 9320	510506		
30494074008	BC10012 MW-10	EPA 9320	510506		
30494074009	BC10013 EB-1	EPA 9320	510506		
30494074010	BC10014 MW-10V	EPA 9320	510506		
30494074011	BC10015 MW-13	EPA 9320	510506		
30494074012	BC10016 MW-13 Dup	EPA 9320	510506		
30494074013	BC10017 MW-18H	EPA 9320	510509		
30494074014	BC10018 MW-11	EPA 9320	510509		
30494074015	BC10018 MW-11 MS	EPA 9320	510509		
30494074016	BC10018 MW-11 MSD	EPA 9320	510509		
30494074017	BC10019 MW-19H	EPA 9320	510509		
30494074018	BC10020 MW-15V	EPA 9320	510509		
30494074019	BC10021 MW-7	EPA 9320	510509		
30494074020	BC10022 MW-7 DUP	EPA 9320	510509		
30494074021	BC10023 FB-3	EPA 9320	510509		
30494074022	BC10024 MW-7V	EPA 9320	510509		
30494074023	BC10025 MW-9	EPA 9320	510509		
30494074024	BC10026 MW-14V	EPA 9320	510509		
30494074025	BC10027 MW-12	EPA 9320	510509		
30494074026	BC10028 MW-12V	EPA 9320	510509		
30494074027	BC10029 MW-20V	EPA 9320	510509		
30494074028	BC10030 MW-20V Dup	EPA 9320	510509		
30494074029	BC10031 MW-24H	EPA 9320	510509		
30494074030	BC10032 MW-1	EPA 9320	510509		
30494074031	BC10033 MW-1V	EPA 9320	510512		
30494074032	BC10033 MW-1V MS	EPA 9320	510512		
30494074033	BC10033 MW-1V MSD	EPA 9320	510512		
30494074034	BC10034 MW-2	EPA 9320	510509		
30494074035	BC10130 MW-13V	EPA 9320	510509		
30494074036	BC10131 MW-14	EPA 9320	510512		
30494074037	BC10132 MW-15	EPA 9320	510512		
30494074038	BC10133 MW-15 Dup	EPA 9320	510512		
30494074039	BC10134 MW-16V	EPA 9320	510512		
30494074040	BC10135 MW-16	EPA 9320	510512		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWBARAP_1367

Pace Project No.: 30494074

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30494074041	BC10136 MW-4	EPA 9320	510512		
30494074042	BC10137 MW-17V	EPA 9320	510512		
30494074043	BC10138 MW-17H	EPA 9320	510512		
30494074044	BC10139 MW-23V	EPA 9320	510512		
30494074045	BC10140 MW-23H	EPA 9320	510512		
30494074046	BC10141 MW-3	EPA 9320	510512		
30494074047	BC10142 FB-4	EPA 9320	510512		
30494074048	BC10143 MW-25V	EPA 9320	510512		
30494074049	BC10144 MW-25H	EPA 9320	510512		
30494074050	BC10145 MW-5	EPA 9320	510512		
30494074051	BC10146 MW-5V	EPA 9320	510512		
30494074052	BC10147 MW-6	EPA 9320	510512		
30494074053	BC10148 FB-2	EPA 9320	511755		
30494074001	BC10007 MW-20H	Total Radium Calculation	517872		
30494074002	BC10008 MW-8V	Total Radium Calculation	517872		
30494074005	BC10009 MW-22H	Total Radium Calculation	517872		
30494074006	BC10010 MW-8	Total Radium Calculation	517872		
30494074007	BC10011 FB-1	Total Radium Calculation	517872		
30494074008	BC10012 MW-10	Total Radium Calculation	517872		
30494074009	BC10013 EB-1	Total Radium Calculation	517872		
30494074010	BC10014 MW-10V	Total Radium Calculation	517872		
30494074011	BC10015 MW-13	Total Radium Calculation	517872		
30494074012	BC10016 MW-13 Dup	Total Radium Calculation	517872		
30494074013	BC10017 MW-18H	Total Radium Calculation	517873		
30494074014	BC10018 MW-11	Total Radium Calculation	517873		
30494074017	BC10019 MW-19H	Total Radium Calculation	517873		
30494074018	BC10020 MW-15V	Total Radium Calculation	517873		
30494074019	BC10021 MW-7	Total Radium Calculation	517873		
30494074020	BC10022 MW-7 DUP	Total Radium Calculation	517873		
30494074021	BC10023 FB-3	Total Radium Calculation	517873		
30494074022	BC10024 MW-7V	Total Radium Calculation	517873		
30494074023	BC10025 MW-9	Total Radium Calculation	517873		
30494074024	BC10026 MW-14V	Total Radium Calculation	517873		
30494074025	BC10027 MW-12	Total Radium Calculation	517873		
30494074026	BC10028 MW-12V	Total Radium Calculation	517873		
30494074027	BC10029 MW-20V	Total Radium Calculation	517873		
30494074028	BC10030 MW-20V Dup	Total Radium Calculation	517873		
30494074029	BC10031 MW-24H	Total Radium Calculation	517873		
30494074030	BC10032 MW-1	Total Radium Calculation	517873		
30494074031	BC10033 MW-1V	Total Radium Calculation	517874		
30494074034	BC10034 MW-2	Total Radium Calculation	517873		
30494074035	BC10130 MW-13V	Total Radium Calculation	517873		
30494074036	BC10131 MW-14	Total Radium Calculation	517874		
30494074037	BC10132 MW-15	Total Radium Calculation	517874		
30494074038	BC10133 MW-15 Dup	Total Radium Calculation	517874		
30494074039	BC10134 MW-16V	Total Radium Calculation	517874		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWBARAP_1367
Pace Project No.: 30494074

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30494074040	BC10135 MW-16	Total Radium Calculation	517874		
30494074041	BC10136 MW-4	Total Radium Calculation	517874		
30494074042	BC10137 MW-17V	Total Radium Calculation	517874		
30494074043	BC10138 MW-17H	Total Radium Calculation	517874		
30494074044	BC10139 MW-23V	Total Radium Calculation	517874		
30494074045	BC10140 MW-23H	Total Radium Calculation	517874		
30494074046	BC10141 MW-3	Total Radium Calculation	517874		
30494074047	BC10142 FB-4	Total Radium Calculation	517874		
30494074048	BC10143 MW-25V	Total Radium Calculation	517874		
30494074049	BC10144 MW-25H	Total Radium Calculation	517874		
30494074050	BC10145 MW-5	Total Radium Calculation	517874		
30494074051	BC10146 MW-5V	Total Radium Calculation	517874		
30494074052	BC10147 MW-6	Total Radium Calculation	517874		
30494074053	BC10148 FB-2	Total Radium Calculation	517875		

REPORT OF LABORATORY ANALYSIS

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WO#: 30494074



30494074

st Document
is must be completed accurately.

Section B
Required Project Information:

Report To: Brooke Caton
Copy To: Renee Jernigan & Blaine Denton
Purchase Order #: APC10755638
Project Name: Plant Barry Ash Pond
Project Number: WMMBARAP_1367

Invoice Information:

Attention: Brooke Caton
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
CCR
Skyler Richmond
Pace Project Manager:
Pace Profile #: 16788

Regulatory Agency

State / Location
AL

SAMPLE ID

Character per box:
A-Z, 0-9 / , -
IDs must be unique

Description	Station Name Location_ID	Site Name Facility_ID	Matrix Spike/Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE TIME	# OF CONTAINERS	Requested Analysis Filtered (Y/N)				TEMP in C	Received on	Custody (Y/N)	Sealed Cooler (Y/N)	Samples (Y/N)	Interact (Y/N)		
									Unpreserved	H2SO4	HNO3	Preservatives								
								Y/N	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)								
BC10007	MW-20H APCO-BY-AP-MW-20H	APCO_Barry_AshPond			GW G	G	5/23/2022 15:48	1				X	X	X					601	
BC10008	MW-8V APCO-BY-AP-MW-8V	APCO_Barry_AshPond	X		GW G	G	5/23/2022 17:26	3				X	X	X					302,003,004	
BC10009	MW-22H APCO-BY-AP-MW-22H	APCO_Barry_AshPond			GW G	G	5/24/2022 9:14	1				X	X	X					005	
BC10010	MW-8 APCO-BY-AP-MW-8	APCO_Barry_AshPond			GW G	G	5/24/2022 10:50	1				X	X	X					006	
BC10011	FB-1 APCO-BY-AP-FB-01	APCO_Barry_AshPond			GW G	G	5/24/2022 11:15	1				X	X	X					008	
BC10012	MW-10 APCO-BY-AP-MW-10	APCO_Barry_AshPond			GW G	G	5/24/2022 12:46	1				X	X	X					009	
BC10013	EB-1 APCO-BY-AP-EB-01	APCO_Barry_AshPond			GW G	G	5/24/2022 13:43	1				X	X	X					010	
BC10014	MW-10V APCO-BY-AP-MW-10V	APCO_Barry_AshPond			GW G	G	5/24/2022 14:44	1				X	X	X					011	
BC10015	MW-13 APCO-BY-AP-MW-13	APCO_Barry_AshPond			GW G	G	5/24/2022 15:55	1				X	X	X					012	
BC10016	MW-13 Dup APCO-BY-AP-MW-13	APCO_Barry_AshPond	X		GW G	G	5/24/2022 15:55	1				X	X	X						
ANAL COMMENTS								ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS								
								AM S&P		5/26/2022	11:32	6-27-22	1015	MA	N	Y	Y	Y	Y	
RELINQUISHED BY / AFFILIATION								DATE		TIME										
Brooke Caton/ APC GTL																				
SIGNATURE of SAMPLER:								DATE Signed:												
Dallas Gentry																				

36494074

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section B
Required Project Information:

Company Name: **Alabama Power Company**
 Report To: **Brooke Catton**
 Copy To: **Renee Jernigan & Blaine Denton**
 Address: **744 Highway 87 GSC Bldg #8**
Merla, AL 35040
 Contact: **@southalabama.com**
 Phone: **664-6101** | Fax: **664-6101**
 Duration: **28 days**

Section C
Invoice Information:

Attention: **Brooke Catton**
 Company Name: **Alabama Power Co.**
 Address: **744 Highway 87 GSC Bldg #8**
CCR
 Project Manager: **Skylar Richmond**
 Project Profile #: **16788**

Section D
Regulatory Agency:

Regulatory Agency: **AL**
 State / Location: **AL**

SAMPLE ID
 Character per box:
 A-Z, 0-9 / , -)
 IDs must be unique

Description	Station Name Location_ID	Site Name Facility_ID	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives	Requested Analysis Filtered (Y/N)	Y/N	EPA 9315	EPA 9320	Total Radium Sum	Residual Chlorine (Y/N)
							START DATE	TIME								
BC10017	APCO-BY-AP-MW-18H	APCO_Barry_AshPond			GW	G	5/23/2022	16:14	1				X	X	X	
BC10018	APCO-BY-AP-MW-11	APCO_Barry_AshPond	X		GW	G	5/23/2022	17:20	3				X	X	X	
BC10019	APCO-BY-AP-MW-19H	APCO_Barry_AshPond			GW	G	5/24/2022	9:27	1				X	X	X	
BC10020	APCO-BY-AP-MW-15V	APCO_Barry_AshPond			GW	G	5/24/2022	10:57	1				X	X	X	
BC10021	APCO-BY-AP-MW-7	APCO_Barry_AshPond			GW	G	5/24/2022	13:10	1				X	X	X	
BC10022	APCO-BY-AP-MW-7	APCO_Barry_AshPond	X		GW	G	5/24/2022	13:10	1				X	X	X	
BC10023	APCO-BY-AP-FB-03	APCO_Barry_AshPond			GW	G	5/24/2022	14:05	1				X	X	X	
BC10024	APCO-BY-AP-MW-7V	APCO_Barry_AshPond			GW	G	5/24/2022	14:14	1				X	X	X	
BC10025	APCO-BY-AP-MW-9	APCO_Barry_AshPond			GW	G	5/24/2022	15:15	1				X	X	X	
BC10026	APCO-BY-AP-MW-14V	APCO_Barry_AshPond			GW	G	5/24/2022	16:24	1				X	X	X	

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Brooke Catton / APC GTL	5/26/2022	11:32	<i>msc</i>	6-22-22	10:25

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Anthony Goggins
 SIGNATURE of SAMPLER: *[Signature]*
 DATE Signed: *[Blank]*

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

30494674

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section B Required Project Information:
 Report To: Brooke Caton
 Copy To: Renee Jernigan & Blaine Denton
 Purchase Order #: APC10755638
 Project Name: Plant Barry Ash Pond
 Project Number: VMWBARAP_1367

Section C Invoice Information:
 Attention: Brooke Caton
 Company Name: Alabama Power Co.
 Address: 744 Highway 87 GSC Bldg #8
 Place Quote: CCR
 Place Project Manager: Skyler Richmond
 Place Profile #: 16788

Regulatory Agency: AL
 State / Location: AL

SAMPLE ID	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		# OF CONTAINERS	Requested Analysis Filtered (Y/N)		ANALYSES TEST						Residual Chlorine (Y/N)
									DATE	TIME		Preservatives	H2SO4	HNO3	EPA 9315	EPA 9320	Total Radium Sum	Unpreserved	H2SO4	
BC10027	MW-12	APCO-BY-AP-MW-12	APCO_Barry_AshPond				GM G	G	5/23/2022	16:15	1				X	X	X	X		025
BC10028	MW-12V	APCO-BY-AP-MW-12V	APCO_Barry_AshPond				GM G	G	5/23/2022	17:05	1				X	X	X	X		026
BC10029	MW-20V	APCO-BY-AP-MW-20V	APCO_Barry_AshPond				GM G	G	5/24/2022	9:05	1				X	X	X	X		027
BC10030	MW-20V Dup	APCO-BY-AP-MW-20V	APCO_Barry_AshPond	X			GM G	G	5/24/2022	9:05	1				X	X	X	X		028
BC10031	MW-24H	APCO-BY-AP-MW-24H	APCO_Barry_AshPond				GM G	G	5/24/2022	10:33	1				X	X	X	X		029
BC10032	MW-1	APCO-BY-AP-MW-1	APCO_Barry_AshPond				GM G	G	5/24/2022	12:58	1				X	X	X	X		030
BC10033	MW-1V	APCO-BY-AP-MW-1V	APCO_Barry_AshPond	X			GM G	G	5/24/2022	15:15	1				X	X	X	X		031, 032, 033
BC10034	MW-2	APCO-BY-AP-MW-2	APCO_Barry_AshPond				GM G	G	5/24/2022	16:58	1				X	X	X	X		034

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	Received on	TEMP in C	Custody Sealed	Intact
Brooke Caton/ APC GTL	5/26/2022	11:32	<i>m. S. S.</i>	5/27/2022	10:05	N Y Y				

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: TJ Daugherty
 SIGNATURE of SAMPLER:

30494074

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section B

Required Project Information:

Alabama Power Company
 Highway 87 GSC Bldg #8
 Merz, AL 35040
 al@southernco.com
 664-6101 Fax
 28 days

Section C

Invoice Information:

Report To: Brooke Caton
 Copy To: Renee Jernigan & Blaine Denton
 Attention: Brooke Caton
 Company Name: Alabama Power Co.
 Address: 744 Highway 87 GSC Bldg #8
 CCR
 Skyler Richmond
 Pace Project Manager:
 Pace Profile #: WMWBARAP_1367
 16788

Regulatory Agency
 State/Location
 AL

SAMPLE ID Character per box. A-Z, 0-9 / , -) 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		# OF CONTAINERS	Requested Analysis Filtered (Y/N)				TEMP in C	Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Intact (Y/N)												
									DATE	TIME		Preservatives	Y/N	Analyses Test	DATE			TIME	SAMPLE CONDITIONS										
BC10130	MW-13V	APCO-BY-AP-MW-13V	APCO_Barry_AshPond				GM G	G	5/25/2022	10:52	1	EPA 9315	X	X	X	035													
BC10131	MW-14	APCO-BY-AP-MW-14	APCO_Barry_AshPond				GM G	G	5/25/2022	11:55	1	EPA 9320	X	X	X	036													
BC10132	MW-15	APCO-BY-AP-MW-15	APCO_Barry_AshPond				GM G	G	5/25/2022	13:07	1	EPA 9315	X	X	X	037													
BC10133	MW-15 Dup	APCO-BY-AP-MW-15	APCO_Barry_AshPond	X			GM G	G	5/25/2022	13:07	1	EPA 9315	X	X	X	038													
BC10134	MW-16V	APCO-BY-AP-MW-16V	APCO_Barry_AshPond				GM G	G	5/25/2022	14:06	1	EPA 9315	X	X	X	039													
BC10135	MW-16	APCO-BY-AP-MW-16	APCO_Barry_AshPond				GM G	G	5/25/2022	14:54	1	EPA 9315	X	X	X	040													
BC10136	MW-4	APCO-BY-AP-MW-4	APCO_Barry_AshPond				GM G	G	5/25/2022	15:35	1	EPA 9315	X	X	X	041													
GENERAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION		DATE	TIME	SAMPLE CONDITIONS		EPA 9315		EPA 9320		Total Radium Sum		Residual Chlorine (Y/N)		TEMP in C		Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Intact (Y/N)							
		Brooke Caton/ APC GTL		5/26/2022	11:32	M. Sisk				607221015		MA	N	Y	Y														

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER:
 SIGNATURE of SAMPLER:

Anthony Goggins
 DATE Signed:

30494074

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section B		Section C	
Required Project Information:		Invoice Information:	
Report To: Brooke Caton	Company Name: Brooke Caton	Attention: Brooke Caton	Regulatory Agency
Copy To: Renee Jernigan & Blaine Denton	Address: Alabama Power Co.	Address: 744 Highway 87 GSC Bldg #8	State / Location:
Project Name: Plant Barry Ash Pond	Purchase Order #: APC10755638	Pace Quote: CCR	AL
Project Number: WMWBARAP_1367	Pace Project Manager: Skylar Richmond	Pace Profile #: 16788	

SAMPLE ID	Description	Station Name Location_ID	Site Name Facility_ID	COLLECTED		Matrix Spike/Matrix Spike Duplicate	Sample Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	# OF CONTAINERS	Requested Analysis Filtered (Y/N)				Residual Chlorine (Y/N)
				START DATE	TIME							Preservatives	Analyses Test	Y/N	EPA 9315	
BC10137	MW-17V	APCO-BY-AP-MW-17V	APCO_Barry_AshPond	5/25/2022	10:39			GW	G	1		X	X	X		042
BC10138	MW-17	APCO-BY-AP-MW-17	APCO_Barry_AshPond	5/25/2022	11:23			GW	G	1		X	X	X		043
BC10139	MW-23V	APCO-BY-AP-MW-23V	APCO_Barry_AshPond	5/25/2022	12:50			GW	G	1		X	X	X		044
BC10140	MW-23H	APCO-BY-AP-MW-23H	APCO_Barry_AshPond	5/25/2022	13:53			GW	G	1		X	X	X		045
BC10141	MW-3	APCO-BY-AP-MW-3	APCO_Barry_AshPond	5/25/2022	15:05			GW	G	1		X	X	X		046
BC10142	FB-4	APCO-BY-AP-FB-04	APCO_Barry_AshPond	5/25/2022	15:20			GW	G	1		X	X	X		047

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Brooke Caton/ APC GTL	5/26/2022	11:32	<i>MSE</i>	6/22/2022	10:15	NA NY Y

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: **Dallas Gentry**
 SIGNATURE of SAMPLER: _____
 DATE Signed: _____

202494074

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section B

Required Project Information:

Alabama Power Company
 Highway 87 GSC Bldg #8
 Merz, AL 35040
 al@alouthemco.com
 664-6101 Fax
 28 days

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

SAMPLE ID

Character per box:
 A-Z, 0-9, /, -
 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		# OF CONTAINERS	Requested Analysis Filtered (Y/N)			Residual Chlorine (Y/N)		
								START DATE	TIME		Preservatives	Analyses Test	DATE		TIME	TEMP In C
BC10143 MW-25V	APCO-BY-AP-MW-25V	APCO_Barry_AshPond				GW	G	5/25/2022	10:50	1			X	X	X	048
BC10144 MW-25H	APCO-BY-AP-MW-25H	APCO_Barry_AshPond				GW	G	5/25/2022	11:40	1			X	X	X	049
BC10145 MW-5	APCO-BY-AP-MW-5	APCO_Barry_AshPond				GW	G	5/25/2022	13:05	1			X	X	X	050
BC10146 MW-5V	APCO-BY-AP-MW-5V	APCO_Barry_AshPond				GW	G	5/25/2022	14:03	1			X	X	X	051
BC10147 MW-6	APCO-BY-AP-MW-6	APCO_Barry_AshPond				GW	G	5/25/2022	15:22	1			X	X	X	052
BC10148 FB-2	APCO-BY-AP-FB-02	APCO_Barry_AshPond				GW	G	5/25/2022	15:45	1			X	X	X	053

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Brooke Caton/ APC GTL	5/26/2022	11:32	<i>MSR</i>	6/22/2022	2:15	NA N Y Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

T.J. Daugherty

SIGNATURE of SAMPLER:

DATE Signed:

Pittsburgh Lab Sample Condition Upon Receipt



Client Name: Alabama Power Project # 30494074

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: 570165854105

Label	<u>SAM</u>
LIMS Login	<u>MJS</u>

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

Thermometer Used NA Type of Ice: Wet Blue None

Cooler Temperature Observed Temp NA °C Correction Factor: NA °C Final Temp: NA °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot#	Date and Initials of person examining contents:
				<u>10D4611</u>	<u>SAM 6/2/22</u>
Chain of Custody Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.	
Sampler Name & Signature on COC:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4.	
Sample Labels match COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.	
-Includes date/time/ID Matrix: <u>WT</u>					
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.	
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.	
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.	
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	
Correct Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	
-Pace Containers Used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	
Orthophosphate field filtered	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.	
Hex Cr Aqueous sample field filtered	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13.	
Organic Samples checked for dechlorination:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.	
Filtered volume received for Dissolved tests	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.	
All containers have been checked for preservation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<u>Added 2.5 mL HNO₃ to sample 012-MSD to get pH < 2</u>
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix					
All containers meet method preservation requirements.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Initial when completed	<u>SAM 6/2/22 14:15</u>
				Lot # of added preservative	<u>DL22-0625</u>
Headspace in VOA Vials (>6mm):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17.	
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18.	
Trip Blank Custody Seals Present	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Rad Samples Screened < 0.5 mrem/hr	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Initial when completed	<u>SAM Date: 6/2/22 Survey Meter SN: 1563</u>

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

A check in this box indicates that additional information has been stored in ereports.

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JC2
Date: 6/18/2022
Worklist: 67114
Matrix: DW

Method Blank Assessment	
MB Sample ID	2474499
MB Concentration:	0.024
M/B Counting Uncertainty:	0.055
MB MDC:	0.132
MB Numerical Performance Indicator:	0.84
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS (Y or N)?	
	LCS67114	LCS067114
Count Date:	7/8/2022	7/8/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.026	24.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.500
Target Conc. (pCi/L, g, F):	4.803	4.803
Uncertainty (Calculated):	0.058	0.058
Result (pCi/L, g, F):	5.124	4.232
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.477	0.428
Numerical Performance Indicator:	1.30	-2.60
Percent Recovery:	106.64%	88.10%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment	
Sample I.D.:	LCS67114
Duplicate Sample I.D.:	LCS067114
Sample Result (pCi/L, g, F):	5.124
Sample Result Counting Uncertainty (pCi/L, g, F):	0.477
Sample Duplicate Result (pCi/L, g, F):	4.232
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.428
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	2.728
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	19.04%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

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

Comments:

Handwritten signatures and initials

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/23/2022	
Spike I.D.:	30494074002	
Sample MS I.D.:	30494074003	
Sample MSD I.D.:	30494074004	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.027	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.309	
MS Target Conc. (pCi/L, g, F):	15.534	
MSD Aliquot (L, g, F):	0.290	
MSD Target Conc. (pCi/L, g, F):	16.556	
MS Spike Uncertainty (calculated):	0.186	
MSD Spike Uncertainty (calculated):	0.199	
Sample Result:	0.449	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.208	
Sample Matrix Spike Result:	15.705	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	1.120	
Sample Matrix Spike Duplicate Result:	17.374	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	1.142	
MS Numerical Performance Indicator:	-0.471	
MSD Numerical Performance Indicator:	0.614	
MS Percent Recovery:	98.21%	
MSD Percent Recovery:	102.23%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30494074002
Sample MS I.D.:	30494074003
Sample MSD I.D.:	30494074004
Sample Matrix Spike Result:	15.705
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	1.120
Sample Matrix Spike Duplicate Result:	17.374
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	1.142
Duplicate Numerical Performance Indicator:	-2.045
Duplicate Percent Recoveries (MS/MSD Duplicate RPD):	4.01%
(Based on the Percent Recoveries) MS/MSD Duplicate Status vs Numerical Indicator:	Pass
(Based on the Percent Recoveries) MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 6/17/2022
Worklist: 67113
Matrix: WT

Method Blank Assessment	MB Sample ID 2474498
MB concentration: M/B 2 Sigma CSU:	0.049 0.230
MB MDC:	0.530
MB Numerical Performance Indicator:	0.42
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS/D67113	N LCS/D67113
Count Date:	7/7/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.124	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	4.337	
Uncertainty (Calculated):	0.212	
Result (pCi/L, g, F):	3.939	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.912	
Numerical Performance Indicator:	-0.83	
Status vs Numerical Indicator:	90.82%	
Status vs Recovery:	N/A	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	See Below #
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?	
Duplicate Numerical Performance Indicator:	
Duplicate RPD:	
Duplicate Status vs Numerical Indicator:	
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:

Handwritten signature: C. W. F. 12/22

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/23/2022	
Sample I.D.:	30494074002	
Sample MS I.D.:	30494074003	
Sample MSD I.D.:	30494074004	
Spike I.D.:	22-016	
Spike I.D.:	35.647	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	0.20	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.806	
MS Aliquot (L, g, F):	8.845	
MS Target Conc. (pCi/L, g, F):	0.806	
MSD Aliquot (L, g, F):	8.842	
MSD Target Conc. (pCi/L, g, F):	0.433	
MS Spike Uncertainty (calculated):	0.433	
MSD Spike Uncertainty (calculated):	0.684	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.391	
Sample Matrix Spike Result:	10.182	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.021	
Sample Matrix Spike Duplicate Result:	8.817	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.765	
MS Numerical Performance Indicator:	0.608	
MSD Numerical Performance Indicator:	-0.747	
MS Percent Recovery:	107.38%	
MSD Percent Recovery:	91.99%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30494074002
Sample MS I.D.:	30494074003
Sample MSD I.D.:	30494074004
Spike I.D.:	10.182
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.021
Sample Matrix Spike Duplicate Result:	8.817
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.765
Duplicate Numerical Performance Indicator:	0.997
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries) MS/MSD Duplicate RPD:	15.43%
MS/MSD Duplicate Status vs Numerical Indicator:	Pass
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
 Analyst: VAL
 Date: 6/17/2022
 Worklist: 67115
 Matrix: WT

Method Blank Assessment	
MB Sample ID	2474503
MB concentration:	0.365
M/B 2 Sigma CSU:	0.353
MB MDC:	0.714
MB Numerical Performance Indicator:	2.02
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCSD67115	LCSD67115
Count Date:	7/5/2022
Spike I.D.:	22-016
Decay Corrected Spike Concentration (pCi/mL):	35.146
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.816
Target Conc. (pCi/L, g, F):	4.308
Uncertainty (Calculated):	0.211
Result (pCi/L, g, F):	3.657
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.851
Numerical Performance Indicator:	-1.46
Percent Recovery:	84.88%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	135%
Lower % Recovery Limits:	60%

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 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):	
Ave sample and/or duplicate results below RL?	
Duplicate Numerical Performance Indicator:	
Duplicate RPD:	
Duplicate Status vs Numerical Indicator:	
Duplicate Status vs RPD:	
% RPD Limit:	

See Below #

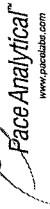
Comments:

6/17/22

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:		5/23/2022	
Sample I.D.:		30494074014	
Sample MS I.D.:		30494074015	
Sample MSD I.D.:		30494074016	
Spike I.D.:		22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		35.647	
Spike Volume Used in MS (mL):		0.20	
Spike Volume Used in MSD (mL):		0.20	
MS Aliquot (L, g, F):		0.809	
MS Target Conc. (pCi/L, g, F):		8.816	
MSD Aliquot (L, g, F):		0.806	
MSD Target Conc. (pCi/L, g, F):		8.849	
MSD Spike Uncertainty (calculated):		0.432	
MSD Spike Uncertainty (calculated):		0.434	
Sample Result:		0.355	
Sample Result 2 Sigma CSU (pCi/L, g, F):		0.433	
Sample Matrix Spike Result:		9.451	
Sample Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		1.925	
Sample Matrix Spike Duplicate Result:		11.674	
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		2.337	
MS Numerical Performance Indicator:		0.272	
MSD Numerical Performance Indicator:		2.003	
MS Percent Recovery:		103.18%	
MSD Percent Recovery:		127.91%	
MS Status vs Numerical Indicator:		Pass	
MS Status vs Numerical Indicator:		Warning	
MS Status vs Recovery:		Pass	
MSD Status vs Recovery:		Pass	
MS/MSD Upper % Recovery Limits:		135%	
MS/MSD Lower % Recovery Limits:		60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30494074014
Sample MS I.D.:	30494074015
Sample MSD I.D.:	30494074016
Sample Matrix Spike Result:	9.451
Sample Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.925
Sample Matrix Spike Duplicate Result:	11.674
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.337
Duplicate Numerical Performance Indicator:	-1.439
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries):	21.40%
MS/MSD Duplicate Status vs Numerical Indicator:	Pass
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow

Test: Ra-226
Analyst: JC2
Date: 6/19/2022
Worklist: 67116
Matrix: DW

Method Blank Assessment	
MB Sample ID	2474504
MB concentration:	-0.031
MB Counting Uncertainty:	0.047
MB MDC:	0.172
MB Numerical Performance Indicator:	-1.29
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	
	LCS67116	YCS67116
Count Date:	7/10/2022	LCS67116
Spike I.D.:	19-033	7/10/2022
Decay Corrected Spike Concentration (pCi/mL):	24.026	24.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.504
Target Conc. (pCi/L, g, F):	4.733	4.764
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.076	4.748
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.478	0.459
Numerical Performance Indicator:	1.39	-0.07
Percent Recovery:	107.23%	99.67%
Status vs Numerical Indicator:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment	Sample I.D.:	LCSD67116
Duplicate Sample I.D.:	LCS67116	LCS67116
Duplicate Result (pCi/L, g, F):	5.076	5.076
Sample Result Counting Uncertainty (pCi/L, g, F):	0.478	0.478
Sample Duplicate Result (pCi/L, g, F):	4.748	4.748
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.459	0.459
Are sample and/or duplicate results below RL?	NO	NO
Duplicate Numerical Performance Indicator:	0.969	0.969
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.31%	7.31%
Duplicate Status vs Numerical Indicator:	N/A	N/A
Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

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

Comments:

JJ
7/11/22
02/11/22

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/23/2022	
Sample I.D.:	30494074014	
Sample MS I.D.:	30494074015	
Sample MSD I.D.:	30494074016	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.027	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.207	
MS Target Conc. (pCi/L, g, F):	23.260	
MSD Aliquot (L, g, F):	0.273	
MSD Target Conc. (pCi/L, g, F):	17.632	
MS Spike Uncertainty (calculated):	0.279	
MSD Spike Uncertainty (calculated):	0.212	
Sample Result:	0.097	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.158	
Sample Matrix Spike Result:	21.409	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.599	
Sample Matrix Spike Duplicate Result:	16.351	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.201	
MS Numerical Performance Indicator:	-2.341	
MSD Numerical Performance Indicator:	-2.197	
MS Percent Recovery:	91.63%	
MSD Percent Recovery:	92.18%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	Sample I.D.:	MS/MSD 1	MS/MSD 2
Sample I.D.:	30494074014		
Sample MS I.D.:	30494074015		
Sample Matrix Spike Result:	21.409		
Sample Matrix Spike Duplicate Result:	1.599		
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	1.201		
Sample Matrix Spike Duplicate Numerical Performance Indicator:	4.957		
Sample Matrix Spike Duplicate Percent Recoveries (Based on the Percent Recoveries) MS/MSD Duplicate RPD:	0.61%		
MS/MSD Duplicate Status vs Numerical Indicator:	N/A		
MS/MSD Duplicate Status vs RPD:	Pass		
% RPD Limit:	25%		

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 6/17/2022
Worklist: 67117
Matrix: WT

Method Blank Assessment

MB Sample ID: 2474506
 MB concentration: 0.706
 MB 2 Sigma CSU: 0.431
 MB MDC: 0.805
 MB Numerical Performance Indicator: 3.21
 MB Status vs Numerical Indicator: Fail*
 MB Status vs. MDC: Pass

Laboratory Control Sample Assessment

LCSD (Y or N)?	N
LCSD67117	LCSD67117
Count Date:	7/5/2022
Spike I.D.:	22-016
Decay Corrected Spike Concentration (pCi/mL):	35.144
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.804
Target Conc. (pCi/L, g, F):	4.374
Uncertainty (Calculated):	0.214
Result (pCi/L, g, F):	4.368
LCSD/LCSD 2 Sigma CSU (pCi/L, g, F):	1.016
Numerical Performance Indicator:	-0.01
Percent Recovery:	99.88%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	135%
Lower % Recovery Limits:	60%

Duplicate Sample Assessment

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?
 Duplicate Numerical Performance Indicator:
 Duplicate RPD:
 Duplicate Status vs Numerical Indicator:
 Duplicate Status vs RPD:
 % RPD Limit:

Enter Duplicate sample IDs if other than LCS/LCSD in the space below.

See Below ##

Sample Matrix Spike Control Assessment

MS/MSD 1	MS/MSD 2
5/24/2022	
Sample I.D.: 30494074031	
Sample MS I.D.: 30494074032	
Sample MSD I.D.: 30494074033	
Spike I.D.: 22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	35.636
Spike Volume Used in MS (mL):	0.20
Spike Volume Used in MSD (mL):	0.20
MS Aliquot (L, g, F):	0.803
MS Target Conc. (pCi/L, g, F):	8.876
MSD Aliquot (L, g, F):	0.807
MSD Target Conc. (pCi/L, g, F):	8.827
MS Spike Uncertainty (calculated):	0.435
MSD Spike Uncertainty (calculated):	0.433
Sample Result:	1.574
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.549
Sample Matrix Spike Result:	10.048
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.008
Sample Matrix Spike Duplicate Result:	8.897
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.800
MS Numerical Performance Indicator:	-0.371
MSD Numerical Performance Indicator:	-1.526
MS Percent Recovery:	95.46%
MSD Percent Recovery:	82.96%
MS Status vs Numerical Indicator:	Pass
MSD Status vs Numerical Indicator:	Pass
MS Status vs Recovery:	Pass
MSD Status vs Recovery:	Pass
MS/MSD Upper % Recovery Limits:	135%
MS/MSD Lower % Recovery Limits:	60%

Matrix Spike/Matrix Spike Duplicate Sample Assessment

Sample I.D.:	30494074031
Sample MS I.D.:	30494074032
Sample MSD I.D.:	30494074033
Sample Matrix Spike Result:	10.048
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.008
Sample Matrix Spike Duplicate Result:	8.897
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.800
Duplicate Numerical Performance Indicator:	0.836
Duplicate Numerical Performance Indicator:	14.01%
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	Pass
MS/MSD Duplicate Status vs Numerical Indicator:	Pass
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

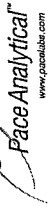
Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.~~

MB activity < MDC, Pass
 6/17/22

Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226
Analyst: JC2
Date: 6/19/2022
Worklist: 67118
Matrix: DW

Method Blank Assessment	
MB Sample ID	2474508
MB concentration:	0.017
M/B Counting Uncertainty:	0.058
MB MDC:	0.149
MB Numerical Performance Indicator:	0.56
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	
	LCS67118	LCS067118
Count Date:	7/10/2022	7/10/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.026	24.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.510	0.501
Target Conc. (pCi/L, g, F):	4.712	4.791
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.030	4.504
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.450	0.449
Numerical Performance Indicator:	-2.95	-1.24
Percent Recovery:	85.53%	94.01%
Status vs Numerical Indicator:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment	
Sample I.D.:	LCS67118
Duplicate Sample I.D.:	LCS067118
Duplicate Result (pCi/L, g, F):	4.030
Sample Result Counting Uncertainty (pCi/L, g, F):	0.450
Sample Duplicate Result (pCi/L, g, F):	4.504
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	NO
Are sample and/or duplicate results below RL?	-1.460
Duplicate Numerical Performance Indicator:	9.44%
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	N/A
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	25%
% RPD Limit:	25%

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

Comments:

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Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/24/2022	
Sample I.D.:	30494074031	
Sample MS I.D.:	30494074032	
Sample MSD I.D.:	30494074033	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.027	
Spike Volume Used in MSD (mL):	0.20	
Spike Volume Used in MS (mL):	0.20	
MS Aliquot (L, g, F):	0.316	
MS Target Conc. (pCi/L, g, F):	15.201	
MSD Aliquot (L, g, F):	0.269	
MSD Target Conc. (pCi/L, g, F):	17.851	
MSD Spike Uncertainty (calculated):	0.182	
MSD Spike Uncertainty (calculated):	0.214	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.426	
Sample Matrix Spike Result:	16.196	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.066	
Sample Matrix Spike Duplicate Result:	17.812	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.261	
MS Numerical Performance Indicator:	1.016	
MSD Numerical Performance Indicator:	-0.704	
MS Percent Recovery:	103.74%	
MSD Percent Recovery:	97.40%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30494074031
Sample MS I.D.:	30494074032
Sample MSD I.D.:	30494074033
Matrix Spike Result:	16.196
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.066
Sample Matrix Spike Duplicate Result:	17.812
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	1.261
Duplicate Numerical Performance Indicator:	-1.919
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	6.31%
MS/MSD Duplicate Status vs Numerical Indicator:	N/A
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226
Analyst: JC2
Date: 6/19/2022
Worklist: 67288
Matrix: DW

Method Blank Assessment	
MB Sample ID	2480257
MB concentration:	0.215
MB Counting Uncertainty:	0.111
MB MDC:	0.148
MB Numerical Performance Indicator:	3.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment		LCSD (Y or N)?	Y
Count Date:	7/11/2022	LCS67288	7/11/2022
Spike I.D.:	19-033	LCS67288	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.026		24.026
Volume Used (mL):	0.10		0.10
Aliquot Volume (L, g, F):	0.505		0.506
Target Conc. (pCi/L, g, F):	4.756		4.747
Uncertainty (Calculated):	0.057		0.057
Result (pCi/L, g, F):	4.603		4.462
LCSD Counting Uncertainty (pCi/L, g, F):	0.465		0.446
Numerical Performance Indicator:	-0.64		-1.25
Percent Recovery:	96.77%		93.98%
Status vs Numerical Indicator:	N/A		N/A
Status vs Recovery:	Pass		Pass
Upper % Recovery Limits:	125%		125%
Lower % Recovery Limits:	75%		75%

Duplicate Sample Assessment	
Sample I.D.:	LCS67288
Duplicate Sample I.D.:	LCS67288
Sample Result (pCi/L, g, F):	4.603
Sample Result Counting Uncertainty (pCi/L, g, F):	0.465
Sample Duplicate Result (pCi/L, g, F):	4.462
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.446
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	0.429
Duplicate Numerical Performance Indicator:	2.93%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

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

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

Sample Matrix Spike Control Assessment		MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/31/2022	30497264001	
Sample I.D.:	30497264002	30497264003	
Sample MS I.D.:	19-033		
Sample MSD I.D.:	24.027		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	0.20		
Spike Volume Used in MS (mL):	0.20		
Spike Volume Used in MSD (mL):	0.308		
MS Aliquot (L, g, F):	15.619		
MS Target Conc. (pCi/L, g, F):	0.275		
MSD Aliquot (L, g, F):	17.494		
MSD Target Conc. (pCi/L, g, F):	0.187		
MS Spike Uncertainty (calculated):	0.210		
MSD Spike Uncertainty (calculated):	0.489		
Sample Result Counting Uncertainty (pCi/L, g, F):	0.216		
Sample Matrix Spike Result:	16.140		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.094		
Sample Matrix Spike Duplicate Result:	19.283		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.262		
MS Numerical Performance Indicator:	0.054		
MSD Numerical Performance Indicator:	1.964		
MS Percent Recovery:	100.20%		
MSD Percent Recovery:	107.43%		
MS Status vs Numerical Indicator:	N/A		
MSD Status vs Numerical Indicator:	N/A		
MS Status vs Recovery:	Pass		
MSD Status vs Recovery:	Pass		
MS/MSD Upper % Recovery Limits:	125%		
MS/MSD Lower % Recovery Limits:	75%		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	30497264001
Sample MS I.D.:	30497264002
Sample MSD I.D.:	16.140
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.094
Sample Matrix Spike Duplicate Result:	19.283
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.262
Duplicate Numerical Performance Indicator:	-3.687
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	6.96%
MS/MSD Duplicate Status vs Numerical Indicator:	N/A
MS/MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: VAL
Date: 6/17/2022
Worklist: 67287
Matrix: WI

Method Blank Assessment	
MB Sample ID	2480254
MB concentration:	0.729
M/B 2 Sigma CSU:	0.340
MB MDC:	0.552
MB Numerical Performance Indicator:	4.21
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCS/D (Y or N)?	
	LCS67287	N LCS67287
Count Date:	7/7/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.124	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.809	
Target Conc. (pCi/L, g, F):	4.344	
Uncertainty (Calculated):	0.213	
Result (pCi/L, g, F):	3.828	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.860	
Numerical Performance Indicator:	-1.14	
Percent Recovery:	88.11%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	See Below ##
Duplicate Sample I.D.:	
Sample Result (pCi/L, g, F):	
Sample Duplicate Result (pCi/L, g, F):	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	See Below ##
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	
Are sample and/or duplicate results below RL?	
Duplicate Numerical Performance Indicator:	
Duplicate RPD:	See Below ##
Duplicate Status vs Numerical Indicator:	
Duplicate Status vs RPD:	
% RPD Limit:	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/31/2022	
Sample I.D.:	30497264001	
Sample MS I.D.:	30497264002	
Sample MSD I.D.:	30497264003	
Spike I.D.:	22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	35.554	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.806	
MS Target Conc. (pCi/L, g, F):	8.818	
MSD Aliquot (L, g, F):	0.810	
MSD Target Conc. (pCi/L, g, F):	8.784	
MS Spike Uncertainty (calculated):	0.432	
MSD Spike Uncertainty (calculated):	0.430	
Sample Result:	0.849	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.368	
Sample Matrix Spike Result:	9.709	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.924	
Sample Matrix Spike Duplicate Result:	9.282	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.838	
MS Numerical Performance Indicator:	0.041	
MSD Numerical Performance Indicator:	-0.358	
MS Percent Recovery:	100.48%	
MSD Percent Recovery:	96.00%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	MS/MSD 1	MS/MSD 2
Sample I.D.:	30497264001	
Sample MS I.D.:	30497264002	
Sample MSD I.D.:	30497264003	
Sample Matrix Spike Result:	9.709	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.924	
Sample Matrix Spike Duplicate Result:	9.282	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.838	
Duplicate Numerical Performance Indicator:	0.315	
Duplicate Numerical Performance Indicator:	4.56%	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	Pass	
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:

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

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Handwritten date: 7/18/22

Appendix D



Appendix E. Horizontal Groundwater Flow Velocity Calculations Plant Barry Ash Pond

2022 1st Semi-Annual Monitoring Event								
Date of Measurement	MW-1	MW-10	Distance	Hydraulic Gradient	Hydraulic Conductivity	Effective Porosity	Calculated Groundwater Flow Velocity	Calculated Groundwater Flow Velocity
	h_1 (ft)	h_2 (ft)	Δl (ft)	$\Delta h/\Delta l$ (ft/ft)	K (ft/day)	n	(ft/d)	(ft/yr)
5/23/2022	4.57	1.95	4564.34	0.00057	9.40	0.25	0.0216	7.88

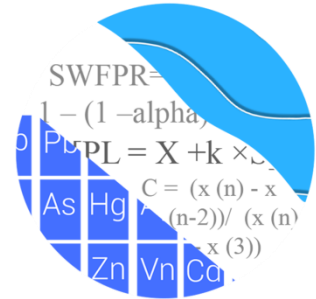
Notes:
 ft = feet
 ft/d = feet/day
 ft/ft = feet per foot
 ft/yr = feet per year

Appendix E

GROUNDWATER STATS CONSULTING

July 21, 2022

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243



Re: Plant Barry Ash Pond
1st Semi-Annual Statistical Analysis – May 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 May 2022 1st Semi-Annual sample event for Alabama Power Company's Plant Barry Ash Pond. 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 United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** BY-UP-MW-1, BY-UP-MW-2, BY-UP-MW-3, and BY-UP-MW-4
- **Downgradient wells:** BY-AP-MW-1, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, and BY-AP-MW-16
- **Delineation wells:** BY-AP-MW-1V, BY-AP-MW-5V, BY-AP-MW-7V, BY-AP-MW-8V, BY-AP-MW-10V, BY-AP-MW-12V, BY-AP-MW-13V, BY-AP-MW-14V, BY-AP-MW-15V, BY-AP-MW-16V, BY-AP-MW-17H, BY-AP-MW-17V, BY-AP-MW-18H, BY-AP-MW-19H, BY-AP-MW-20H, BY-AP-MW-20V, BY-AP-MW-22H, BY-AP-MW-23H, BY-AP-MW-23V, BY-AP-MW-24H, BY-AP-MW-25H, and BY-AP-MW-25VM
- **Piezometer:** BY-AP-MW-15VM

Data from delineation wells are included on time series and box plots but did not require formal statistics. Piezometer BY-AP-MW-15VM only monitors water levels; therefore, it is not included in this analysis.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed 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 summary of Appendix IV downgradient well/constituent pairs with 100% non-detects follows this letter. For all constituents, a substitution of the most recent reporting limit is used for non-detect data. In the time series plots and interwell tests, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. For calculating intrawell prediction limits, however, the substitution is performed for individual wells and may differ across wells. This generally gives the most conservative limit in each case.

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). 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.

In the April 2020 background screening, Appendix III 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. A summary of the background screening is presented in a later section of this letter. 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): 12
- # Background Samples (Interwell): 71
- # Constituents: 7
- # Downgradient wells: 16

Summary of Statistical Methods – Appendix III Parameters

Based on the Statistical Analysis Plan, the following statistical methods are used to evaluate the Appendix III parameters:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for pH and sulfate
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, 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 (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate. Non-detects are handled as follows:

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.

- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In 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.

Appendix III Background Screening – April 2020

Outlier Analysis

Background data through May 2019 for Appendix III parameters were screened for outliers using Tukey's test for outliers and/or visual screening, and identified outliers were flagged with "o" in the database and shown in a lighter font on the time series graphs and data pages. A list of flagged outliers is included with this report (Appendix C). Flagged values are excluded from background in the calculation of statistical limits in order to better represent background conditions and to produce limits that are conservative from a regulatory perspective. No seasonal patterns were visually apparent on any of the time series plots, and no seasonal adjustments were made.

Trend Tests

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 in the background used for construction of prediction limits. This step serves to reduce variation

in background and better represent current background conditions. The results of the trend analyses showed several statistically significant increasing and decreasing trends. However, the background time period is short, and all trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to any of the records. Detailed trend test results were included with the April 2020 screening report.

Appendix III – Evaluation of Statistical Approach

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 screening and use of the ANOVA, intrawell limits were initially recommended for sulfate, and interwell methods were recommended for boron, calcium, chloride, fluoride, pH and TDS. However, as shown on the boxplots, the upgradient levels for pH are very low (acid) and are not representative of downgradient water quality. Therefore, intrawell limits were recommended for pH as well—unless or until a future study confirms that those low levels are representative of unimpacted downgradient conditions.

Appendix III Background Update – Fall 2021

Outlier Analysis

Proposed background data were reviewed to identify any newly suspected outliers, since the last background update described above, at all wells for pH and sulfate through May 2021 and at upgradient wells for boron, calcium, chloride, fluoride, and TDS through November 2021. Visual screening is used to identify potential outliers. When values are identified as outliers, these measurements are flagged with “o” and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. 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. During the background update, the highest values for sulfate among existing background data in wells BY-MW-AP-13 and BY-MW-AP-14 were flagged to construct statistical limits that are conservative (i.e., lower) from a regulatory perspective. Additionally, the highest values among compliance data for sulfate in wells BY-MW-AP-MW-5 and MW-AP-16 were flagged in order to incorporate only compliance data that were of similar concentrations to existing background data.

Mann-Whitney

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2019 to compliance data through May 2021. When no statistically significant difference in medians between the two groups is found at a 99% confidence level, background data may be updated with newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found the following well/constituent pairs:

Increase:

- Sulfate: BY-AP-MW-1, BY-AP-MW-8, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14

Decrease:

- pH: BY-UP-MW-3, BY-UP-MW-4, BY-AP-MW-6, BY-AP-MW-13, BY-AP-MW-14

Note that the Mann-Whitney could not test sulfate in wells BY-AP-MW-5 and BY-MW-AP-16 because a minimum of 4 compliance samples were not available. However, because the available compliance samples were similar in concentration to background measurements, the respective records were updated with more recent samples.

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data but will be reconsidered in the future. 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.

Due to more recent data for pH in all wells being fairly similar to background and better representing the groundwater quality in the absence of suspected impacts from practices at the facility, these background data sets were updated. While the Mann-Whitney test did not identify statistically significant differences for sulfate at several wells, these records

were not updated with more recent data due to the observed increase in concentrations in more recent samples compared to background samples. The following records were not updated during the 2021 background update, and a summary follows this report (Background Date Ranges):

- Sulfate: BY-MW-AP-1, BY-MW-AP-8, BY-MW-AP-9, BY-MW-AP-10, BY-MW-AP-11, BY-MW-AP-12, BY-MW-AP-13, and BY-MW-AP-14

Trend Tests

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data through October 2021 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 be deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. Statistically significant trends were identified for the following well/constituent pairs:

Increasing

- Calcium: BY-UP-MW-3 and BY-UP-MW-4
- Fluoride: BY-UP-MW-2
- TDS: BY-UP-MW-1, BY-UP-MW-2, and BY-UP-MW-4

Decreasing

- Chloride: BY-UP-MW-2

Although statistically significant trends were identified for the well/constituent pairs listed above, the magnitudes of the trends are marginal relative to the respective concentrations; therefore, no adjustments were required for these well/constituent pairs at this time. Additionally, concentrations among all upgradient wells remain similar to each other. Therefore, all data from upgradient wells were used to construct interwell prediction limits.

Evaluation of Appendix III Parameters – May 2022

Intrawell prediction limits were constructed for pH and sulfate using screened background data through May 2021 at each well. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

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 May 2022 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. Intrawell prediction limits combined with a 1-of-2 verification strategy were constructed for pH and sulfate (Figure D). Background data will be re-evaluated for updating background limits when a minimum of 4 compliance samples are available.

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, fluoride, and TDS using upgradient well data through May 2022 (Figure E). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The May 2022 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present. Note that during this event, the reporting limit for fluoride increased from 0.1 mg/L to 0.125 mg/L, which resulted in a slight change to the interwell prediction limit. This change did not result in any additional exceedances.

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. Summary tables and complete graphical results for intrawell and interwell prediction limits may be found following this letter (Figures D and E, respectively). Exceedances for both intrawell and interwell prediction limits were identified for the following well/constituent pairs:

Intrawell:

- pH: BY-UP-MW-1, BY-UP-MW-2, BY-UP-MW-3, BY-UP-MW-4 (all upgradient), BY-AP-MW-1, BY-AP-MW-2, BY-AP-MW-6, BY-AP-MW-8, BY-AP-MW-10, and BY-AP-MW-13
- Sulfate: BY-AP-MW-1, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, and BY-AP-MW-14

Interwell:

- Boron: BY-AP-MW-1, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, and BY-AP-MW-16

- Calcium: BY-AP-MW-1, BY-AP-MW-2, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, and BY-AP-MW-16
- Chloride: BY-AP-MW-1, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, and BY-AP-MW-16
- Fluoride: BY-AP-MW-15
- TDS: BY-AP-MW-1, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, and BY-AP-MW-16

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 (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. Upgradient trends are an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: BY-AP-MW-10 and BY-AP-MW-16
- Calcium: BY-UP-MW-3 (upgradient), BY-UP-MW-4 (upgradient), BY-AP-MW-7, BY-AP-MW-10, and BY-AP-MW-12
- Chloride: BY-AP-MW-1, BY-AP-MW-3, BY-AP-MW-7, BY-AP-MW-10, BY-AP-MW-12, BY-AP-MW-14, BY-AP-MW-15, and BY-AP-MW-16
- Fluoride: BY-UP-MW-1, BY-UP-MW-2, BY-UP-MW-3, and BY-UP-MW-4 (all upgradient)
- Sulfate: BY-AP-MW-1, BY-AP-MW-8, BY-AP-MW-11, BY-AP-MW-12, and BY-AP-MW-14
- TDS: BY-UP-MW-1 (upgradient), BY-UP-MW-4 (upgradient), BY-AP-MW-10, and BY-AP-MW-15

Decreasing:

- Boron: BY-AP-MW-8
- Calcium: BY-AP-MW-8
- Chloride: BY-UP-MW-2, BY-UP-MW-3, and BY-UP-MW-4 (all upgradient)
- pH: BY-UP-MW-2 (upgradient), BY-UP-MW-3 (upgradient), BY-UP-MW-4 (upgradient), BY-AP-MW-2, and BY-AP-MW-13

Evaluation of Appendix IV Parameters – May 2022

Data from upgradient wells for Appendix IV parameters were assessed for outliers during the previous analysis. 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 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2023 2nd 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.

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) 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 May 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 with 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. Exceedances were identified for the following well/constituent pairs:

- Arsenic: BY-AP-MW-1, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, and BY-AP-MW-16
- Cobalt: BY-AP-MW-7 and BY-AP-MW-15

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Barry Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Easton Rayner
Groundwater Analyst

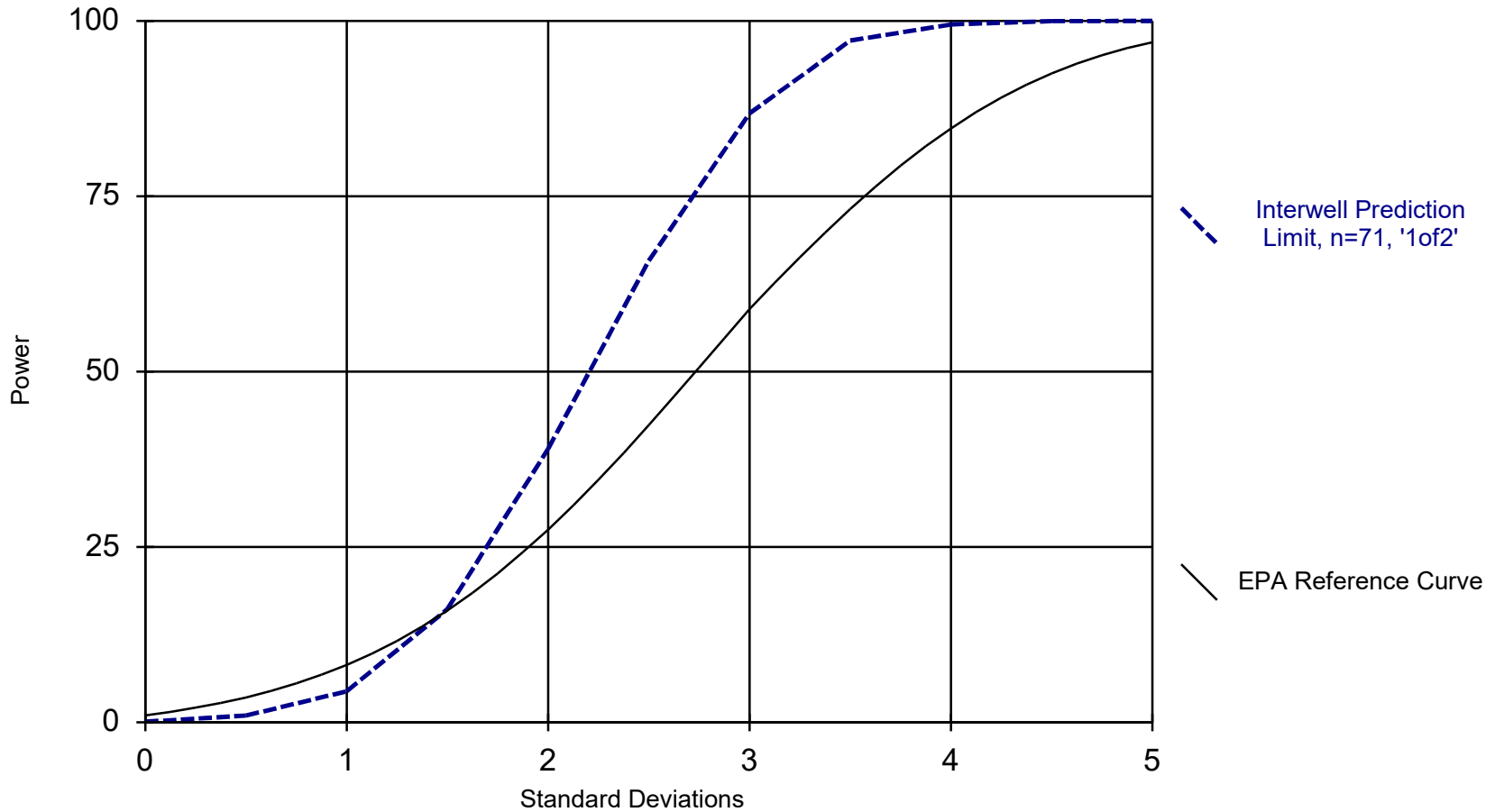


Kristina Rayner
Senior Statistician



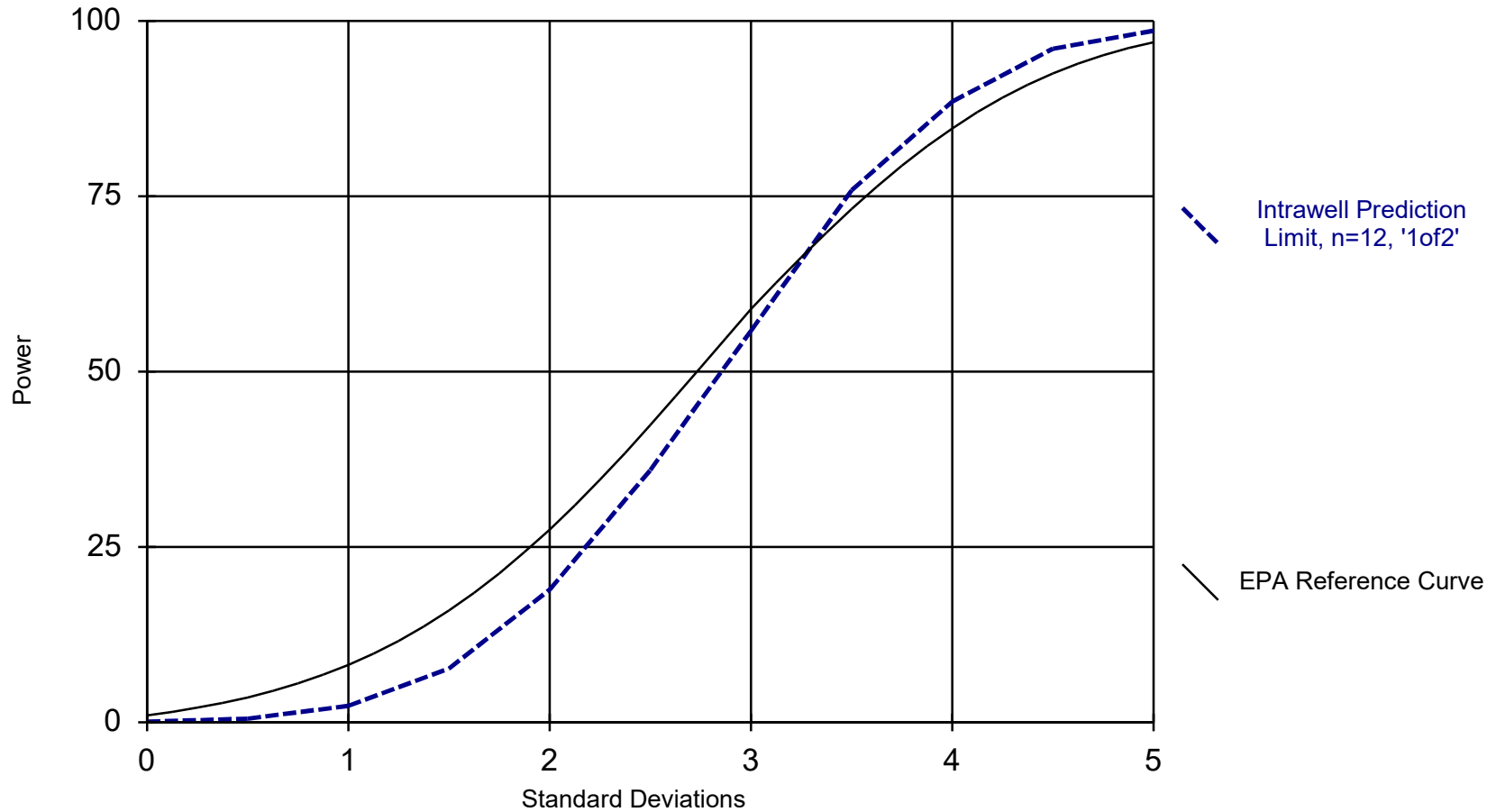
Andrew Collins
Project Manager

Power Curve



Kappa = 2.112, based on 16 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Power Curve



Kappa = 2.8, based on 16 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Date Ranges

Date: 7/12/2022 12:14 PM

Plant Barry Client: Southern Company Data: Barry Ash Pond

Sulfate as SO4 (mg/L)

- BY-AP-MW-1 background:3/2/2016-5/29/2019
- BY-AP-MW-10 background:3/1/2016-5/30/2019
- BY-AP-MW-11 background:3/1/2016-5/29/2019
- BY-AP-MW-12 background:3/2/2016-5/29/2019
- BY-AP-MW-13 background:3/2/2016-5/29/2019
- BY-AP-MW-13V background:3/2/2016-5/29/2019
- BY-AP-MW-8 background:3/1/2016-5/29/2019
- BY-AP-MW-9 background:3/1/2016-5/30/2019

100% Non-Detects

Analysis Run 7/20/2022 3:33 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Antimony (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9

Arsenic (mg/L)

BY-AP-MW-3

Beryllium (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9

Cadmium (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9

Fluoride, total (mg/L)

BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-6

Lead (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-15, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-5, BY-AP-MW-7, BY-AP-MW-8

Lithium (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-16, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-8, BY-AP-MW-9

Mercury (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9

Molybdenum (mg/L)

BY-AP-MW-10, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4

Selenium (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9

Thallium (mg/L)

BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15, BY-AP-MW-16, BY-AP-MW-2, BY-AP-MW-3, BY-AP-MW-4, BY-AP-MW-5, BY-AP-MW-6, BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9

Intrawell Prediction Limits - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH, field (SU)	BY-AP-MW-1	5.91	5.47	5/24/2022	5.44	Yes 19	n/a	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-10	6.463	6.143	5/24/2022	5.81	Yes 19	6.303	0.06515	0	None	No	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-AP-MW-13	6.14	5.79	5/24/2022	5.5	Yes 19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2	
pH, field (SU)	BY-AP-MW-2	6.2	5.161	5/24/2022	4.78	Yes 19	1094	156.3	0	None	x^4	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-AP-MW-6	5.694	4.846	5/25/2022	4.57	Yes 19	801.5	101.6	0	None	x^4	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-AP-MW-8	6.26	5.89	5/24/2022	5.6	Yes 19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2	
pH, field (SU)	BY-UP-MW-1	4.882	4.49	5/31/2022	3.89	Yes 18	4.686	0.0786	0	None	No	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-UP-MW-2	5.032	4.318	5/31/2022	3.31	Yes 18	4.675	0.1431	0	None	No	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-UP-MW-3	4.98	4.4	5/31/2022	3.54	Yes 18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2	
pH, field (SU)	BY-UP-MW-4	5.082	4.517	5/31/2022	3.97	Yes 18	4.799	0.1134	0	None	No	0.0002351	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-1	6.348	n/a	5/24/2022	21	Yes 13	52.17	74.33	46.15	Kaplan-Meier	^3	0.0004702	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-10	5	n/a	5/24/2022	14.7	Yes 13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-11	19.37	n/a	5/23/2022	29.3	Yes 13	1.308	0.5028	46.15	Kaplan-Meier	^(1/3)	0.0004702	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-12	7.04	n/a	5/23/2022	13	Yes 12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-13	9.841	n/a	5/24/2022	38.3	Yes 12	3.818	2.151	41.67	Kaplan-Meier	No	0.0004702	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-14	61.6	n/a	5/25/2022	105	Yes 16	n/a	n/a	56.25	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-7	5	n/a	5/24/2022	7.14	Yes 16	n/a	n/a	37.5	n/a	n/a	0.006456	NP Intra (normality) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-8	6.01	n/a	5/24/2022	81.3	Yes 13	n/a	n/a	76.92	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2	

Intrawell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH, field (SU)	BY-AP-MW-1	5.91	5.47	5/24/2022	5.44	Yes	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-10	6.463	6.143	5/24/2022	5.81	Yes	19	6.303	0.06515	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-11	6.34	5.85	5/23/2022	6.32	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-12	6.25	5.58	5/23/2022	6.12	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-13	6.14	5.79	5/24/2022	5.5	Yes	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-14	6.14	5.76	5/25/2022	6.14	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-15	6.76	6.2	5/25/2022	6.68	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-16	5.87	5.23	5/25/2022	5.74	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-2	6.2	5.161	5/24/2022	4.78	Yes	19	1094	156.3	0	None	x^4	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-3	5.22	4.24	5/25/2022	4.64	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-4	5.355	3.955	5/25/2022	4.6	No	19	4.655	0.2846	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-5	6.03	5.47	5/25/2022	5.99	No	18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-6	5.694	4.846	5/25/2022	4.57	Yes	19	801.5	101.6	0	None	x^4	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-7	6.432	6.166	5/24/2022	6.32	No	18	6.299	0.05346	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-8	6.26	5.89	5/24/2022	5.6	Yes	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-9	6.32	5.97	5/24/2022	6.03	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-UP-MW-1	4.882	4.49	5/31/2022	3.89	Yes	18	4.686	0.0786	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-UP-MW-2	5.032	4.318	5/31/2022	3.31	Yes	18	4.675	0.1431	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-UP-MW-3	4.98	4.4	5/31/2022	3.54	Yes	18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2
pH, field (SU)	BY-UP-MW-4	5.082	4.517	5/31/2022	3.97	Yes	18	4.799	0.1134	0	None	No	0.0002351	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-1	6.348	n/a	5/24/2022	21	Yes	13	52.17	74.33	46.15	Kaplan-Meier	x^3	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-10	5	n/a	5/24/2022	14.7	Yes	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-11	19.37	n/a	5/23/2022	29.3	Yes	13	1.308	0.5028	46.15	Kaplan-Meier	x^(1/3)	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-12	7.04	n/a	5/23/2022	13	Yes	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-13	9.841	n/a	5/24/2022	38.3	Yes	12	3.818	2.151	41.67	Kaplan-Meier	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-14	61.6	n/a	5/25/2022	105	Yes	16	n/a	n/a	56.25	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-15	7.61	n/a	5/25/2022	1.8J	No	17	n/a	n/a	58.82	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-16	6.72	n/a	5/25/2022	6.29	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-2	3.3	n/a	5/24/2022	0.615J	No	17	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-3	5	n/a	5/25/2022	1.41J	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-4	5.778	n/a	5/25/2022	1.97J	No	17	2.878	1.149	5.882	None	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-5	11	n/a	5/25/2022	5.53	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-6	3.037	n/a	5/25/2022	1.27J	No	17	0.01145	0.4356	23.53	Kaplan-Meier	ln(x)	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-7	5	n/a	5/24/2022	7.14	Yes	16	n/a	n/a	37.5	n/a	n/a	0.006456	NP Intra (normality) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-8	6.01	n/a	5/24/2022	81.3	Yes	13	n/a	n/a	76.92	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-9	5.91	n/a	5/24/2022	5.76	No	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-1	31.7	n/a	5/31/2022	12.8	No	16	3.458	0.85	0	None	sqrt(x)	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-2	9.774	n/a	5/31/2022	8.09	No	15	6.454	1.269	0	None	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-3	9.087	n/a	5/31/2022	7.02	No	16	7.496	0.6224	0	None	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-4	10.8	n/a	5/31/2022	7.94	No	16	n/a	n/a	0	n/a	n/a	0.006456	NP Intra (normality) 1 of 2

Interwell Prediction Limits - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-1	0.188	5/24/2022	2.08	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-10	0.188	5/24/2022	2.34	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-16	0.188	5/25/2022	1.98	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-8	0.188	5/24/2022	1.12	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-9	0.188	5/24/2022	2.01	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	BY-AP-MW-1	2.141	5/24/2022	43.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-10	2.141	5/24/2022	63.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-11	2.141	5/23/2022	26	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-12	2.141	5/23/2022	20.6	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-13	2.141	5/24/2022	19.2	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-14	2.141	5/25/2022	11.4	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-15	2.141	5/25/2022	6.41	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-16	2.141	5/25/2022	13.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-2	2.141	5/24/2022	2.45	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-5	2.141	5/25/2022	14.6	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-7	2.141	5/24/2022	10.5	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-8	2.141	5/24/2022	31.5	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-9	2.141	5/24/2022	38.3	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-1	9.9	5/24/2022	28.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-10	9.9	5/24/2022	27.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-11	9.9	5/23/2022	25.1	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-12	9.9	5/23/2022	26.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-13	9.9	5/24/2022	43.5	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-14	9.9	5/25/2022	45.3	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-15	9.9	5/25/2022	80.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-16	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-3	9.9	5/25/2022	15.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-4	9.9	5/25/2022	16.1	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-5	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-7	9.9	5/24/2022	13.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-8	9.9	5/24/2022	25	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-9	9.9	5/24/2022	17.3	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-15	0.125	5/25/2022	0.214	Yes	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
TDS (mg/L)	BY-AP-MW-1	58	5/24/2022	464	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-10	58	5/24/2022	398	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-11	58	5/23/2022	404	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-12	58	5/23/2022	345	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-13	58	5/24/2022	257	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-14	58	5/25/2022	328	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-15	58	5/25/2022	255	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-16	58	5/25/2022	299	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-5	58	5/25/2022	252	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-7	58	5/24/2022	148	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-8	58	5/24/2022	303	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-9	58	5/24/2022	268	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-1	0.188	5/24/2022	2.08	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-10	0.188	5/24/2022	2.34	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-11	0.188	5/23/2022	0.0558J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-12	0.188	5/23/2022	0.0626J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-13	0.188	5/24/2022	0.0457J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-14	0.188	5/25/2022	0.0618J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-15	0.188	5/25/2022	0.0826J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-16	0.188	5/25/2022	1.98	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-2	0.188	5/24/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-3	0.188	5/25/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-4	0.188	5/25/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-5	0.188	5/25/2022	0.063J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-6	0.188	5/25/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-7	0.188	5/24/2022	0.0369J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-8	0.188	5/24/2022	1.12	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-9	0.188	5/24/2022	2.01	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	BY-AP-MW-1	2.141	5/24/2022	43.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-10	2.141	5/24/2022	63.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-11	2.141	5/23/2022	26	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-12	2.141	5/23/2022	20.6	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-13	2.141	5/24/2022	19.2	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-14	2.141	5/25/2022	11.4	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-15	2.141	5/25/2022	6.41	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-16	2.141	5/25/2022	13.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-2	2.141	5/24/2022	2.45	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-3	2.141	5/25/2022	1.29	No	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-4	2.141	5/25/2022	1.69	No	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-5	2.141	5/25/2022	14.6	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-6	2.141	5/25/2022	1.62	No	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-7	2.141	5/24/2022	10.5	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-8	2.141	5/24/2022	31.5	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-9	2.141	5/24/2022	38.3	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-1	9.9	5/24/2022	28.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-10	9.9	5/24/2022	27.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-11	9.9	5/23/2022	25.1	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-12	9.9	5/23/2022	26.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-13	9.9	5/24/2022	43.5	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-14	9.9	5/25/2022	45.3	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-15	9.9	5/25/2022	80.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-16	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-2	9.9	5/24/2022	9.21	No	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-3	9.9	5/25/2022	15.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-4	9.9	5/25/2022	16.1	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-5	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-6	9.9	5/25/2022	6.63	No	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-7	9.9	5/24/2022	13.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-8	9.9	5/24/2022	25	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-9	9.9	5/24/2022	17.3	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-1	0.125	5/24/2022	0.0801J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-10	0.125	5/24/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-11	0.125	5/23/2022	0.0709J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-12	0.125	5/23/2022	0.0873J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-13	0.125	5/24/2022	0.0769J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-14	0.125	5/25/2022	0.0733J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-15	0.125	5/25/2022	0.214	Yes	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-16	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-2	0.125	5/24/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-3	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-4	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-5	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-6	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-7	0.125	5/24/2022	0.0724J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-8	0.125	5/24/2022	0.0713J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-9	0.125	5/24/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
TDS (mg/L)	BY-AP-MW-1	58	5/24/2022	464	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-10	58	5/24/2022	398	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-11	58	5/23/2022	404	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-12	58	5/23/2022	345	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
TDS (mg/L)	BY-AP-MW-13	58	5/24/2022	257	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-14	58	5/25/2022	328	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-15	58	5/25/2022	255	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-16	58	5/25/2022	299	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-2	58	5/24/2022	40.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-3	58	5/25/2022	50.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-4	58	5/25/2022	48.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-5	58	5/25/2022	252	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-6	58	5/25/2022	40.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-7	58	5/24/2022	148	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-8	58	5/24/2022	303	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-9	58	5/24/2022	268	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2

Trend Test - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:26 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-10	0.1311	110	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-16	0.0646	84	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-8	-0.1071	-112	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-10	2.463	117	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-12	0.4261	87	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-7	0.4635	133	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-8	-0.4562	-88	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-3 (bg)	0.07505	86	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-4 (bg)	0.1262	111	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-1	0.8122	65	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-10	1.596	139	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-12	0.6575	105	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-14	1.34	83	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-15	9.506	151	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-16	0.8393	115	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-3	0.359	107	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-7	0.4288	75	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-2 (bg)	-0.3942	-104	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-3 (bg)	-0.04984	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-4 (bg)	-0.05925	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-1 (bg)	0.01277	80	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-2 (bg)	0.01673	85	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-3 (bg)	0.01205	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-4 (bg)	0.01076	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-13	-0.0481	-128	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-2	-0.09486	-137	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-2 (bg)	-0.07015	-123	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-3 (bg)	-0.07433	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-4 (bg)	-0.05992	-98	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-1	2.168	106	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-11	5.258	114	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-12	2.096	77	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-14	7.276	79	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-8	2.306	104	74	Yes	19	52.63	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-10	6.544	88	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-15	15.07	125	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-1 (bg)	3.147	72	68	Yes	18	5.556	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-4 (bg)	3.695	95	68	Yes	18	22.22	n/a	n/a	0.01	NP

Trend Test - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:26 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-1	0.05988	45	68	No	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-10	0.1311	110	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-16	0.0646	84	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-8	-0.1071	-112	-68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-9	0.01049	10	68	No	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-1 (bg)	0	-19	-68	No	18	44.44	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-2 (bg)	0	27	63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-3 (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-4 (bg)	0	25	68	No	18	88.89	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-1	0.3773	13	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-10	2.463	117	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-11	-0.333	-43	-74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-12	0.4261	87	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-13	0.1429	36	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-14	0	-7	-74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-15	0.1185	41	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-16	0.06036	18	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-2	-0.05034	-36	-74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-5	0	4	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-7	0.4635	133	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-8	-0.4562	-88	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-9	0.09472	21	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-1 (bg)	0.02597	19	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-2 (bg)	0.06598	57	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-3 (bg)	0.07505	86	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-4 (bg)	0.1262	111	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-1	0.8122	65	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-10	1.596	139	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-11	0.5172	43	74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-12	0.6575	105	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-13	-0.07749	-5	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-14	1.34	83	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-15	9.506	151	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-16	0.8393	115	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-3	0.359	107	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-4	-0.3427	-26	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-5	0.02448	15	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-7	0.4288	75	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-8	0.08022	18	74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-9	-1.025	-69	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-1 (bg)	-0.1668	-34	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-2 (bg)	-0.3942	-104	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-3 (bg)	-0.04984	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-4 (bg)	-0.05925	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-AP-MW-15	0	0	74	No	19	5.263	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-1 (bg)	0.01277	80	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-2 (bg)	0.01673	85	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-3 (bg)	0.01205	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-4 (bg)	0.01076	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-1	0	0	87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-10	-0.01552	-32	-87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-13	-0.0481	-128	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-2	-0.09486	-137	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-6	-0.04963	-83	-87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-8	-0.01141	-56	-87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-1 (bg)	-0.004287	-14	-81	No	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-2 (bg)	-0.07015	-123	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-3 (bg)	-0.07433	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-4 (bg)	-0.05992	-98	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-1	2.168	106	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-10	0.812	67	74	No	19	47.37	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-11	5.258	114	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-12	2.096	77	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-13	3.002	67	68	No	18	27.78	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-14	7.276	79	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-7	0.7261	62	68	No	18	33.33	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-8	2.306	104	74	Yes	19	52.63	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-UP-MW-1 (bg)	1.548	45	68	No	18	0	n/a	n/a	0.01	NP

Trend Test - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:26 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate as SO4 (mg/L)	BY-UP-MW-2 (bg)	0.0231	3	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-UP-MW-3 (bg)	-0.07308	-27	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-UP-MW-4 (bg)	-0.02454	-6	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-1	0	1	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-10	6.544	88	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-11	5.887	54	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-12	-1.313	-20	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-13	-5.166	-64	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-14	2.028	33	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-15	15.07	125	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-16	3.704	49	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-5	-2.941	-31	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-7	1.47	31	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-8	-0.7384	-8	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-9	-5.014	-59	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-1 (bg)	3.147	72	68	Yes	18	5.556	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-2 (bg)	1.703	57	68	No	18	11.11	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-3 (bg)	1.36	45	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-4 (bg)	3.695	95	68	Yes	18	22.22	n/a	n/a	0.01	NP

Upper Tolerance Limits - Summary Table

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 1/19/2022, 3:44 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	92.65	n/a	n/a	0.03056	NP Inter
Arsenic (mg/L)	n/a	0.0017	n/a	n/a	n/a	68	n/a	n/a	88.24	n/a	n/a	0.03056	NP Inter
Barium (mg/L)	n/a	0.183	n/a	n/a	n/a	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	66	n/a	n/a	93.94	n/a	n/a	0.03387	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Chromium (mg/L)	n/a	0.01	n/a	n/a	n/a	68	n/a	n/a	83.82	n/a	n/a	0.03056	NP Inter
Cobalt (mg/L)	n/a	0.0157	n/a	n/a	n/a	67	n/a	n/a	58.21	n/a	n/a	0.03217	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	3	n/a	n/a	n/a	60	n/a	n/a	0	n/a	n/a	0.04607	NP Inter
Fluoride, total (mg/L)	n/a	0.1	n/a	n/a	n/a	72	n/a	n/a	52.78	n/a	n/a	0.02489	NP Inter
Lead (mg/L)	n/a	0.00126	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Lithium (mg/L)	n/a	0.02	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Molybdenum (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Thallium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter

BARRY ASH POND GWPS			
Analyte	Units	Background	GWPS
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.0017	0.01
Barium	mg/L	0.183	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0157	0.0157
Combined Radium-226/228	pCi/L	3	5
Fluoride	mg/L	0.1	4
Lead	mg/L	0.00126	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.00102	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 second semi-annual sampling event in 2021.

Confidence Interval Summary Table - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	BY-AP-MW-1	0.07688	0.05769	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-10	0.07651	0.06677	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-11	0.01648	0.01374	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-12	0.0246	0.0215	0.01	Yes	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	BY-AP-MW-13	0.01495	0.01312	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-14	0.0182	0.01473	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-15	0.01954	0.01573	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-16	0.01434	0.01096	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-5	0.03536	0.02914	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-7	0.02326	0.01926	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-8	0.06545	0.05105	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-9	0.04498	0.03737	0.01	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-15	0.037	0.03248	0.0157	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-7	0.02135	0.01752	0.0157	Yes	8	0	No	0.01	Param.

Confidence Interval Summary Table - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	BY-AP-MW-1	0.07688	0.05769	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-10	0.07651	0.06677	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-11	0.01648	0.01374	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-12	0.0246	0.0215	0.01	Yes	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	BY-AP-MW-13	0.01495	0.01312	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-14	0.0182	0.01473	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-15	0.01954	0.01573	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-16	0.01434	0.01096	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-2	0.001765	0.00125	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-4	0.0002	0.0001	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	BY-AP-MW-5	0.03536	0.02914	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-6	0.000103	0.0001	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	BY-AP-MW-7	0.02326	0.01926	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-8	0.06545	0.05105	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-9	0.04498	0.03737	0.01	Yes	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-1	0.3384	0.2783	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-10	0.07502	0.06196	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-11	0.09918	0.06777	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-12	0.08641	0.07752	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-13	0.07647	0.06744	2	No	8	0	ln(x)	0.01	Param.
Barium (mg/L)	BY-AP-MW-14	0.07075	0.0594	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-15	0.08085	0.05845	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-16	0.1005	0.08087	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-2	0.02663	0.02375	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-3	0.04373	0.03406	2	No	8	0	sqrt(x)	0.01	Param.
Barium (mg/L)	BY-AP-MW-4	0.03257	0.01483	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-5	0.1575	0.1412	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-6	0.02913	0.02379	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-7	0.07229	0.06041	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-8	0.1473	0.1367	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-9	0.1232	0.1143	2	No	8	0	No	0.01	Param.
Beryllium (mg/L)	BY-AP-MW-4	0.00102	0.00065	0.004	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	BY-AP-MW-6	0.00031	0.00007	0.005	No	8	75	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-1	0.00415	0.00223	0.1	No	8	0	No	0.004	NP (normality)
Chromium (mg/L)	BY-AP-MW-10	0.00102	0.00052	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-11	0.003956	0.002066	0.1	No	8	0	No	0.01	Param.
Chromium (mg/L)	BY-AP-MW-12	0.0056	0.00325	0.1	No	8	0	No	0.004	NP (normality)
Chromium (mg/L)	BY-AP-MW-13	0.008713	0.006678	0.1	No	8	0	ln(x)	0.01	Param.
Chromium (mg/L)	BY-AP-MW-14	0.005123	0.003732	0.1	No	8	0	No	0.01	Param.
Chromium (mg/L)	BY-AP-MW-15	0.00102	0.00049	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-16	0.0018	0.00102	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-2	0.00102	0.00029	0.1	No	8	75	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-3	0.00104	0.000919	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-4	0.00102	0.00026	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-5	0.00103	0.00101	0.1	No	8	75	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-6	0.00102	0.00023	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-7	0.00709	0.00058	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-8	0.00165	0.00102	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-9	0.00102	0.0007	0.1	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-1	0.005	0.00091	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-10	0.005	0.00054	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-11	0.005	0.00118	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-12	0.003937	0.00292	0.0157	No	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-13	0.005	0.00113	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-14	0.005	0.00124	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-15	0.037	0.03248	0.0157	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-16	0.02062	0.01343	0.0157	No	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-2	0.007575	0.006423	0.0157	No	8	0	x^2	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-3	0.005	0.00016	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-4	0.0205	0.00363	0.0157	No	8	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	BY-AP-MW-5	0.005	0.00184	0.0157	No	8	75	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-6	0.005	0.0006	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-7	0.02135	0.01752	0.0157	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-8	0.005	0.00067	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-9	0.005	0.00069	0.0157	No	8	62.5	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-1	2.783	1.67	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-10	1.332	0.3915	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-11	0.8362	0.3081	5	No	8	0	sqrt(x)	0.01	Param.

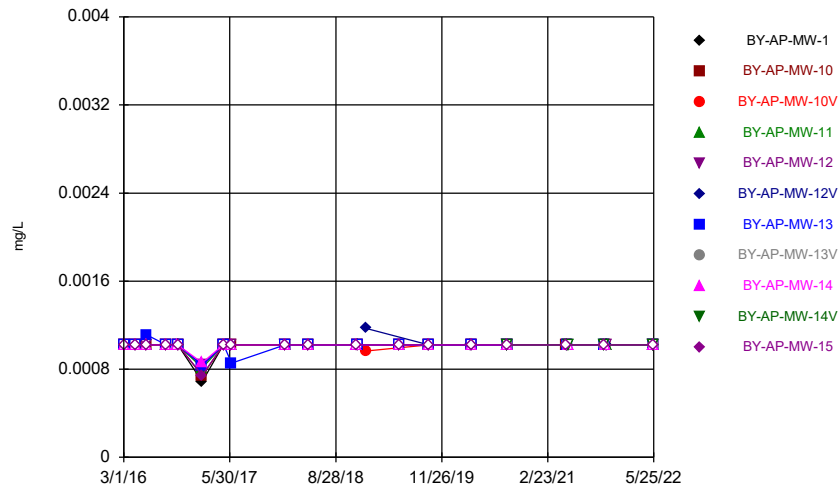
Confidence Interval Summary Table - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-12	1.76	0.8804	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-13	1.375	0.5961	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-14	1.124	0.476	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-15	1.443	0.3816	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-16	1.569	0.285	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-2	0.9189	0.3196	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-3	1.8	0.3065	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-4	0.9614	0.3385	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-5	2.221	0.9224	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-6	1.312	-0.03787	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-7	1.116	0.294	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-8	1.054	0.4141	5	No	8	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-9	1.478	0.636	5	No	8	0	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-1	0.194	0.0625	4	No	8	12.5	No	0.004	NP (normality)
Fluoride, total (mg/L)	BY-AP-MW-10	0.105	0.0573	4	No	8	62.5	No	0.004	NP (NDs)
Fluoride, total (mg/L)	BY-AP-MW-11	0.09643	0.06172	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-12	0.09011	0.05424	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-13	0.07751	0.05904	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-14	0.09472	0.06606	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-15	0.2059	0.1691	4	No	8	0	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-16	0.08512	0.06444	4	No	8	37.5	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-5	0.09618	0.05716	4	No	8	25	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-7	0.1062	0.07458	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-8	0.09399	0.06127	4	No	8	37.5	ln(x)	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-9	0.08187	0.05408	4	No	8	12.5	No	0.01	Param.
Lead (mg/L)	BY-AP-MW-11	0.0002	0.00009	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-12	0.000326	0.00018	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-13	0.0002	0.00015	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-14	0.0002	0.0000764	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-16	0.0002	0.000191	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-4	0.0002	0.00007	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-6	0.006786	0.0006176	0.015	No	8	12.5	sqrt(x)	0.01	Param.
Lead (mg/L)	BY-AP-MW-9	0.00108	0.0002	0.015	No	8	87.5	No	0.004	NP (NDs)
Lithium (mg/L)	BY-AP-MW-11	0.02902	0.00914	0.04	No	8	25	No	0.01	Param.
Lithium (mg/L)	BY-AP-MW-15	0.02368	0.01029	0.04	No	8	12.5	No	0.01	Param.
Lithium (mg/L)	BY-AP-MW-7	0.0882	0.0102	0.04	No	8	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-1	0.0002	0.00008	0.1	No	8	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-11	0.00652	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-12	0.00109	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-13	0.00356	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-14	0.000701	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-15	0.00209	0.0002	0.1	No	8	50	No	0.004	NP (normality)
Molybdenum (mg/L)	BY-AP-MW-16	0.0002	0.000136	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-5	0.0002	0.00011	0.1	No	8	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-6	0.00033	0.00011	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-7	0.000214	0.00018	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-8	0.000321	0.00019	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-9	0.00024	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Selenium (mg/L)	BY-AP-MW-13	0.00102	0.00056	0.05	No	8	87.5	No	0.004	NP (NDs)

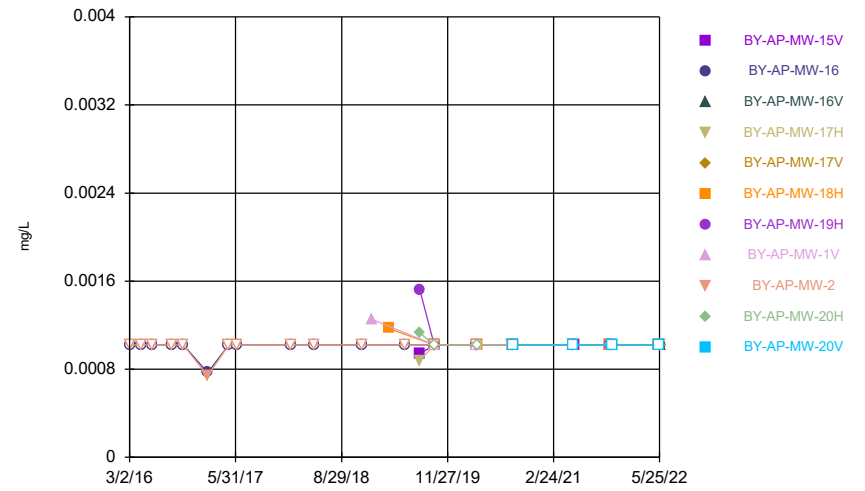
FIGURE A.

Time Series



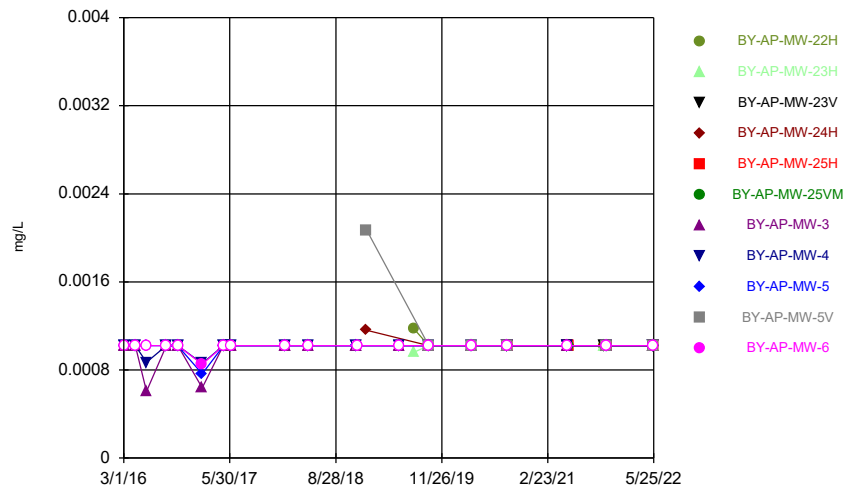
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



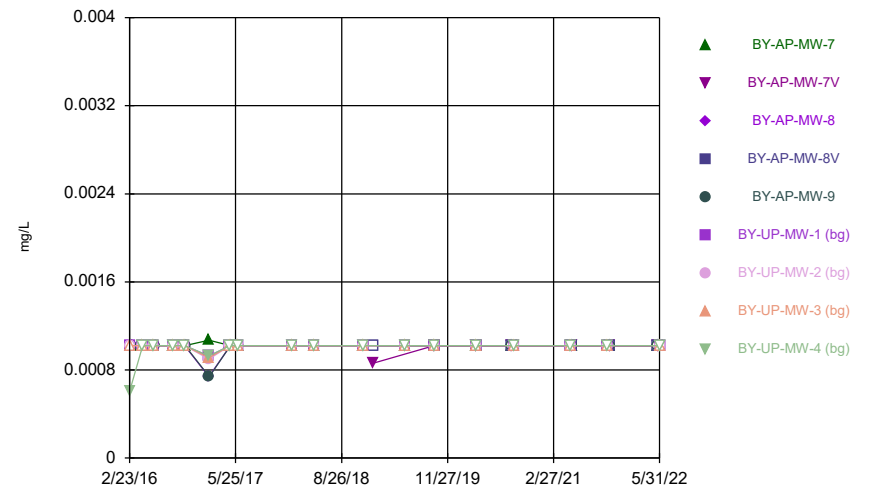
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Time Series



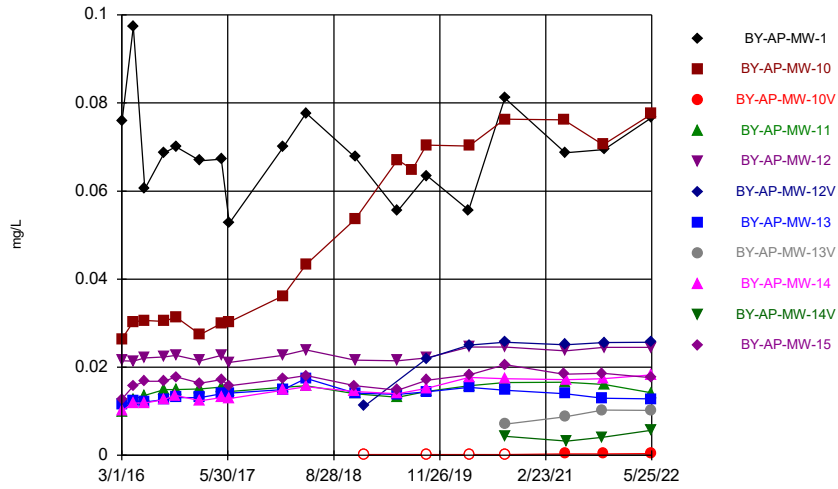
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Time Series



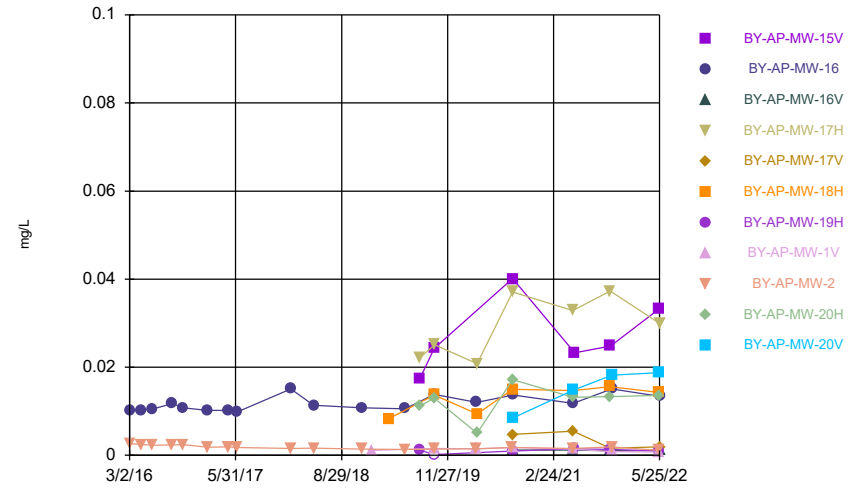
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Time Series



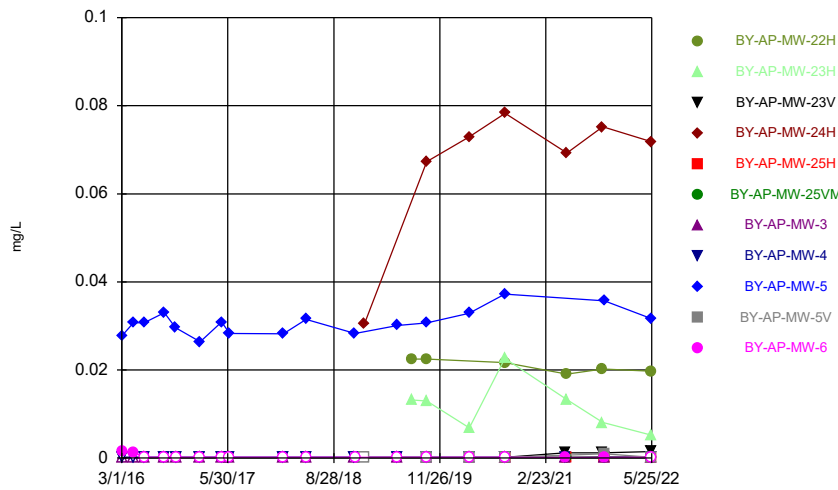
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Time Series



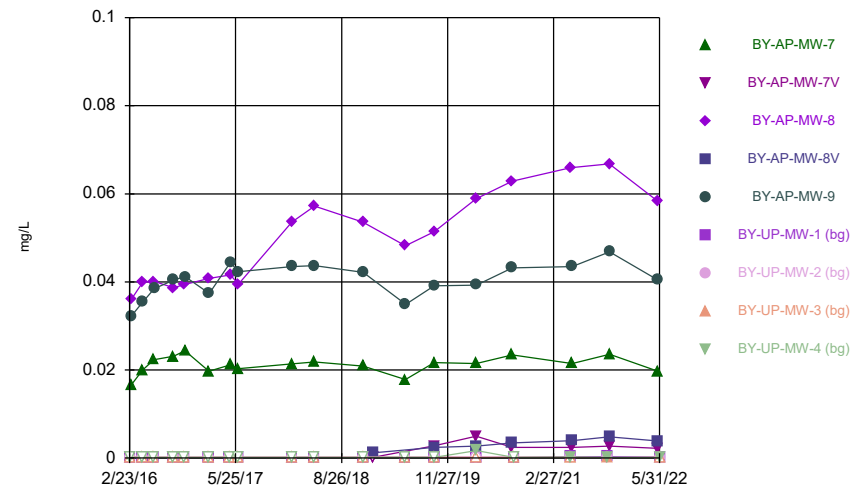
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Time Series



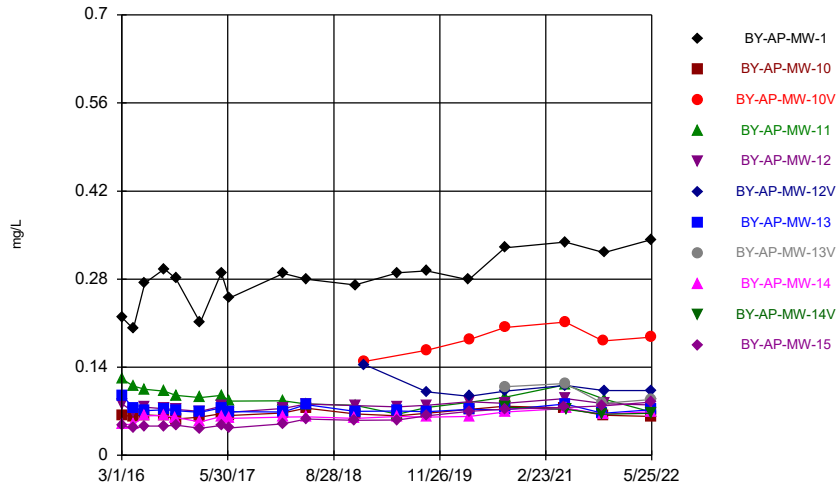
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Time Series



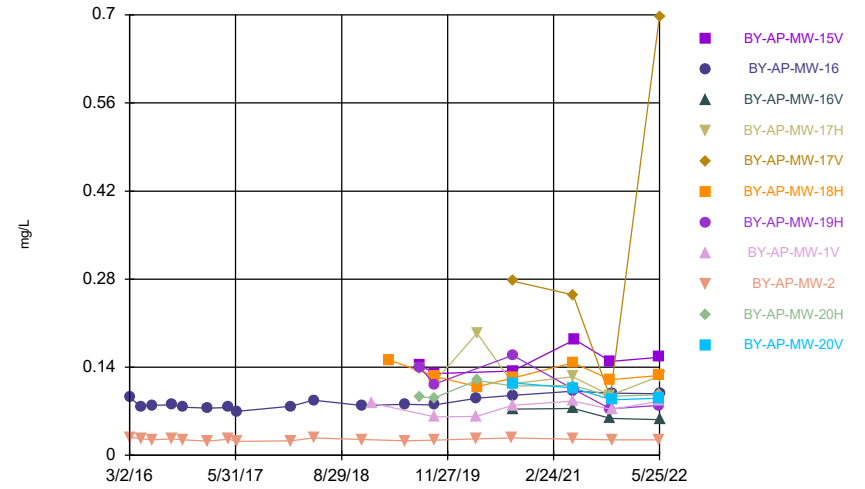
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Time Series



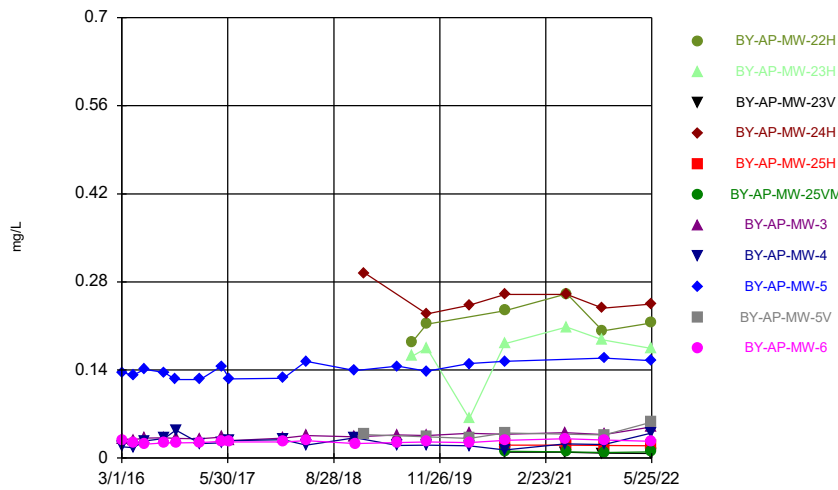
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Time Series



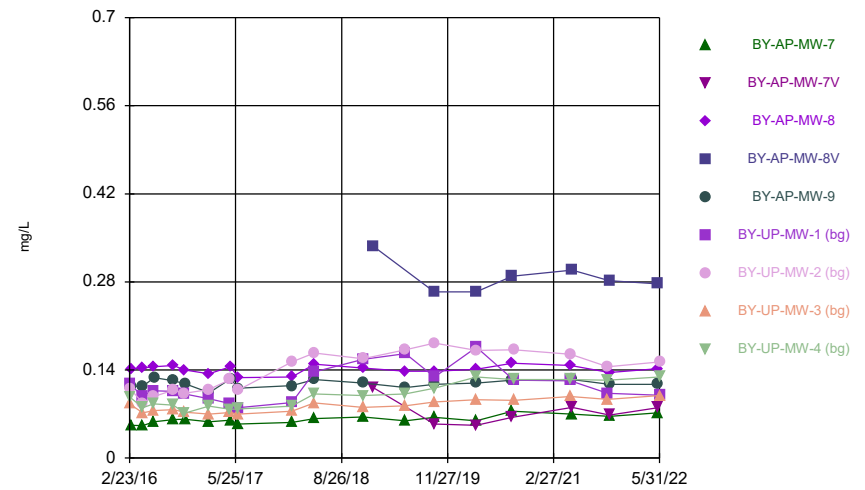
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Time Series



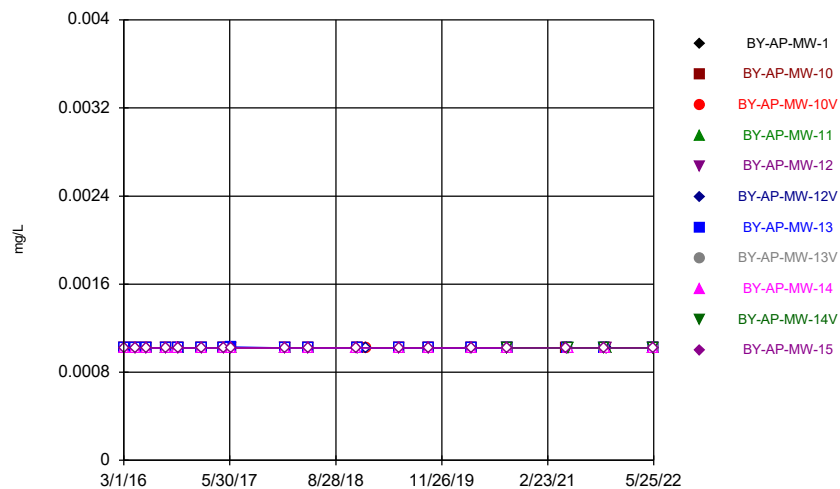
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Time Series



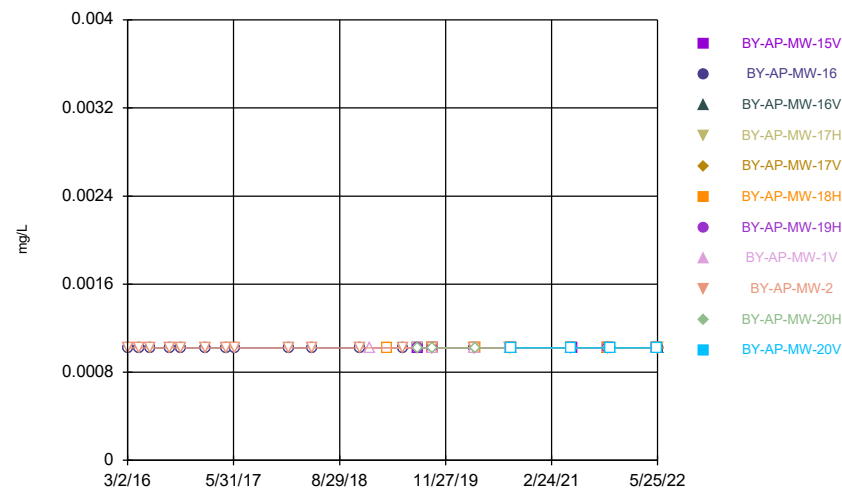
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



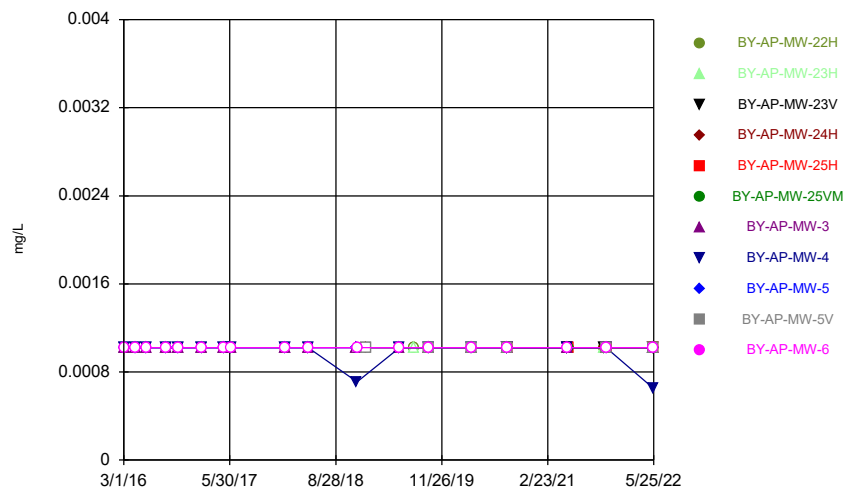
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Time Series



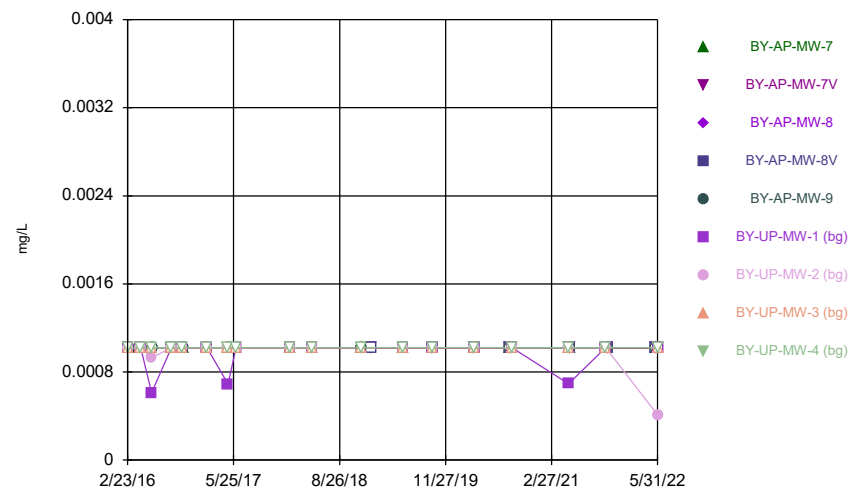
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Time Series



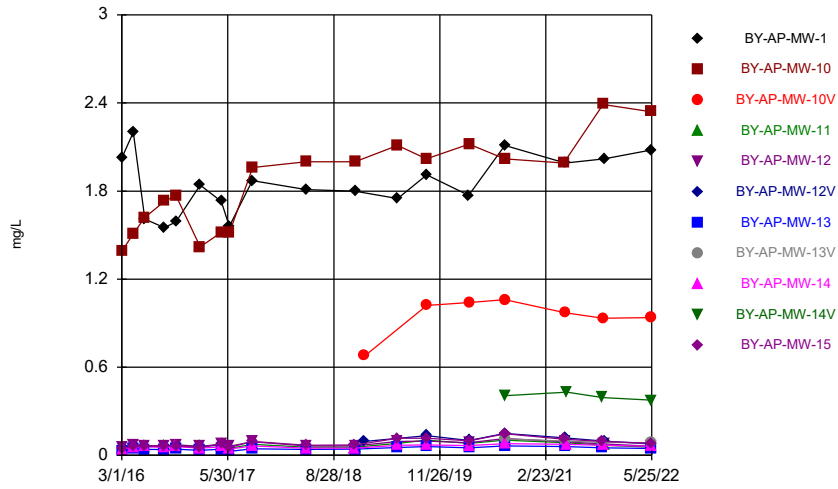
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Time Series



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Plant Barry Client: Southern Company Data: Barry Ash Pond

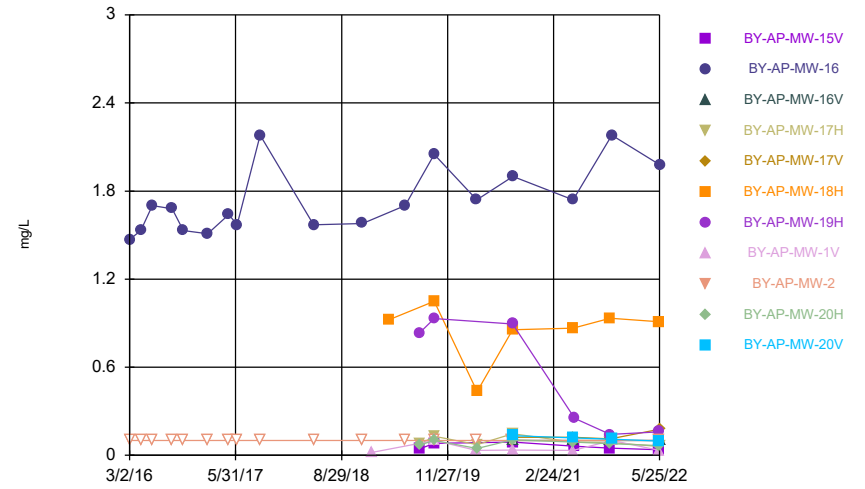
Time Series



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Plant Barry Client: Southern Company Data: Barry Ash Pond

Hollow symbols indicate censored values.

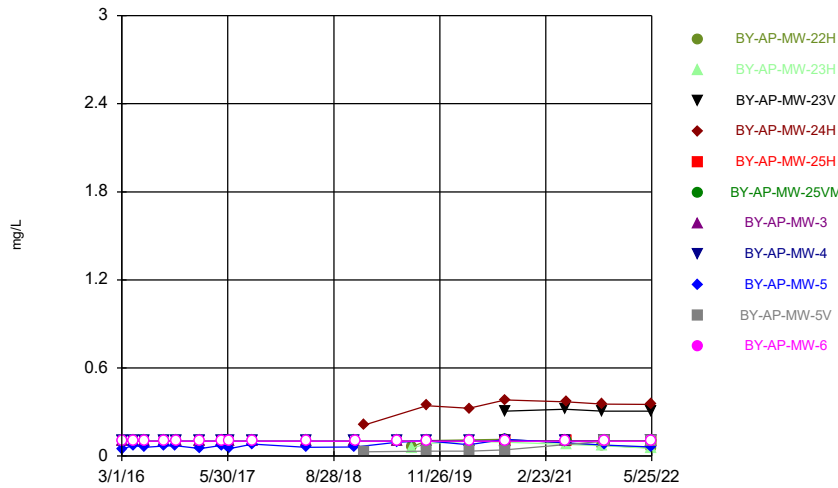
Time Series



Constituent: Boron, total Analysis Run 7/21/2022 3:43 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

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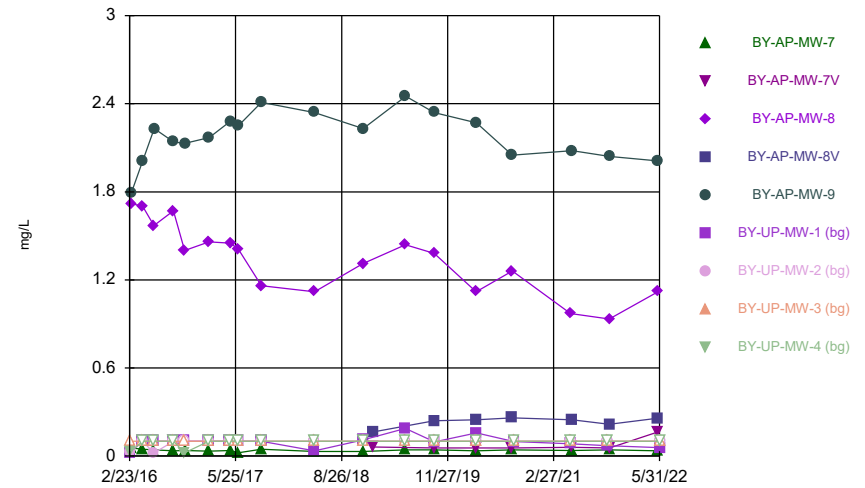
Time Series



Constituent: Boron, total Analysis Run 7/21/2022 3:43 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

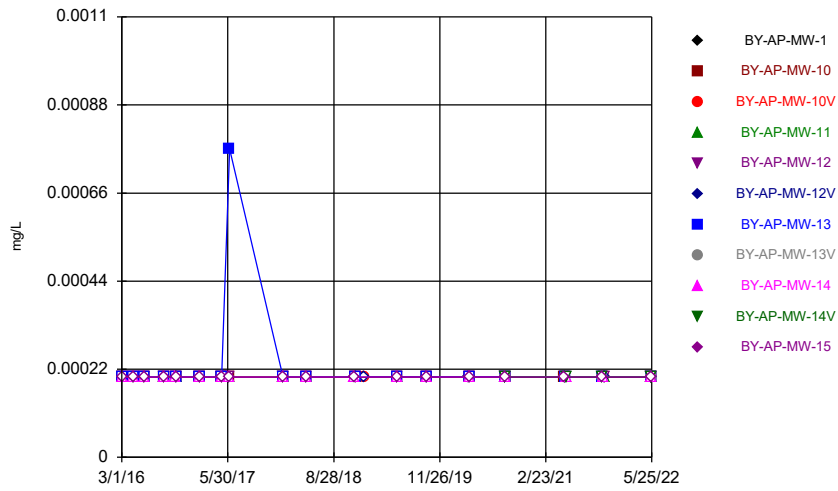
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Time Series



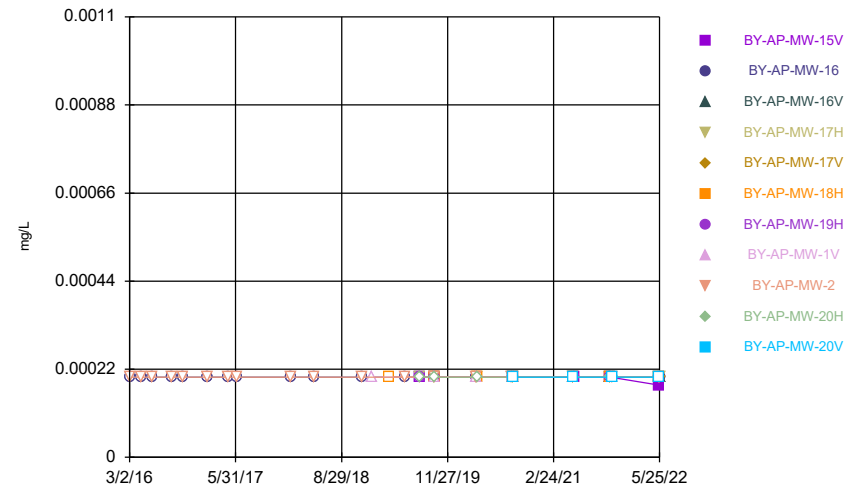
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



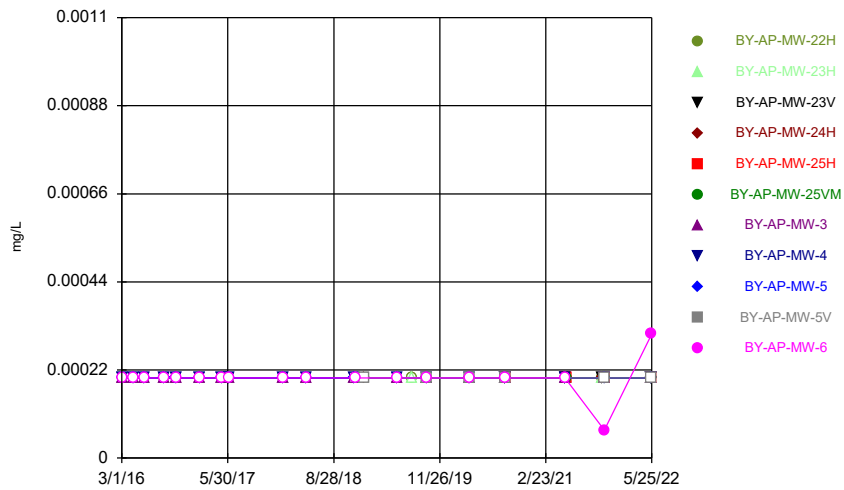
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



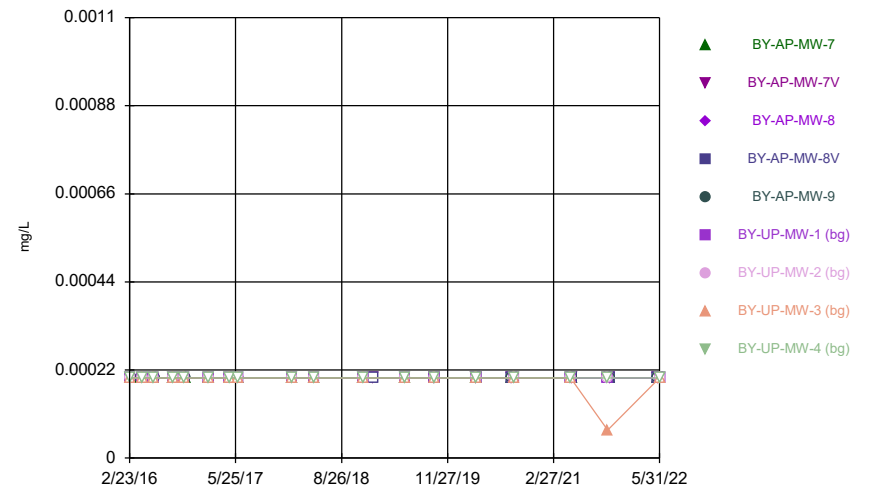
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



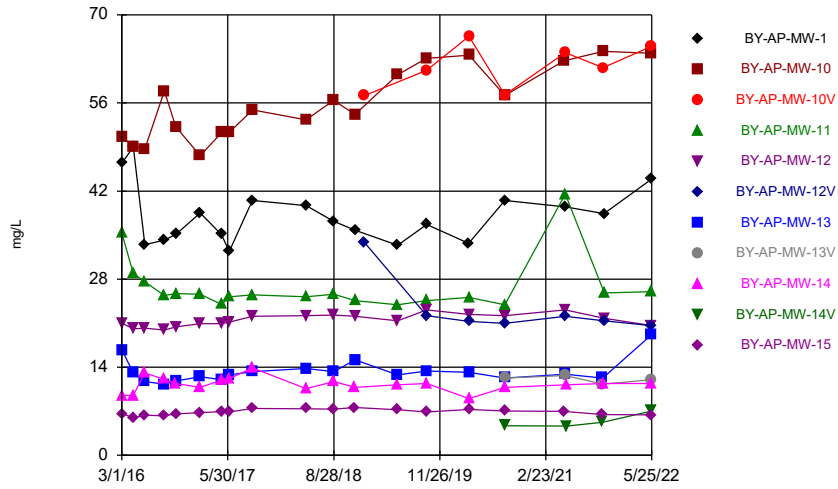
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Time Series



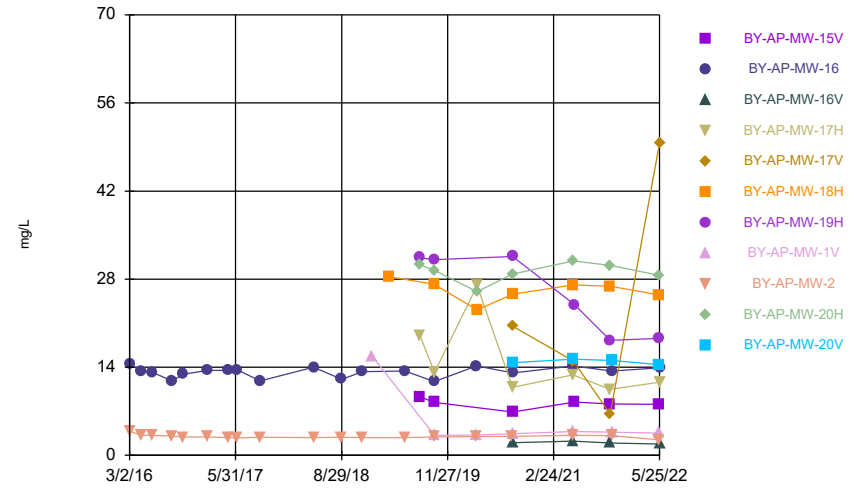
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



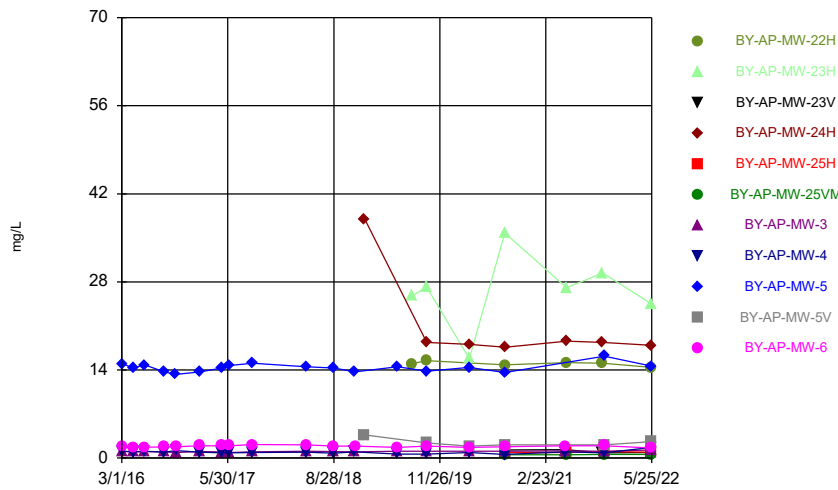
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



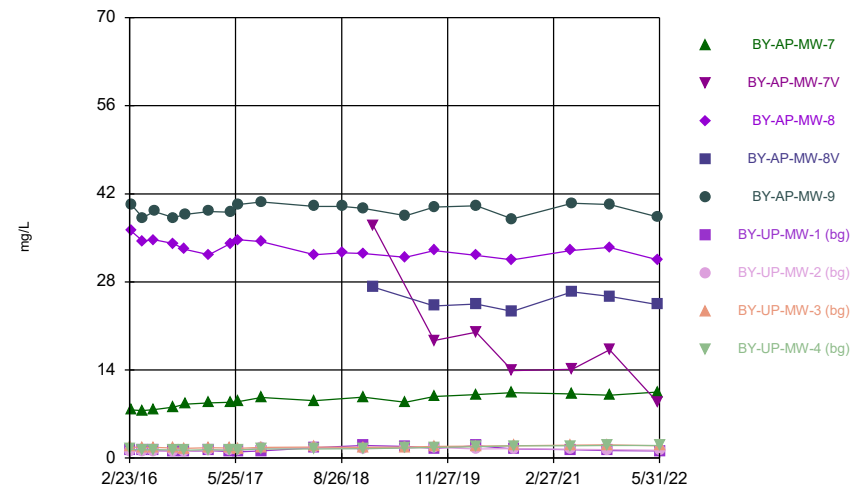
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



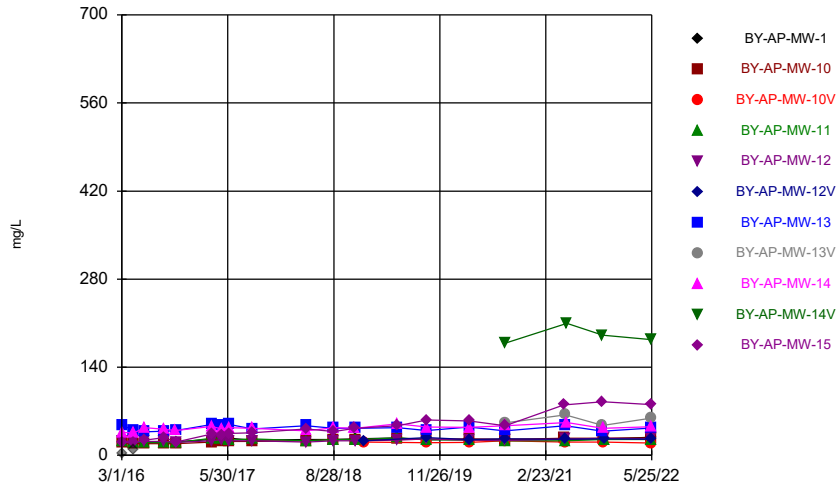
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Time Series



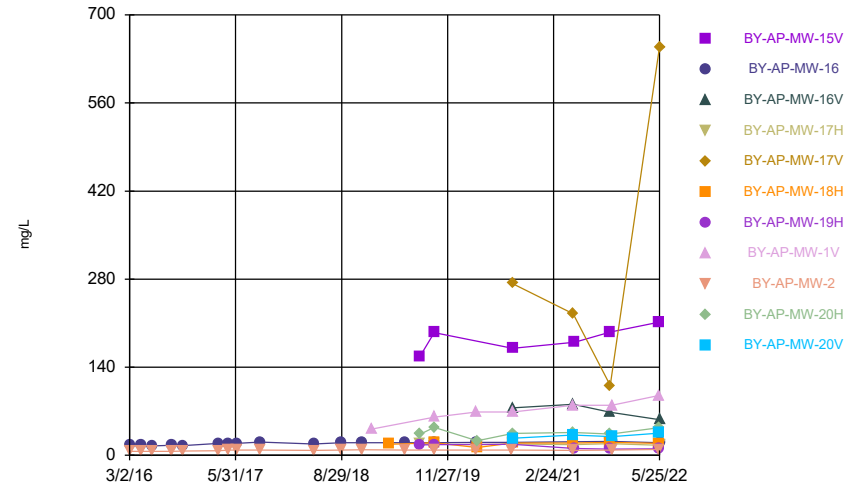
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Time Series



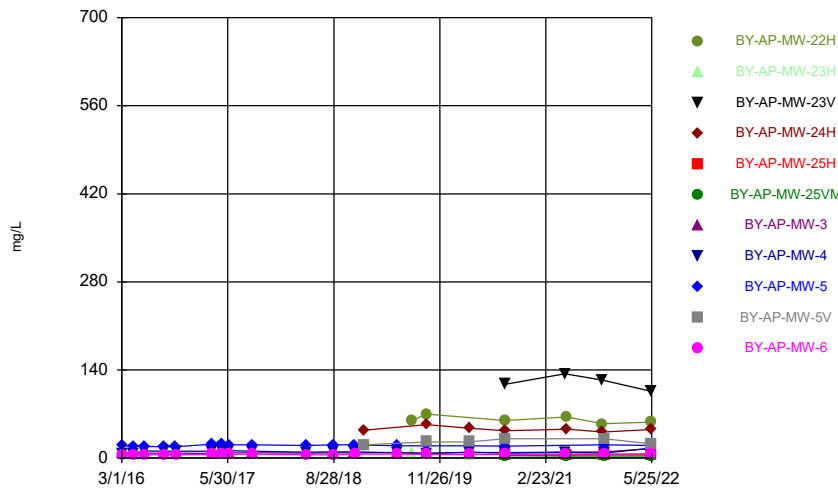
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Time Series



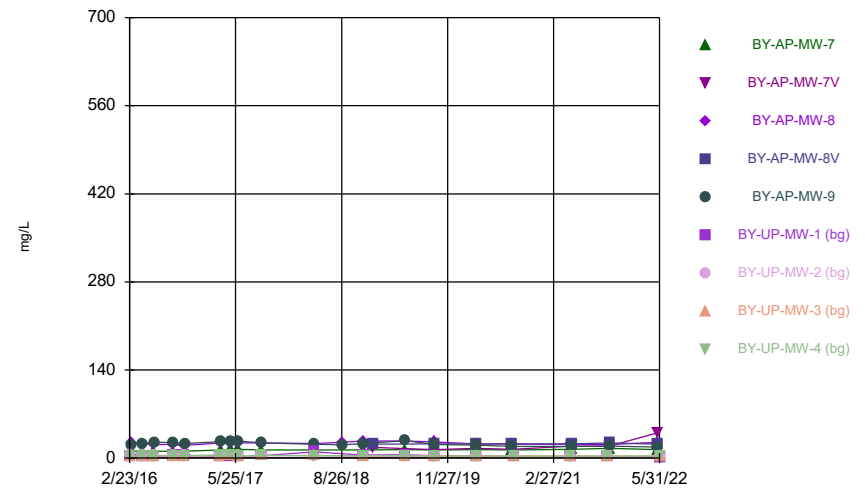
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Time Series



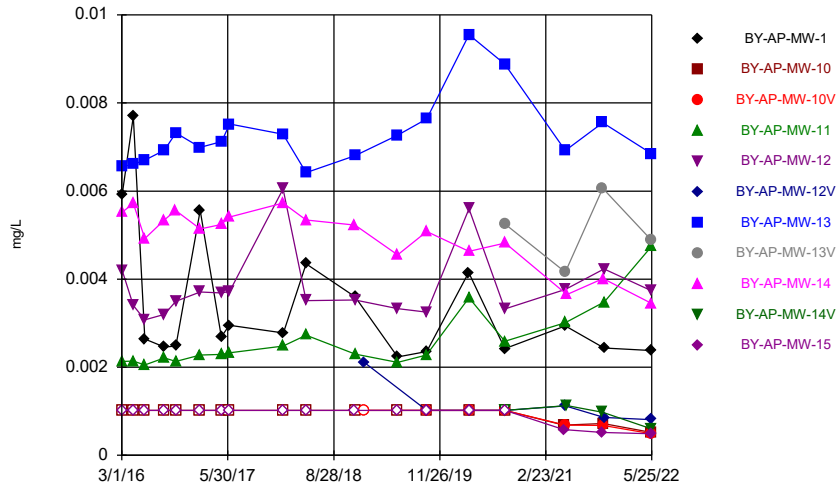
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Time Series



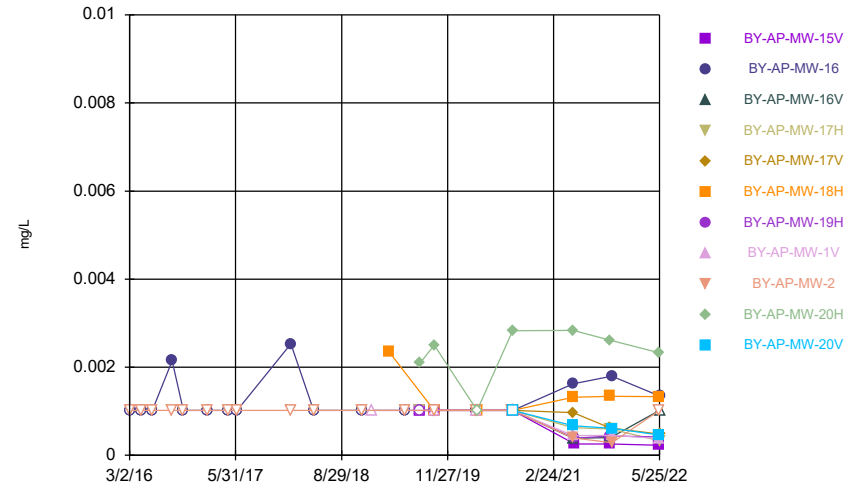
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Time Series



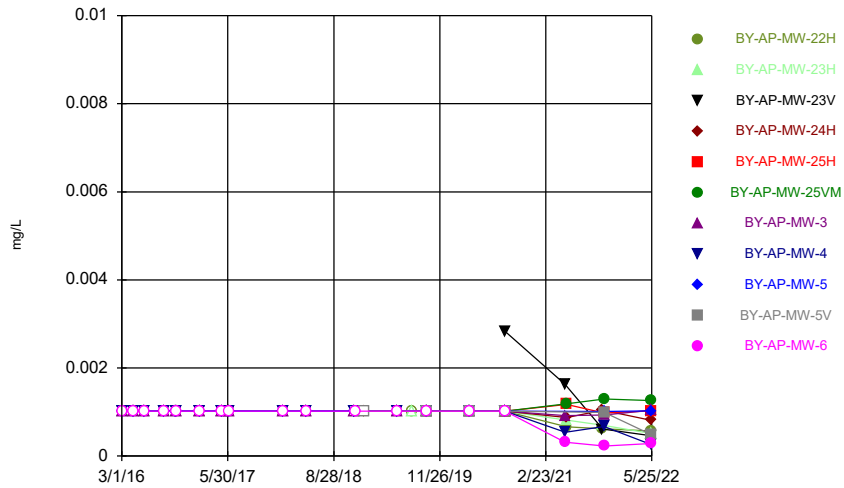
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Time Series



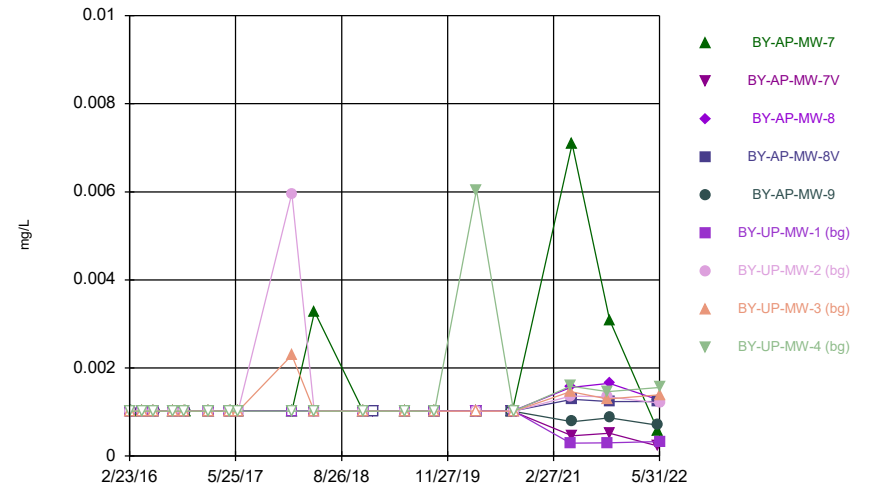
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Time Series



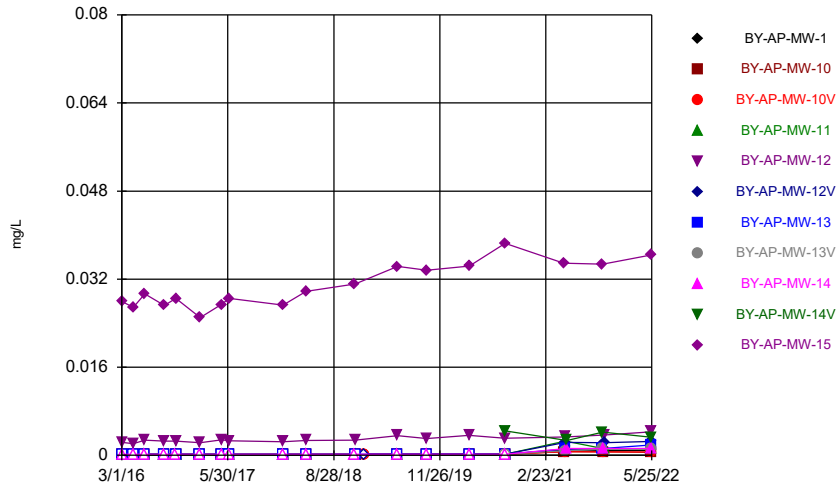
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



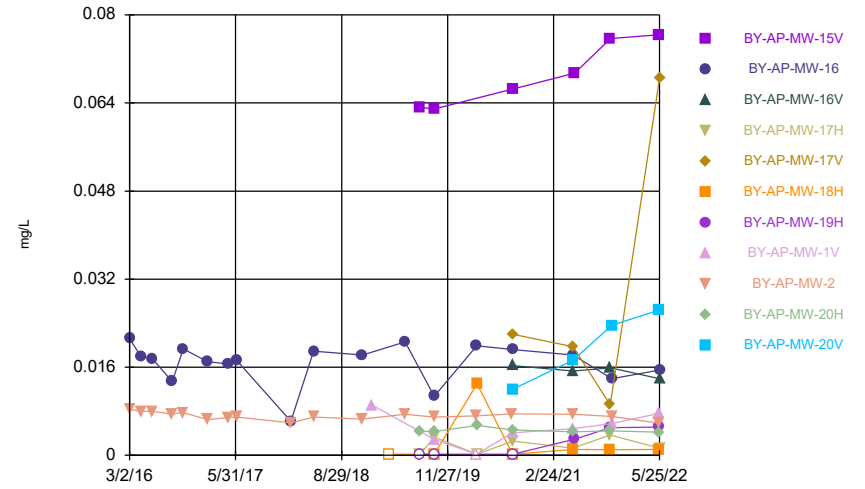
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



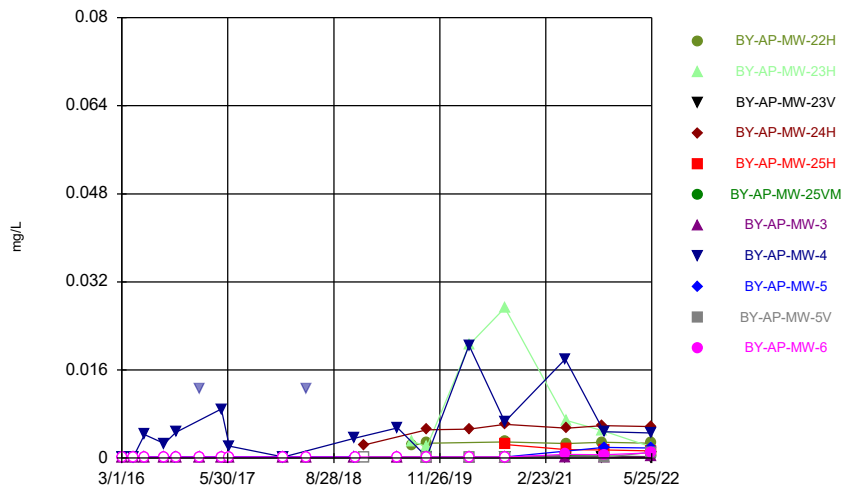
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



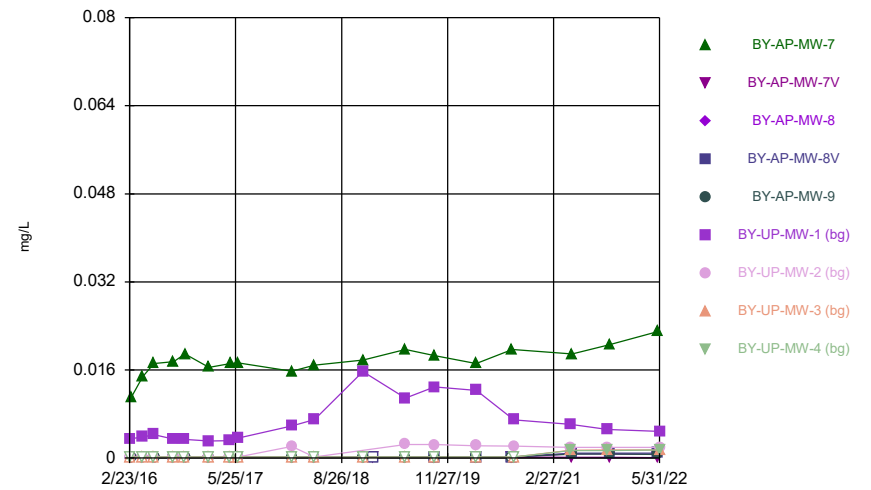
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Time Series



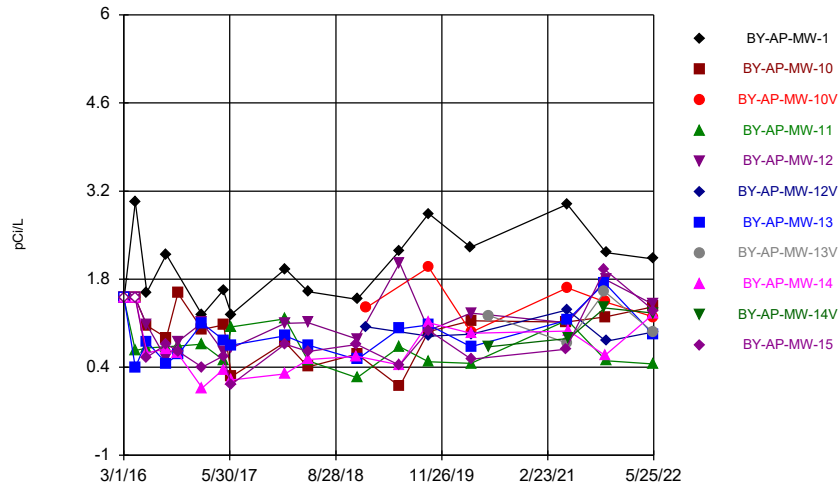
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



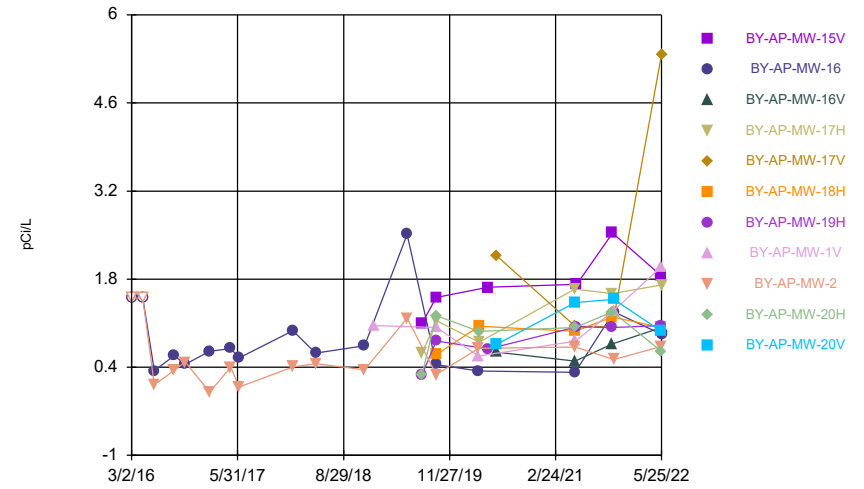
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Time Series



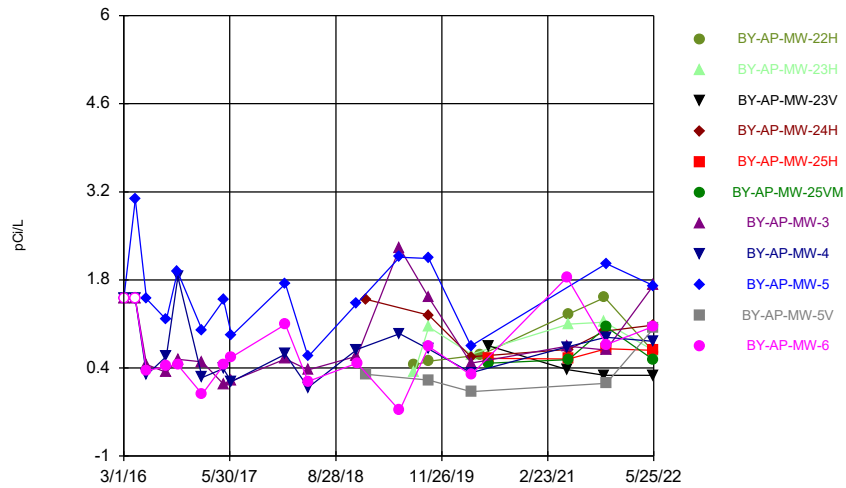
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



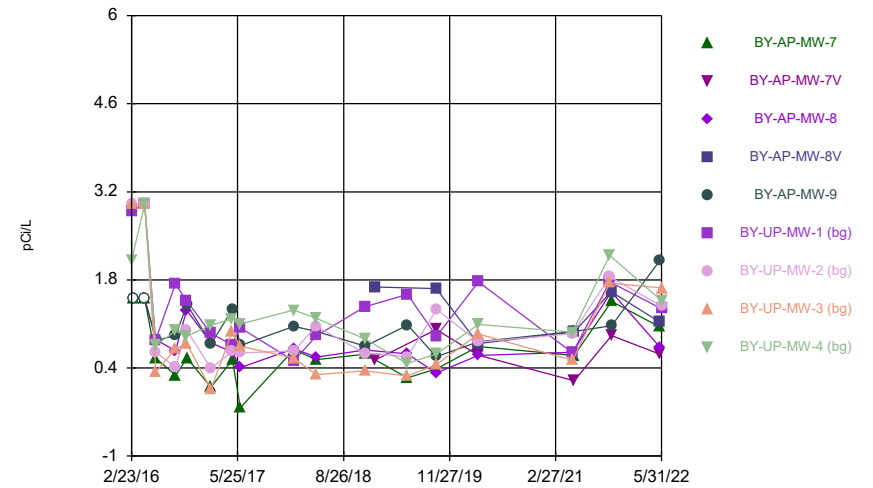
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



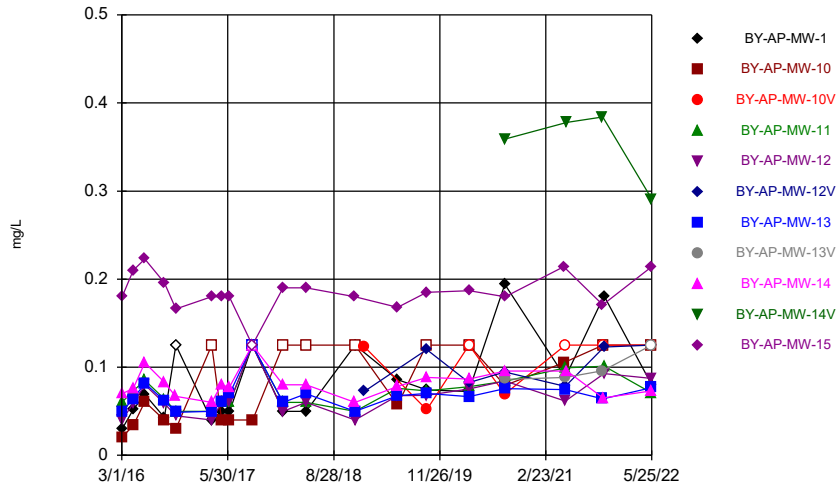
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series

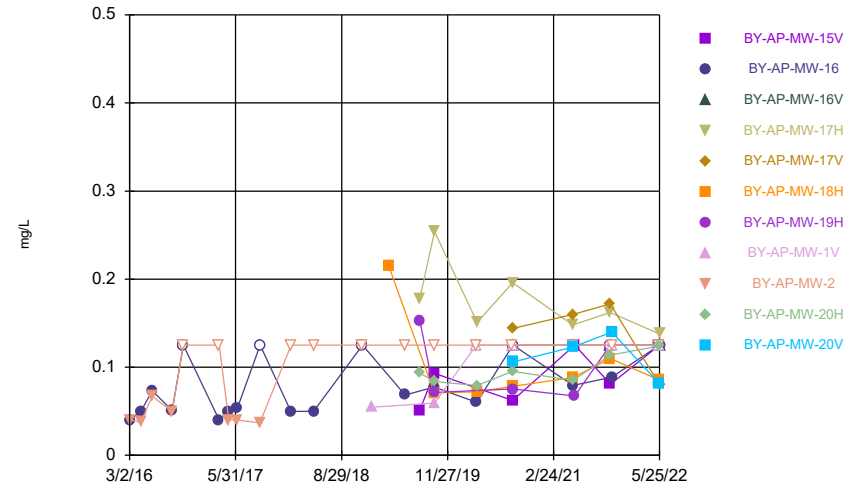


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Plant Barry Client: Southern Company Data: Barry Ash Pond

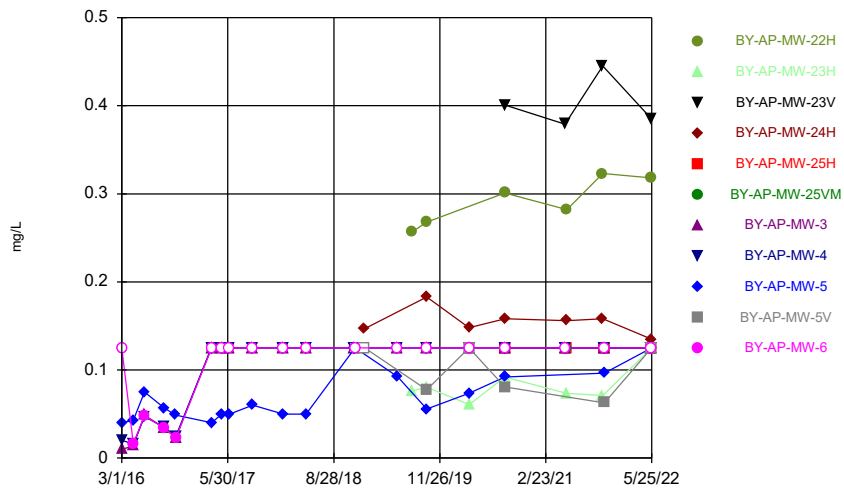
Time Series



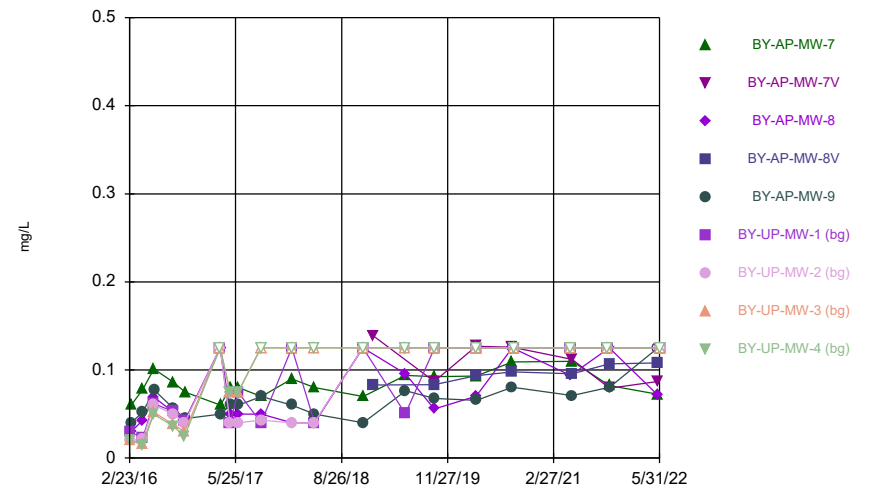
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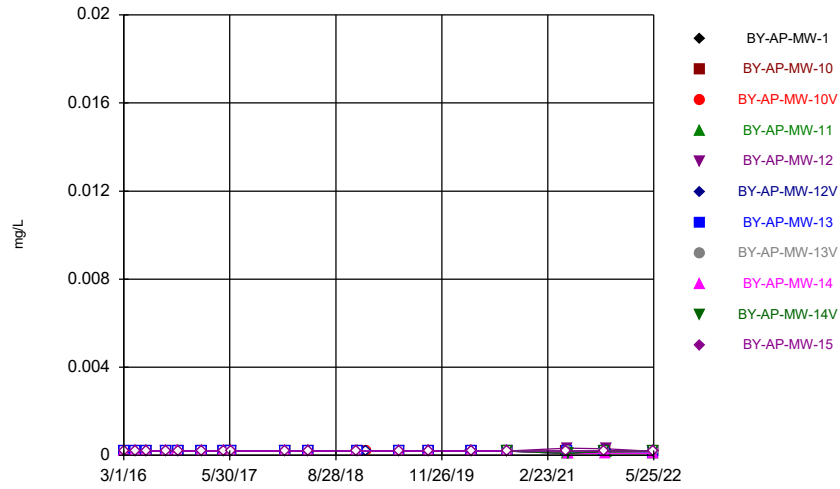
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Time Series

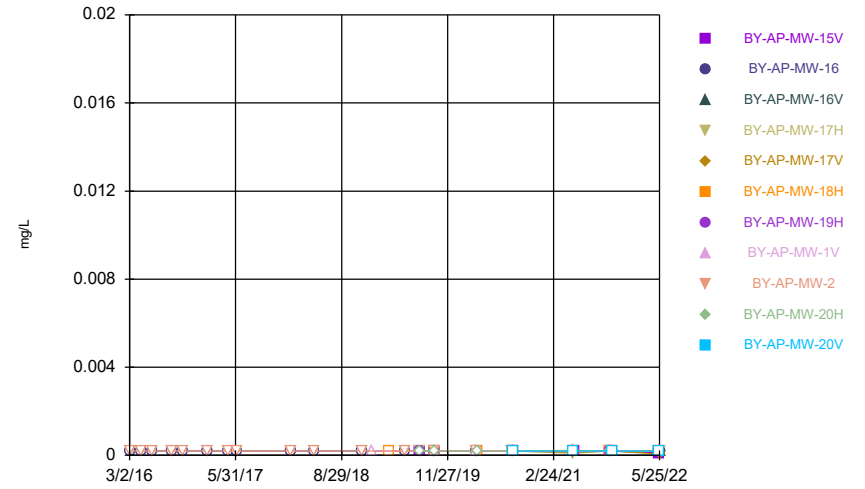


Time Series



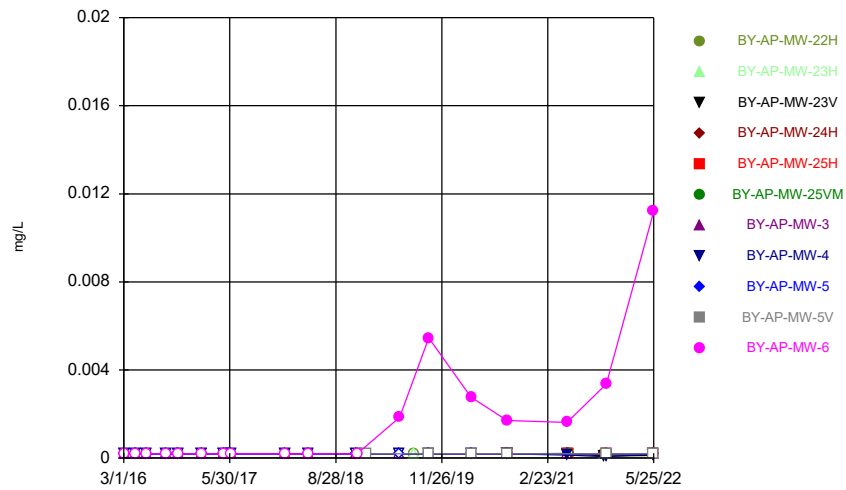
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Time Series



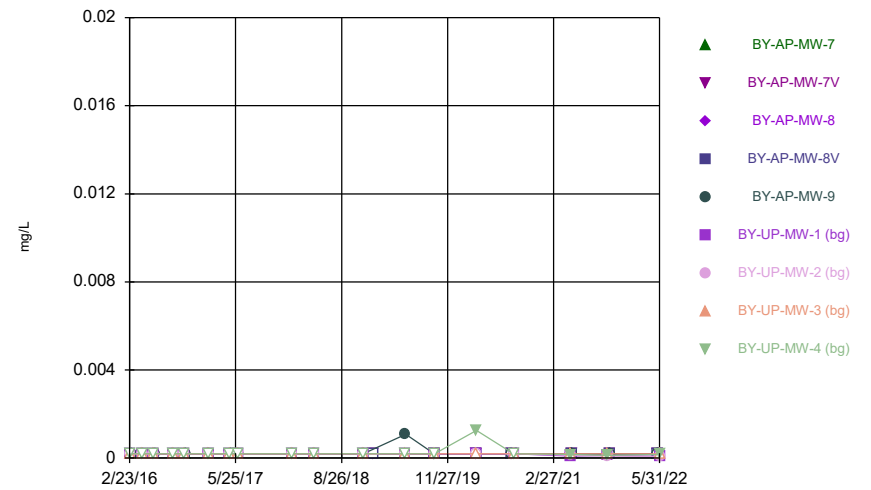
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Time Series



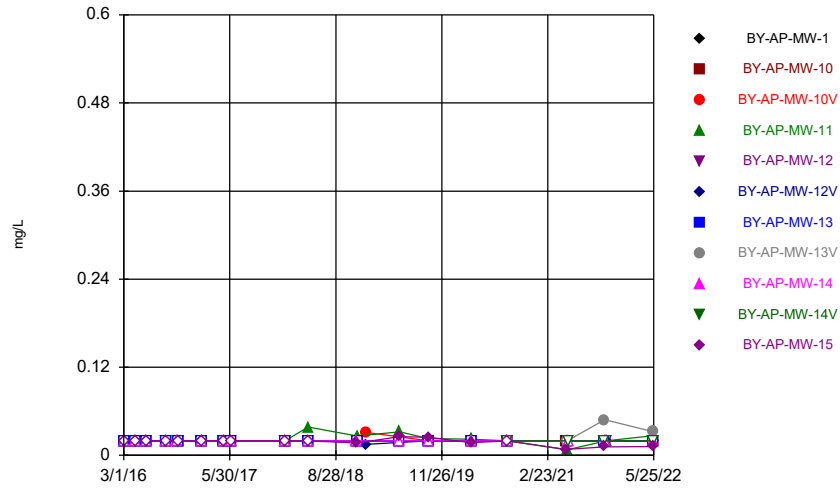
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Time Series



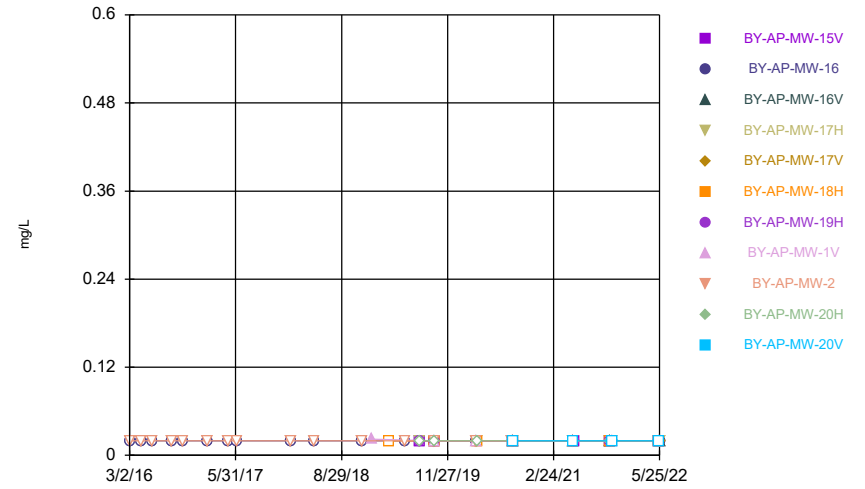
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



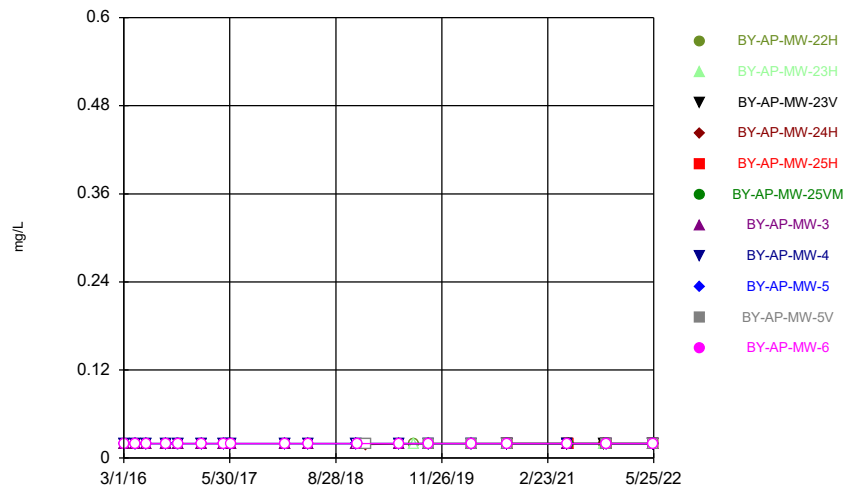
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Time Series



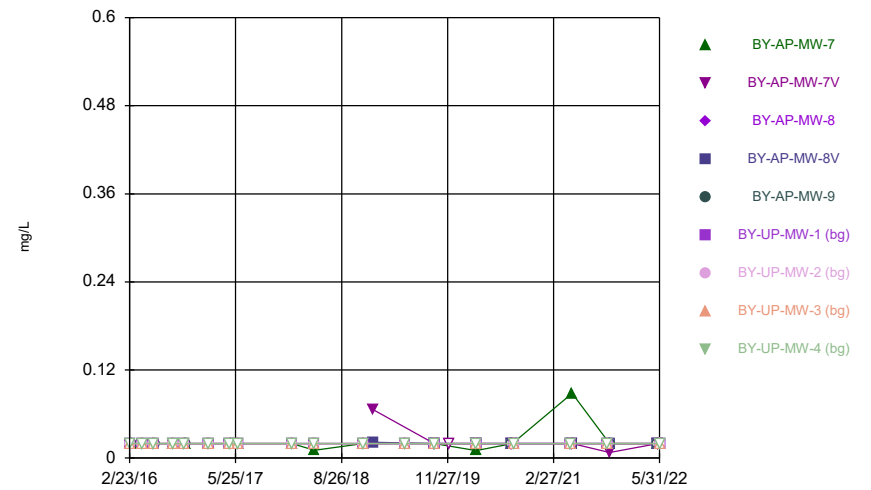
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



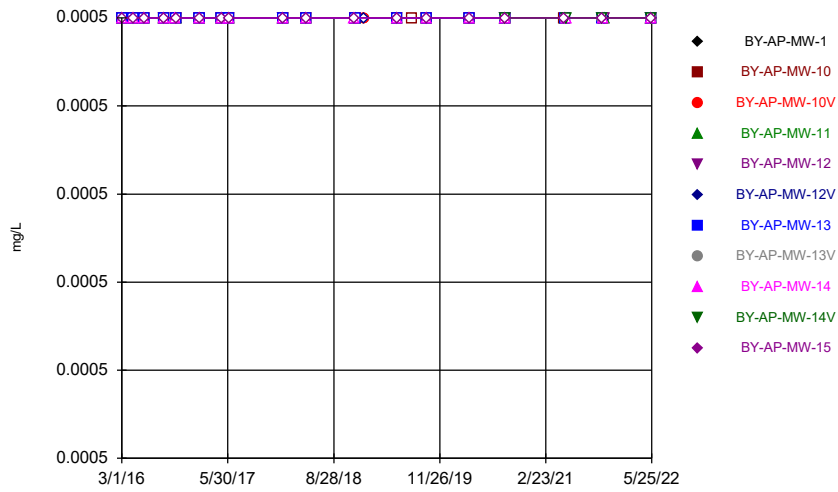
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Time Series



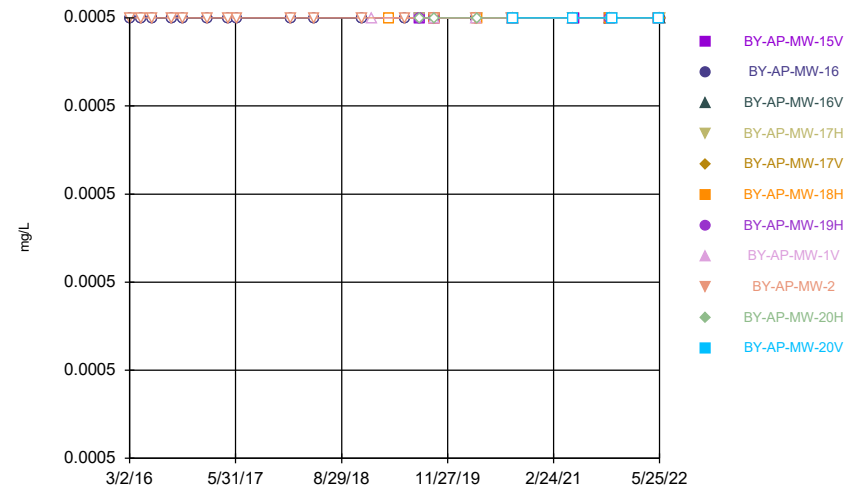
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Time Series



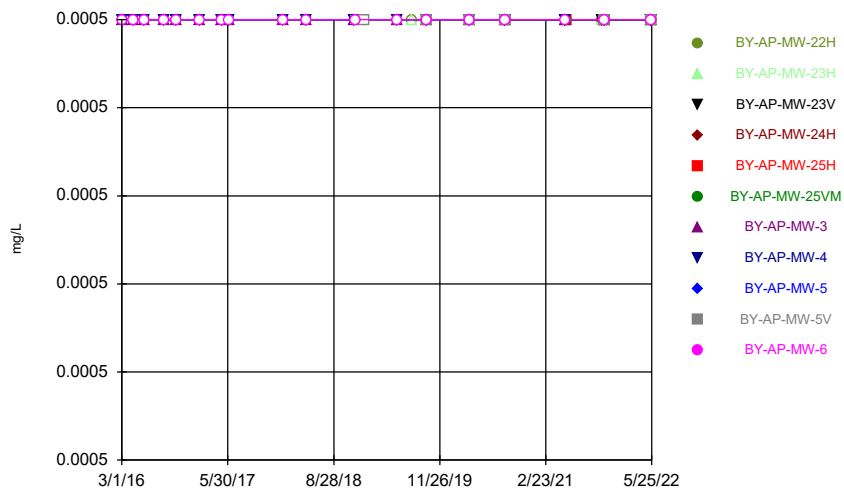
Constituent: Mercury Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



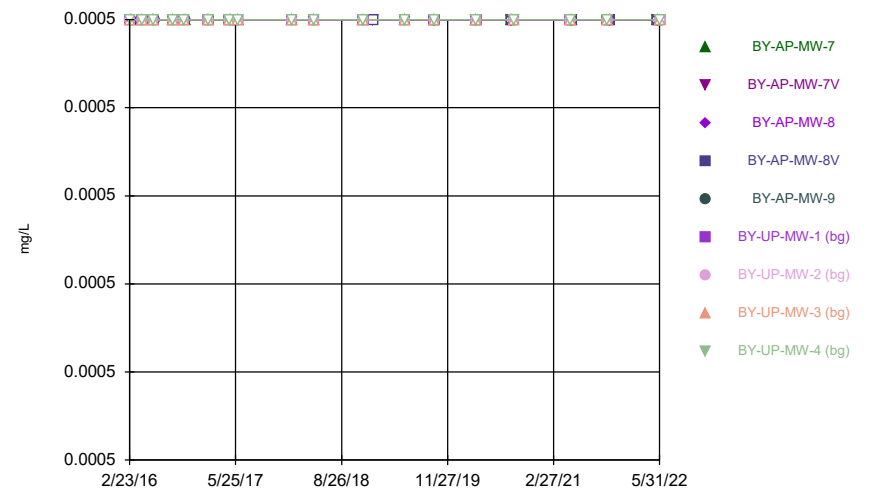
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Time Series



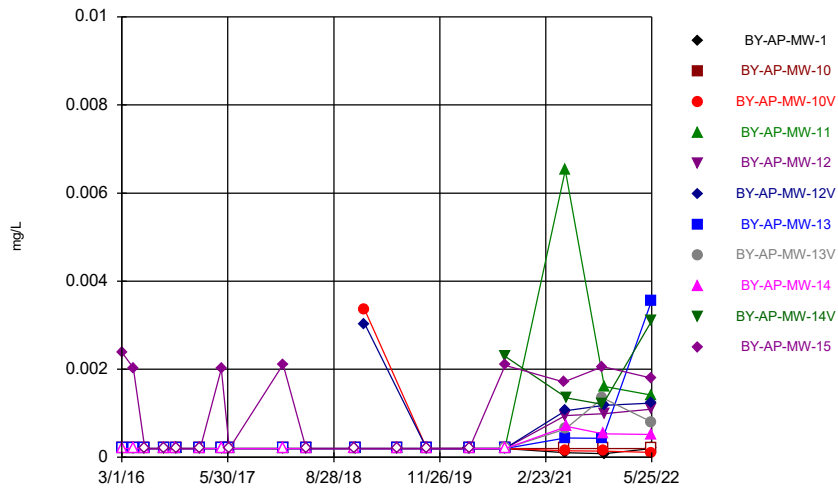
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Time Series



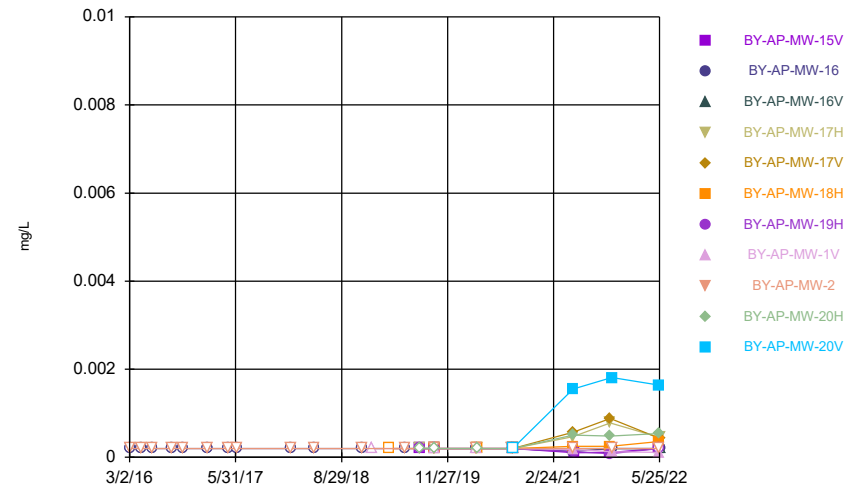
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Time Series



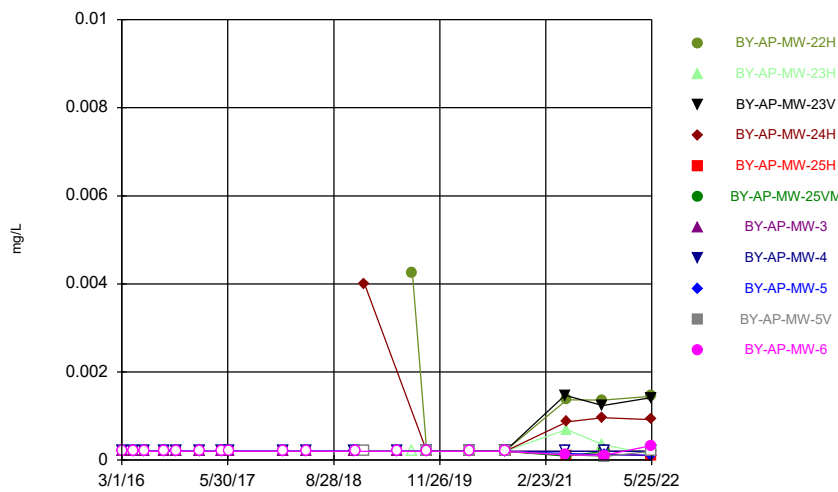
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



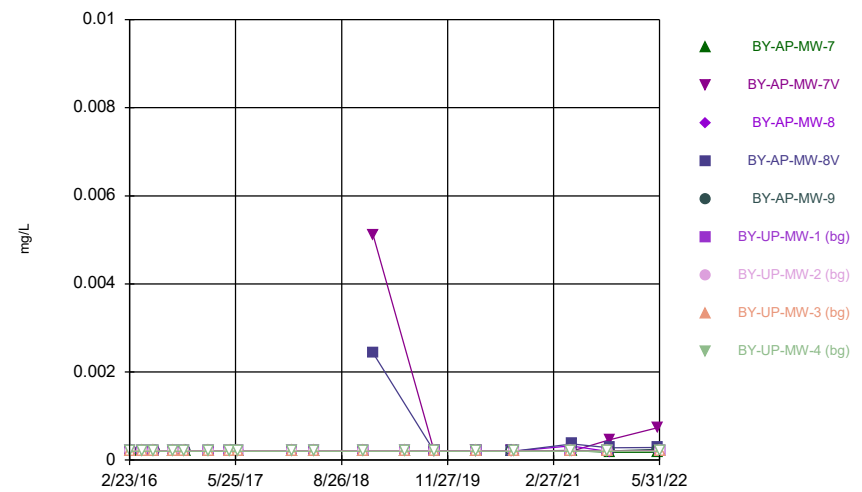
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



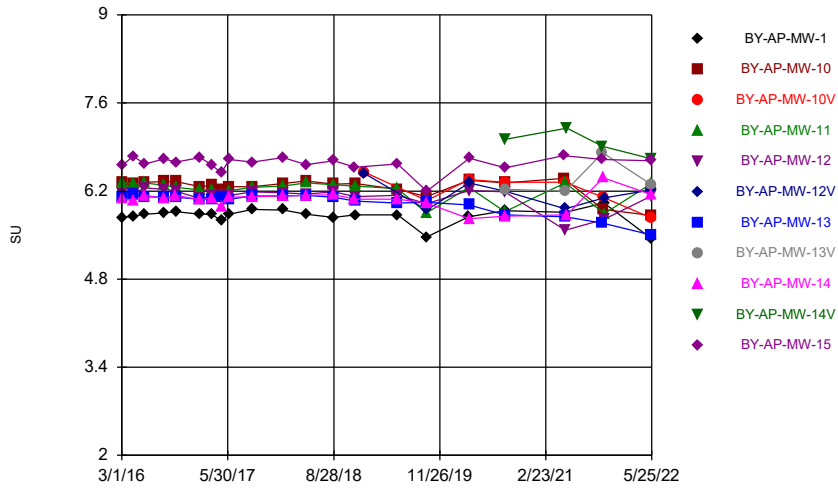
Constituent: Molybdenum Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



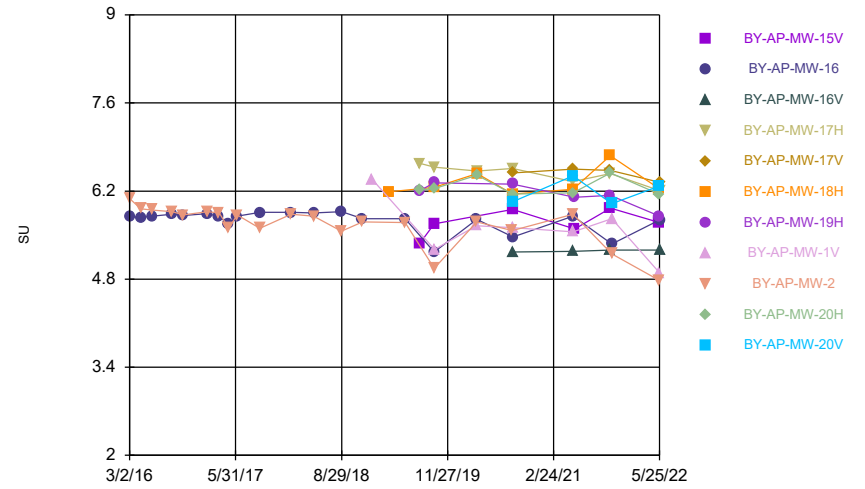
Constituent: Molybdenum Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



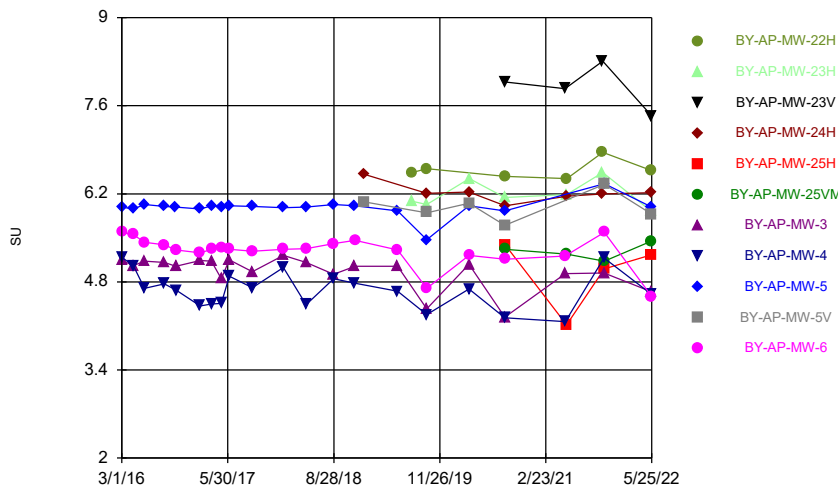
Constituent: pH, field Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



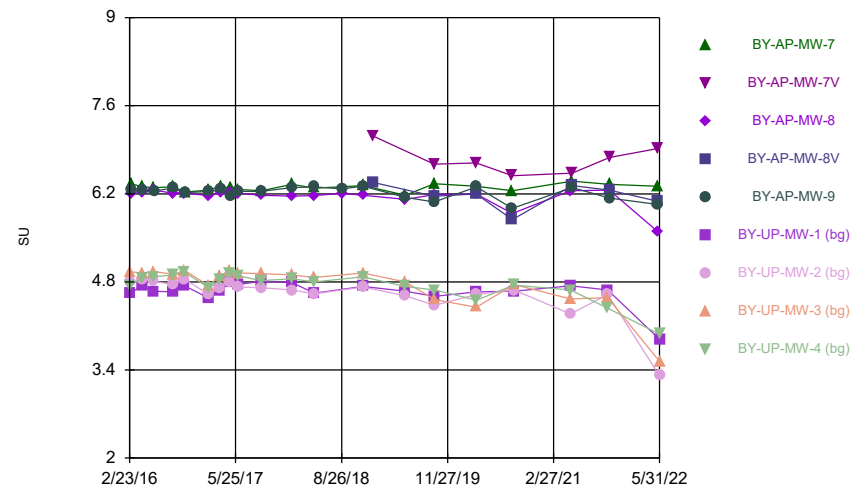
Constituent: pH, field Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



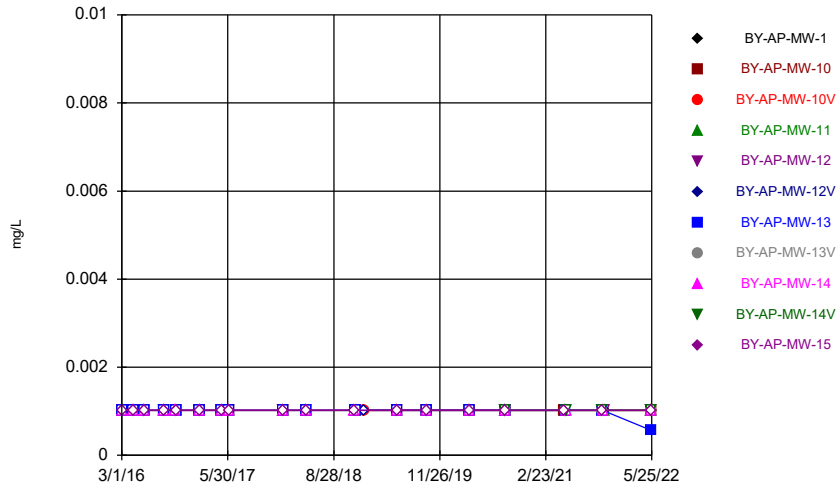
Constituent: pH, field Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



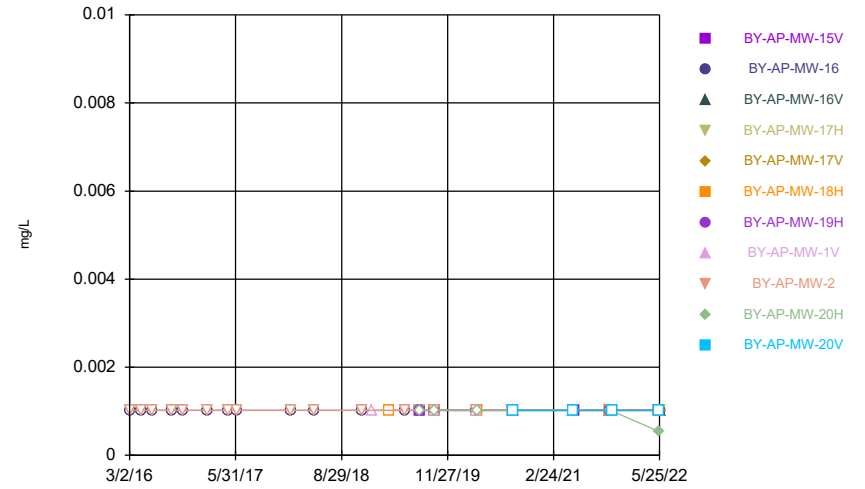
Constituent: pH, field Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



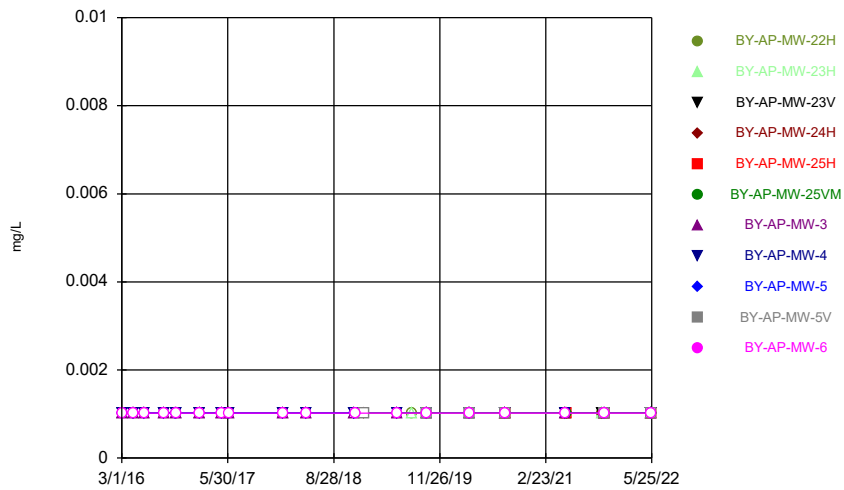
Constituent: Selenium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



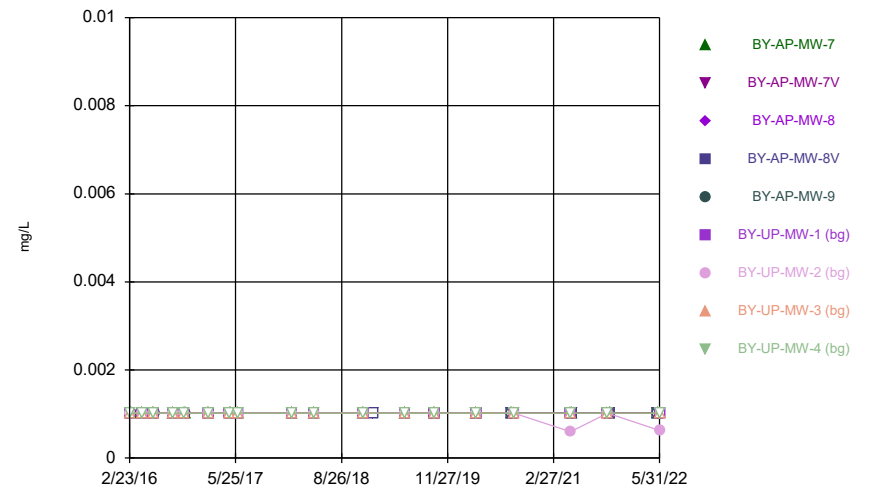
Constituent: Selenium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



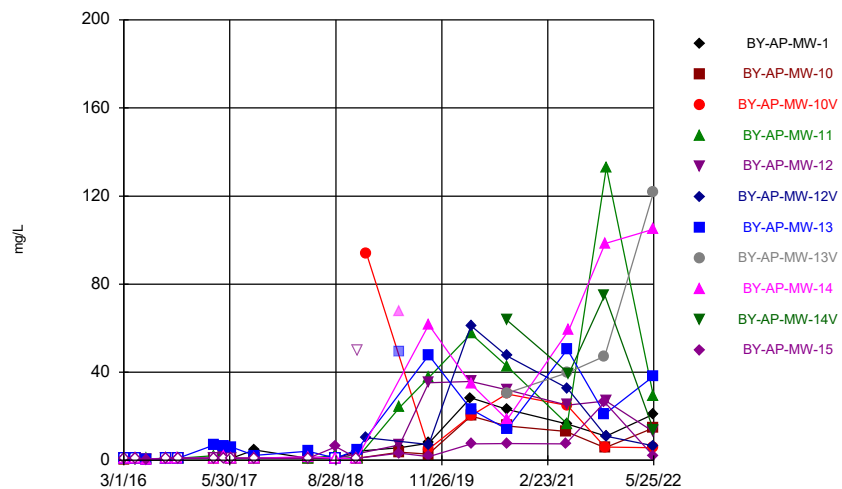
Constituent: Selenium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



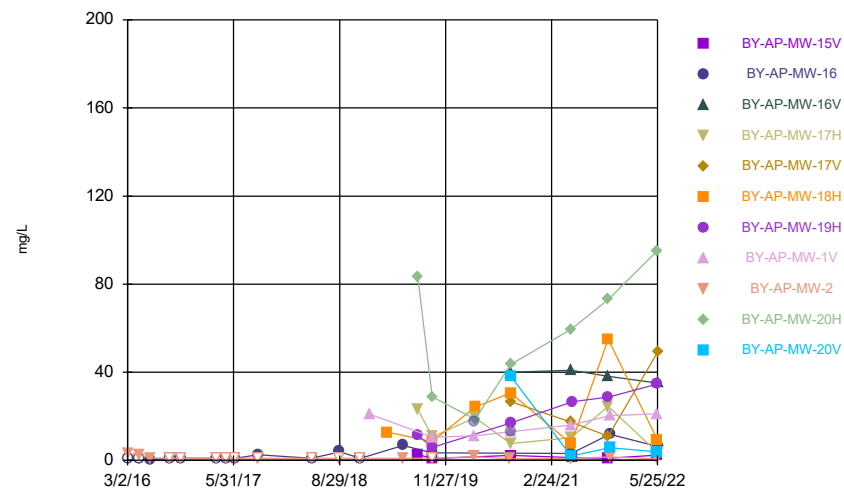
Constituent: Selenium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



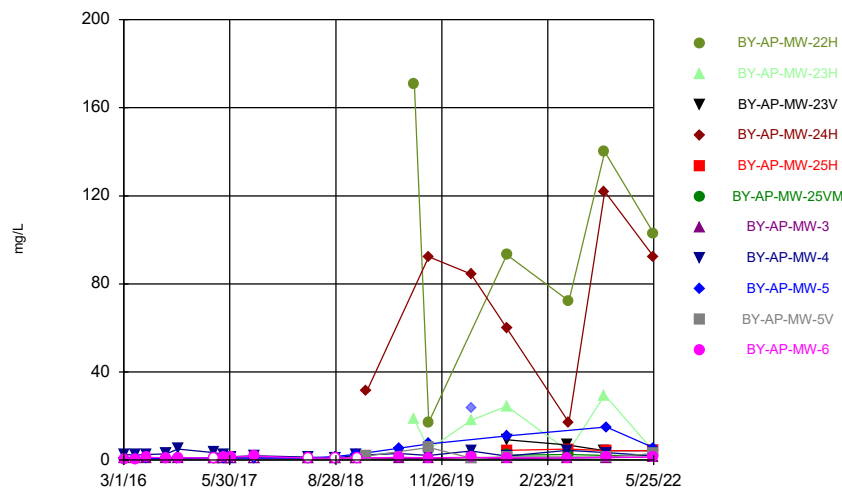
Constituent: Sulfate as SO4 Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



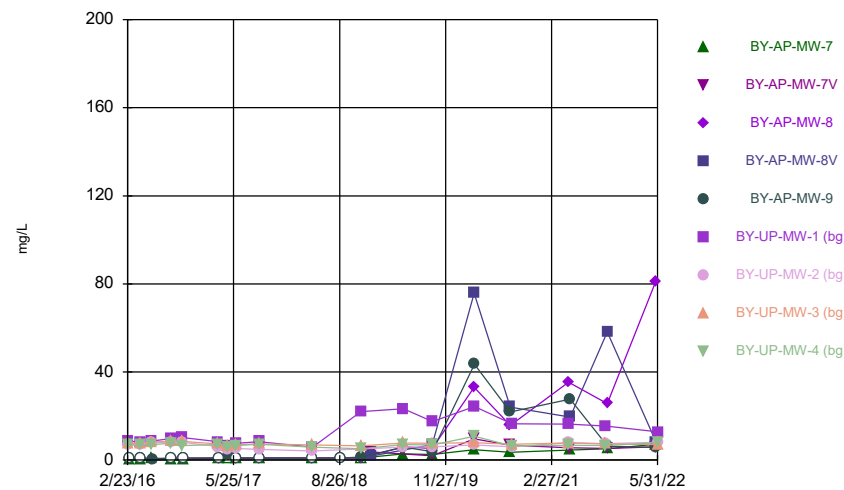
Constituent: Sulfate as SO4 Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



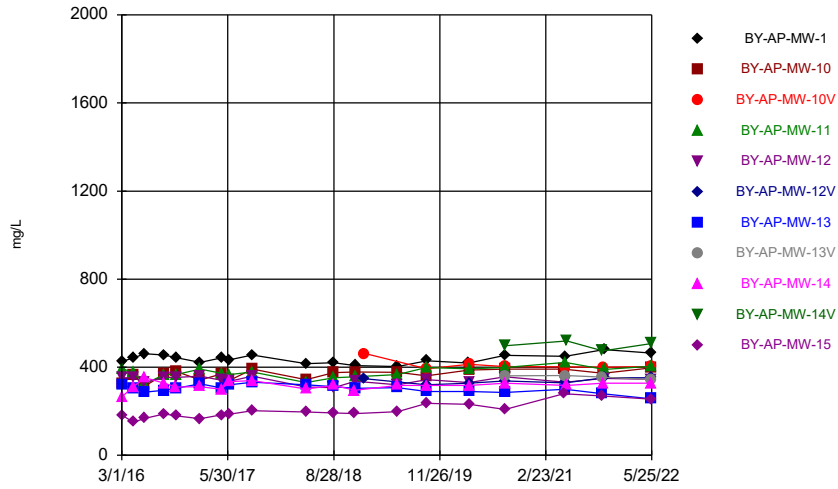
Constituent: Sulfate as SO4 Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



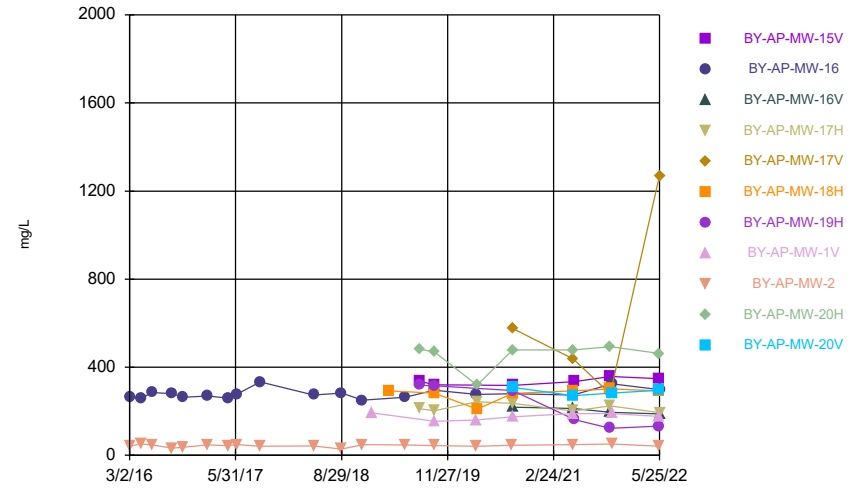
Constituent: Sulfate as SO4 Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



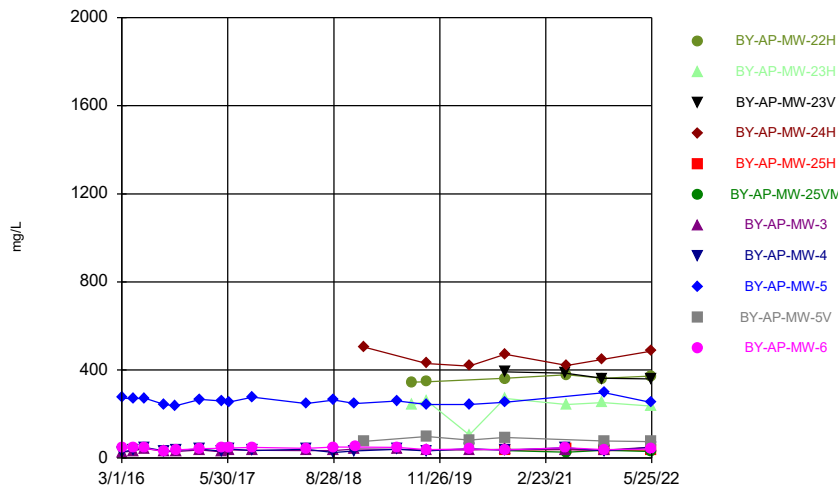
Constituent: TDS Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



Constituent: TDS Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

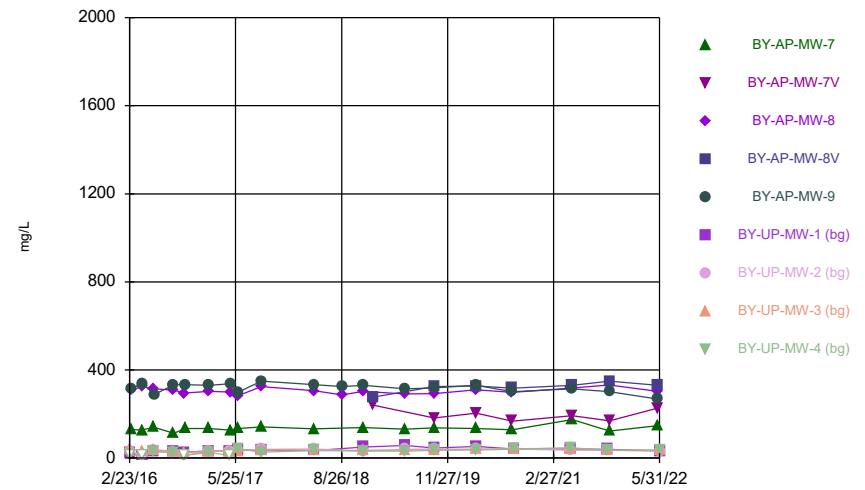
Time Series



Constituent: TDS Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

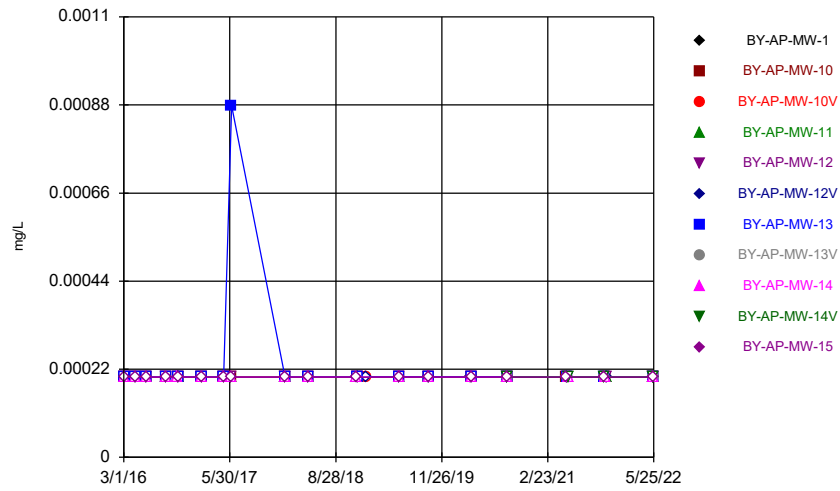
Hollow symbols indicate censored values.

Time Series



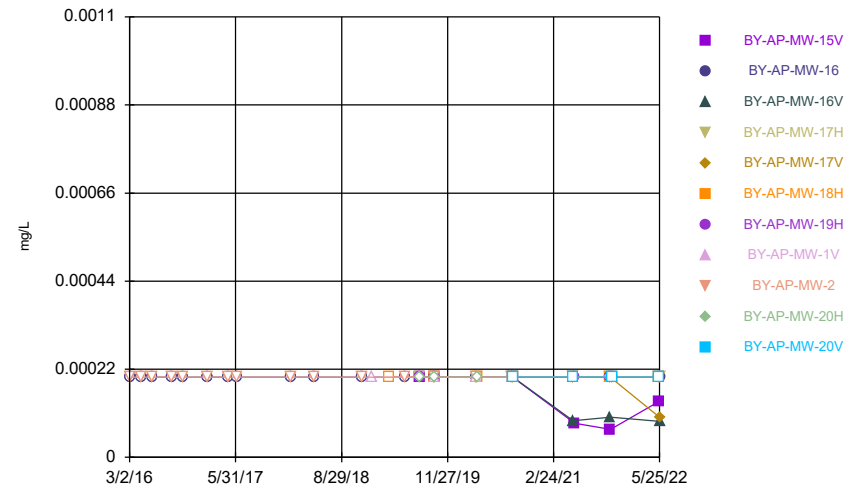
Constituent: TDS Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



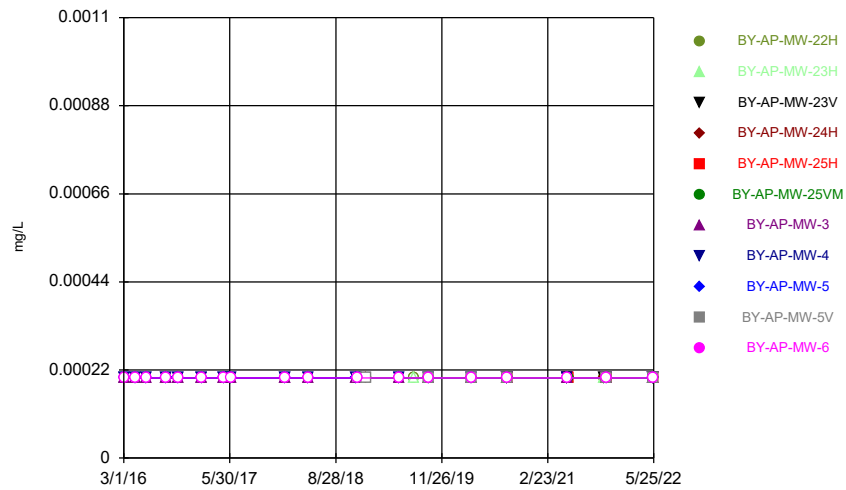
Constituent: Thallium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



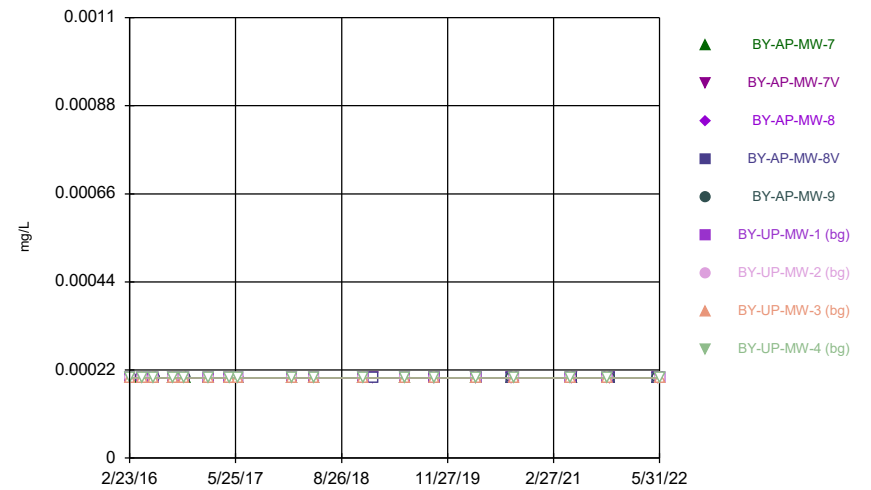
Constituent: Thallium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



Constituent: Thallium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



Constituent: Thallium Analysis Run 7/21/2022 3:44 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.00102		<0.00102					
3/2/2016	<0.00102				<0.00102		<0.00102		<0.00102
4/19/2016	<0.00102								
4/20/2016		<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
6/8/2016	<0.00102	<0.00102		<0.00102	<0.00102		0.00111 (J)		<0.00102
8/30/2016									<0.00102
8/31/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
10/18/2016									<0.00102
10/19/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
1/31/2017	0.000687 (J)						0.000834 (J)		0.00086 (J)
2/1/2017		0.000743 (J)		0.000812 (J)	0.000838 (J)				
5/2/2017	<0.00102								<0.00102
5/3/2017		<0.00102		<0.00102	<0.00102		<0.00102		
6/6/2017	<0.00102								<0.00102
6/7/2017		<0.00102		<0.00102	<0.00102		0.000857 (J)		
1/22/2018							<0.00102		
1/23/2018		<0.00102		<0.00102	<0.00102				<0.00102
1/24/2018	<0.00102								
5/1/2018	<0.00102								
5/2/2018		<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
11/27/2018									<0.00102
11/28/2018	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
1/8/2019			0.000965 (J)			0.00117 (J)			
5/29/2019	<0.00102			<0.00102	<0.00102		<0.00102		<0.00102
5/30/2019		<0.00102							
9/30/2019		<0.00102		<0.00102					
10/1/2019	<0.00102		<0.00102		<0.00102		<0.00102		<0.00102
10/2/2019						<0.00102			
3/30/2020	<0.00102								
3/31/2020		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
4/1/2020									
9/1/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
9/2/2020								<0.00102	<0.00102
5/11/2021		<0.00102							
5/18/2021	<0.00102		<0.00102		<0.00102	<0.00102			
5/19/2021				<0.00102			<0.00102	<0.00102	
5/25/2021									<0.00102
10/26/2021							<0.00102	<0.00102	
10/27/2021		<0.00102	<0.00102						<0.00102
11/1/2021	<0.00102				<0.00102	<0.00102			
11/2/2021				<0.00102					
5/23/2022				<0.00102	<0.00102	<0.00102			
5/24/2022	<0.00102	<0.00102	<0.00102				<0.00102		
5/25/2022								<0.00102	<0.00102

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.00102
4/19/2016		<0.00102
4/20/2016		
6/8/2016		<0.00102
8/30/2016		
8/31/2016		<0.00102
10/18/2016		
10/19/2016		<0.00102
1/31/2017		0.000746 (J)
2/1/2017		
5/2/2017		<0.00102
5/3/2017		
6/6/2017		<0.00102
6/7/2017		
1/22/2018		<0.00102
1/23/2018		
1/24/2018		
5/1/2018		<0.00102
5/2/2018		
11/27/2018		<0.00102
11/28/2018		
1/8/2019		
5/29/2019		<0.00102
5/30/2019		
9/30/2019		
10/1/2019		<0.00102
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.00102
9/1/2020		
9/2/2020	<0.00102	<0.00102
5/11/2021		<0.00102
5/18/2021		
5/19/2021		
5/25/2021	<0.00102	
10/26/2021	<0.00102	<0.00102
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.00102	
5/25/2022		<0.00102

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.00102							<0.00102
4/19/2016		<0.00102							<0.00102
6/8/2016		<0.00102							<0.00102
8/31/2016		<0.00102							<0.00102
10/19/2016		<0.00102							<0.00102
1/31/2017		0.000769 (J)							0.000739 (J)
5/2/2017		<0.00102							<0.00102
6/6/2017		<0.00102							<0.00102
1/23/2018		<0.00102							
1/24/2018									<0.00102
5/1/2018		<0.00102							<0.00102
11/27/2018		<0.00102							<0.00102
1/8/2019								0.00125 (J)	
3/20/2019						0.00117 (J)			
5/29/2019		<0.00102							<0.00102
7/31/2019	0.00094 (J)			0.000878 (J)			0.00152 (J)		
10/1/2019	<0.00102	<0.00102				<0.00102	<0.00102		<0.00102
10/2/2019				<0.00102				<0.00102	
3/30/2020								<0.00102	
3/31/2020		<0.00102							<0.00102
4/1/2020				<0.00102		<0.00102			
8/31/2020									<0.00102
9/1/2020	<0.00102			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
9/2/2020		<0.00102	<0.00102						
5/17/2021				<0.00102					
5/18/2021					<0.00102			<0.00102	<0.00102
5/19/2021		<0.00102	<0.00102			<0.00102			
5/25/2021	<0.00102						<0.00102		
10/25/2021				<0.00102	<0.00102	<0.00102	<0.00102		
10/26/2021	<0.00102		<0.00102						
11/1/2021		<0.00102						<0.00102	<0.00102
5/23/2022						<0.00102			
5/24/2022	<0.00102						<0.00102	<0.00102	<0.00102
5/25/2022		<0.00102	<0.00102	<0.00102	<0.00102				

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	0.00113 (J)	
10/1/2019	<0.00102	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.00102	
8/31/2020		
9/1/2020	<0.00102	<0.00102
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	<0.00102	<0.00102
5/25/2021		
10/25/2021		
10/26/2021	<0.00102	
11/1/2021		<0.00102
5/23/2022	<0.00102	
5/24/2022		<0.00102
5/25/2022		

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.00102	<0.00102
3/2/2016							<0.00102		
4/19/2016							<0.00102	<0.00102	
4/20/2016									<0.00102
6/7/2016							0.000606 (J)	0.000869 (J)	<0.00102
8/30/2016								<0.00102	<0.00102
8/31/2016							<0.00102		
10/18/2016									<0.00102
10/19/2016							<0.00102	<0.00102	
1/31/2017							0.000637 (J)	0.00086 (J)	0.000765 (J)
5/2/2017							<0.00102	<0.00102	
5/3/2017									<0.00102
6/6/2017							<0.00102	<0.00102	
6/7/2017									<0.00102
1/24/2018							<0.00102	<0.00102	<0.00102
5/1/2018							<0.00102	<0.00102	
5/2/2018									<0.00102
11/27/2018							<0.00102	<0.00102	<0.00102
11/28/2018									
1/8/2019				0.00116 (J)					
5/29/2019							<0.00102	<0.00102	<0.00102
7/31/2019	0.00117 (J)	0.000964 (J)							
10/1/2019	<0.00102	<0.00102					<0.00102	<0.00102	<0.00102
10/2/2019				<0.00102					
3/31/2020				<0.00102			<0.00102	<0.00102	<0.00102
4/1/2020		<0.00102							
9/1/2020	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102	<0.00102
9/2/2020				<0.00102	<0.00102	<0.00102			
5/17/2021			<0.00102						
5/18/2021							<0.00102	<0.00102	
5/24/2021		<0.00102			<0.00102	<0.00102			
5/25/2021	<0.00102			<0.00102					
10/26/2021	<0.00102	<0.00102	<0.00102	<0.00102					
11/1/2021							<0.00102	<0.00102	
11/2/2021					<0.00102	<0.00102			<0.00102
5/24/2022	<0.00102			<0.00102					
5/25/2022		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.00102
3/2/2016		
4/19/2016		<0.00102
4/20/2016		
6/7/2016		<0.00102
8/30/2016		<0.00102
8/31/2016		
10/18/2016		
10/19/2016		<0.00102
1/31/2017		0.000852 (J)
5/2/2017		
5/3/2017		<0.00102
6/6/2017		
6/7/2017		<0.00102
1/24/2018		<0.00102
5/1/2018		
5/2/2018		<0.00102
11/27/2018		
11/28/2018		<0.00102
1/8/2019	0.00207 (J)	
5/29/2019		<0.00102
7/31/2019		
10/1/2019		<0.00102
10/2/2019	<0.00102	
3/31/2020	<0.00102	<0.00102
4/1/2020		
9/1/2020	<0.00102	
9/2/2020		<0.00102
5/17/2021		<0.00102
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.00102	<0.00102
5/24/2022		
5/25/2022	<0.00102	<0.00102

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.00102	<0.00102	<0.00102	0.000606 (J)
3/1/2016	<0.00102		<0.00102		<0.00102				
4/19/2016						<0.00102	<0.00102	<0.00102	<0.00102
4/20/2016	<0.00102		<0.00102		<0.00102				
6/6/2016						<0.00102			<0.00102
6/7/2016	<0.00102		<0.00102				<0.00102	<0.00102	
6/8/2016					<0.00102				
8/30/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
8/31/2016	<0.00102				<0.00102				
10/18/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
10/19/2016	<0.00102				<0.00102				
1/31/2017	0.00107 (J)		0.00074 (J)			0.000925 (J)	0.000898 (J)	0.000911 (J)	0.000928 (J)
2/1/2017					0.000738 (J)				
5/2/2017						<0.00102	<0.00102	<0.00102	<0.00102
5/3/2017	<0.00102		<0.00102		<0.00102				
6/6/2017						<0.00102	<0.00102	<0.00102	<0.00102
6/7/2017	<0.00102		<0.00102		<0.00102				
1/23/2018					<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
1/24/2018	<0.00102		<0.00102						
5/1/2018							<0.00102	<0.00102	<0.00102
5/2/2018	<0.00102		<0.00102		<0.00102	<0.00102			
11/26/2018									<0.00102
11/27/2018			<0.00102			<0.00102	<0.00102	<0.00102	
11/28/2018	<0.00102				<0.00102				
1/9/2019		0.000861 (J)		<0.00102					
5/28/2019									<0.00102
5/29/2019	<0.00102		<0.00102			<0.00102	<0.00102	<0.00102	
5/30/2019					<0.00102				
9/30/2019	<0.00102		<0.00102		<0.00102				
10/1/2019		<0.00102		<0.00102					
10/2/2019						<0.00102	<0.00102	<0.00102	<0.00102
3/30/2020	<0.00102	<0.00102	<0.00102	<0.00102					
3/31/2020					<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
9/2/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102				
9/8/2020									<0.00102
9/9/2020						<0.00102	<0.00102	<0.00102	
5/11/2021			<0.00102				<0.00102	<0.00102	<0.00102
5/12/2021						<0.00102			
5/18/2021	<0.00102	<0.00102		<0.00102	<0.00102				
10/18/2021								<0.00102	<0.00102
10/19/2021						<0.00102	<0.00102		
10/26/2021			<0.00102	<0.00102					
10/27/2021	<0.00102	<0.00102			<0.00102				
5/23/2022				<0.00102					
5/24/2022	<0.00102	<0.00102	<0.00102		<0.00102				
5/31/2022						<0.00102	<0.00102	<0.00102	<0.00102

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		0.0264		0.01					
3/2/2016	0.076				0.0215		0.0115		0.0101
4/19/2016	0.0973								
4/20/2016		0.0303		0.0127	0.0214		0.0123		0.0119
6/8/2016	0.0605	0.0306		0.0136	0.0221		0.0121		0.0119
8/30/2016									0.0127
8/31/2016	0.0687	0.0304		0.0149	0.0223		0.0127		
10/18/2016									0.0136
10/19/2016	0.0701	0.0314		0.0149	0.0227		0.0131		
1/31/2017	0.0669						0.0131		0.0124
2/1/2017		0.0274		0.0151	0.0215				
5/2/2017	0.0672								0.0131
5/3/2017		0.03		0.0155	0.0227		0.014		
6/6/2017	0.0527								0.0129
6/7/2017		0.0303		0.0145	0.0211		0.0141		
1/22/2018							0.0149		
1/23/2018		0.0362		0.0154	0.0227				0.0148
1/24/2018	0.07								
5/1/2018	0.0777								
5/2/2018		0.0433		0.0158	0.0239		0.0175		0.0156
11/27/2018									0.0145
11/28/2018	0.0677	0.0536		0.014	0.0216		0.0141		
1/8/2019			<0.0002			0.0112			
5/29/2019	0.0555			0.0132	0.0215		0.0138		0.014
5/30/2019		0.0671							
7/31/2019		0.0649							
9/30/2019		0.0704		0.0145					
10/1/2019	0.0635		<0.0002		0.0221		0.0144		0.0152
10/2/2019						0.022			
3/30/2020	0.0557								
3/31/2020		0.0702	<0.0002	0.0158	0.0246	0.025	0.0154		0.0177
4/1/2020									
9/1/2020	0.0811	0.0763	<0.0002	0.0165	0.0246	0.0257	0.0148		
9/2/2020								0.00708	0.0174
5/11/2021		0.0762							
5/18/2021	0.0687		0.000356		0.0237	0.0251			
5/19/2021				0.0166			0.014	0.00877	
5/25/2021									0.0172
10/26/2021							0.013	0.0103	
10/27/2021		0.0705	0.00033						0.0174
11/1/2021	0.0694				0.0245	0.0256			
11/2/2021				0.0161					
5/23/2022				0.0142	0.0245	0.0257			
5/24/2022	0.0767	0.0775	0.00036				0.0128		
5/25/2022								0.0102	0.0183

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Constituent: Arsenic (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		0.0128
4/19/2016		0.0157
4/20/2016		
6/8/2016		0.0168
8/30/2016		
8/31/2016		0.0168
10/18/2016		
10/19/2016		0.0178
1/31/2017		0.0164
2/1/2017		
5/2/2017		0.0172
5/3/2017		
6/6/2017		0.0158
6/7/2017		
1/22/2018		0.0173
1/23/2018		
1/24/2018		
5/1/2018		0.0181
5/2/2018		
11/27/2018		0.0158
11/28/2018		
1/8/2019		
5/29/2019		0.0148
5/30/2019		
7/31/2019		
9/30/2019		
10/1/2019		0.017
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		0.0183
9/1/2020		
9/2/2020	0.00433 (J)	0.0206
5/11/2021		0.0184
5/18/2021		
5/19/2021		
5/25/2021	0.00324	
10/26/2021	0.0041	0.0186
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	0.00572	
5/25/2022		0.0176

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Constituent: Arsenic (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		0.0102							0.00263 (J)
4/19/2016		0.0103							0.00247 (J)
6/8/2016		0.0105							0.0023 (J)
8/31/2016		0.0117							0.00237 (J)
10/19/2016		0.0108							0.00241 (J)
1/31/2017		0.0102							0.00185 (J)
5/2/2017		0.0102							0.00194 (J)
6/6/2017		0.00982							0.00175 (J)
1/23/2018		0.0151							
1/24/2018									0.00158 (J)
5/1/2018		0.0114							0.00166 (J)
11/27/2018		0.0108							0.00144 (J)
1/8/2019								0.00109 (J)	
3/20/2019						0.00831			
5/29/2019		0.0106							0.00132 (J)
7/31/2019	0.0174			0.0221			0.00118 (J)		
10/1/2019	0.0243	0.0138				0.0137	<0.0002		0.0014 (J)
10/2/2019				0.0251				0.00157 (J)	
3/30/2020								0.00152 (J)	
3/31/2020		0.012							0.00149 (J)
4/1/2020				0.0208		0.00937			
8/31/2020									0.00176 (J)
9/1/2020	0.0401			0.0371	0.00472 (J)	0.015	0.00101 (J)	0.00179 (J)	
9/2/2020		0.0137	0.0012 (J)						
5/17/2021				0.0329					
5/18/2021					0.00546			0.00144	0.00159
5/19/2021		0.0118	0.00123			0.0147			
5/25/2021	0.0233						0.0015		
10/25/2021				0.0373	0.00162	0.0156	0.00134		
10/26/2021	0.0248		0.00105						
11/1/2021		0.0151						0.00086	0.00191
5/23/2022						0.0143			
5/24/2022	0.0333						0.00099	0.00079	0.00115
5/25/2022		0.0134	0.00112	0.03	0.00192				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	0.0112	
10/1/2019	0.013	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	0.00508	
8/31/2020		
9/1/2020	0.0172	0.00845
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.0132	0.0148
5/25/2021		
10/25/2021		
10/26/2021	0.0133	
11/1/2021		0.0182
5/23/2022	0.0136	
5/24/2022		0.0188
5/25/2022		

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Constituent: Arsenic (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.0002	0.0277
3/2/2016							<0.0002		
4/19/2016							<0.0002	<0.0002	
4/20/2016									0.0307
6/7/2016							<0.0002	<0.0002	0.0308
8/30/2016								<0.0002	0.033
8/31/2016							<0.0002		
10/18/2016									0.0296
10/19/2016							<0.0002	<0.0002	
1/31/2017							<0.0002	<0.0002	0.0264
5/2/2017							<0.0002	<0.0002	
5/3/2017									0.0309
6/6/2017							<0.0002	<0.0002	
6/7/2017									0.0283
1/24/2018							<0.0002	<0.0002	0.0282
5/1/2018							<0.0002	<0.0002	
5/2/2018									0.0315
11/27/2018							<0.0002	<0.0002	0.0283
11/28/2018									
1/8/2019				0.0306					
5/29/2019							<0.0002	<0.0002	0.0301
7/31/2019	0.0225	0.0132							
10/1/2019	0.0225	0.013					<0.0002	<0.0002	0.0307
10/2/2019				0.0673					
3/31/2020				0.0729			<0.0002	<0.0002	0.0329
4/1/2020		0.00689							
9/1/2020	0.0217	0.0226	<0.0002				<0.0002	<0.0002	0.0372
9/2/2020				0.0783	<0.0002	<0.0002			
5/17/2021			0.00119						
5/18/2021							<0.0002	0.000125 (J)	
5/24/2021		0.0133			8.73E-05 (J)	<0.0002			
5/25/2021	0.0191			0.0693					
10/26/2021	0.0202	0.00807	0.00119	0.0752					
11/1/2021							<0.0002	0.0002	
11/2/2021					0.00016 (J)	<0.0002			0.0357
5/24/2022	0.0197			0.0718					
5/25/2022		0.00518	0.00149		0.0002 (J)	<0.0002	<0.0002	<0.0002	0.0316

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		0.00142 (J)
3/2/2016		
4/19/2016		0.00138 (J)
4/20/2016		
6/7/2016		<0.0002
8/30/2016		<0.0002
8/31/2016		
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
5/2/2017		
5/3/2017		<0.0002
6/6/2017		
6/7/2017		<0.0002
1/24/2018		<0.0002
5/1/2018		
5/2/2018		<0.0002
11/27/2018		
11/28/2018		<0.0002
1/8/2019	<0.0002	
5/29/2019		<0.0002
7/31/2019		
10/1/2019		<0.0002
10/2/2019	<0.0002	
3/31/2020	<0.0002	<0.0002
4/1/2020		
9/1/2020	<0.0002	
9/2/2020		<0.0002
5/17/2021		0.000103 (J)
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	0.00101	0.0001 (J)
5/24/2022		
5/25/2022	0.00017 (J)	<0.0002

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.0002	<0.0002	<0.0002	<0.0002
3/1/2016	0.0166		0.036		0.0322				
4/19/2016						<0.0002	<0.0002	<0.0002	<0.0002
4/20/2016	0.02		0.0399		0.0354				
6/6/2016						<0.0002			<0.0002
6/7/2016	0.0223		0.0401				<0.0002	<0.0002	
6/8/2016					0.0385				
8/30/2016			0.0387			<0.0002	<0.0002	<0.0002	<0.0002
8/31/2016	0.0231				0.0404				
10/18/2016			0.0394			<0.0002	<0.0002	<0.0002	<0.0002
10/19/2016	0.0244				0.0412				
1/31/2017	0.0197		0.0408			<0.0002	<0.0002	<0.0002	<0.0002
2/1/2017					0.0374				
5/2/2017						<0.0002	<0.0002	<0.0002	<0.0002
5/3/2017	0.0212		0.0416		0.0444				
6/6/2017						<0.0002	<0.0002	<0.0002	<0.0002
6/7/2017	0.0203		0.0395		0.0423				
1/23/2018					0.0435	<0.0002	<0.0002	<0.0002	<0.0002
1/24/2018	0.0214		0.0536						
5/1/2018							<0.0002	<0.0002	<0.0002
5/2/2018	0.0218		0.0572		0.0437	<0.0002			
11/26/2018									<0.0002
11/27/2018			0.0536			<0.0002	<0.0002	<0.0002	
11/28/2018	0.0209				0.0422				
1/9/2019		<0.0002		0.00121 (J)					
5/28/2019									<0.0002
5/29/2019	0.0178		0.0482			<0.0002	<0.0002	<0.0002	
5/30/2019					0.0349				
9/30/2019	0.0217		0.0514		0.0391				
10/1/2019		0.00278 (J)		0.00243 (J)					
10/2/2019						<0.0002	<0.0002	<0.0002	<0.0002
3/30/2020	0.0215	0.005	0.0589	0.00275 (J)					
3/31/2020					0.0393	<0.0002	<0.0002	<0.0002	0.0017 (J)
9/2/2020	0.0234	0.0024 (J)	0.0629	0.00346 (J)	0.0432				
9/8/2020									<0.0002
9/9/2020						<0.0002	<0.0002	<0.0002	
5/11/2021			0.0659				0.000136 (J)	<0.0002	0.000217
5/12/2021						0.000336			
5/18/2021	0.0215	0.00242		0.00398	0.0435				
10/18/2021								9E-05 (J)	0.00019 (J)
10/19/2021						0.00035	0.00012 (J)		
10/26/2021			0.0668	0.0048					
10/27/2021	0.0236	0.0027			0.0468				
5/23/2022				0.00386					
5/24/2022	0.0197	0.00218	0.0583		0.0404				
5/31/2022						0.00024	9E-05 (J)	<0.0002	0.0002

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Constituent: Barium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		0.0634		0.122					
3/2/2016	0.219				0.0815		0.0947		0.0491
4/19/2016	0.201								
4/20/2016		0.0622		0.11	0.0692		0.0758		0.049
6/8/2016	0.274	0.0642		0.105	0.0763		0.071		0.0627
8/30/2016									0.0635
8/31/2016	0.296	0.063		0.102	0.0741		0.0722		
10/18/2016									0.0603
10/19/2016	0.281	0.0577		0.0953	0.0727		0.0707		
1/31/2017	0.211						0.0686		0.0533
2/1/2017		0.0607		0.0917	0.0701				
5/2/2017	0.29								0.0616
5/3/2017		0.0665		0.0951	0.078		0.0756		
6/6/2017	0.25								0.0585
6/7/2017		0.0632		0.0864	0.0682		0.0695		
1/22/2018							0.0688		
1/23/2018		0.0673		0.0868	0.0744				0.0608
1/24/2018	0.289								
5/1/2018	0.28								
5/2/2018		0.0752		0.0816	0.0814		0.0806		0.0614
11/27/2018									0.0589
11/28/2018	0.271	0.066		0.0796	0.0788		0.0697		
1/8/2019			0.149			0.144			
5/29/2019	0.29			0.0653	0.0769		0.0704		0.0617
5/30/2019		0.063							
9/30/2019		0.0669		0.0759					
10/1/2019	0.293		0.167		0.0795		0.0696		0.0605
10/2/2019						0.101			
3/30/2020	0.279								
3/31/2020		0.0727	0.184	0.0842	0.0851	0.0939	0.0728		0.0619
4/1/2020									
9/1/2020	0.33	0.078	0.203	0.0923	0.0827	0.102	0.0722		
9/2/2020								0.109	0.0687
5/11/2021		0.0757							
5/18/2021	0.339		0.212		0.0902	0.111			
5/19/2021				0.112			0.0817	0.114	
5/25/2021									0.0745
10/26/2021							0.0667	0.0827	
10/27/2021		0.0638	0.182						0.0651
11/1/2021	0.322				0.0823	0.103			
11/2/2021				0.0894					
5/23/2022				0.0691	0.0802	0.103			
5/24/2022	0.343	0.0618	0.188				0.0723		
5/25/2022								0.0888	0.0693

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Constituent: Barium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		0.0468
4/19/2016		0.043
4/20/2016		
6/8/2016		0.0465
8/30/2016		
8/31/2016		0.0464
10/18/2016		
10/19/2016		0.0481
1/31/2017		0.0427
2/1/2017		
5/2/2017		0.0473
5/3/2017		
6/6/2017		0.0437
6/7/2017		
1/22/2018		0.0501
1/23/2018		
1/24/2018		
5/1/2018		0.0575
5/2/2018		
11/27/2018		0.0557
11/28/2018		
1/8/2019		
5/29/2019		0.0562
5/30/2019		
9/30/2019		
10/1/2019		0.0628
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		0.0697
9/1/2020		
9/2/2020	0.0766	0.0736
5/11/2021		0.0762
5/18/2021		
5/19/2021		
5/25/2021	0.0729	
10/26/2021	0.0653	0.0784
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	0.067	
5/25/2022		0.0846

Time Series

Constituent: Barium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		0.0921							0.0285
4/19/2016		0.0775							0.0268
6/8/2016		0.0798							0.0248
8/31/2016		0.0801							0.026
10/19/2016		0.0766							0.0247
1/31/2017		0.075							0.0228
5/2/2017		0.0761							0.0257
6/6/2017		0.07							0.0219
1/23/2018		0.0779							
1/24/2018									0.0229
5/1/2018		0.0877							0.0279
11/27/2018		0.0792							0.0249
1/8/2019								0.0826	
3/20/2019						0.152			
5/29/2019		0.081							0.0232
7/31/2019	0.144			0.138			0.14		
10/1/2019	0.13	0.0803				0.126	0.113		0.0241
10/2/2019				0.117				0.0611	
3/30/2020								0.062	
3/31/2020		0.091							0.0264
4/1/2020				0.194		0.109			
8/31/2020									0.0275
9/1/2020	0.134			0.114	0.277	0.123	0.159	0.0795	
9/2/2020		0.0954	0.0733						
5/17/2021				0.125					
5/18/2021					0.255			0.0861	0.0259
5/19/2021		0.102	0.0743			0.147			
5/25/2021	0.184						0.104		
10/25/2021				0.0953	0.0928	0.12	0.0738		
10/26/2021	0.149		0.0589						
11/1/2021		0.0988						0.0731	0.0247
5/23/2022						0.127			
5/24/2022	0.156						0.0796	0.0863	0.0248
5/25/2022		0.0977	0.0569	0.126	0.698				

Time Series

Constituent: Barium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	0.0928	
10/1/2019	0.0913	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	0.119	
8/31/2020		
9/1/2020	0.11	0.115
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.111	0.107
5/25/2021		
10/25/2021		
10/26/2021	0.0936	
11/1/2021		0.0883
5/23/2022	0.0963	
5/24/2022		0.0906
5/25/2022		

Time Series

Constituent: Barium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								0.018	0.136
3/2/2016							0.0306		
4/19/2016							0.0292	0.0166	
4/20/2016									0.132
6/7/2016							0.0318	0.0271	0.141
8/30/2016								0.0312	0.136
8/31/2016							0.0324		
10/18/2016									0.125
10/19/2016							0.0313	0.0443	
1/31/2017							0.0306	0.0231	0.125
5/2/2017							0.0332	0.0241	
5/3/2017									0.146
6/6/2017							0.0275	0.0276	
6/7/2017									0.126
1/24/2018							0.0317	0.0293	0.127
5/1/2018							0.0356	0.0205	
5/2/2018									0.154
11/27/2018							0.0339	0.0321	0.139
11/28/2018									
1/8/2019				0.294					
5/29/2019							0.037	0.0203	0.146
7/31/2019	0.185	0.162							
10/1/2019	0.213	0.175					0.0356	0.0207	0.138
10/2/2019				0.229					
3/31/2020				0.243			0.0393	0.0193	0.15
4/1/2020		0.0629							
9/1/2020	0.234	0.182	0.00933 (J)				0.038	0.0131	0.154
9/2/2020				0.26	0.0204	0.0111			
5/17/2021			0.0094						
5/18/2021							0.0406	0.0225	
5/24/2021		0.208			0.0206	0.00981			
5/25/2021	0.261			0.26					
10/26/2021	0.202	0.188	0.00766	0.238					
11/1/2021							0.0371	0.0217	
11/2/2021					0.0203	0.00907			0.159
5/24/2022	0.215			0.245					
5/25/2022		0.174	0.00735		0.0197	0.00993	0.0494	0.0399	0.155

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Constituent: Barium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		0.0278
3/2/2016		
4/19/2016		0.0242
4/20/2016		
6/7/2016		0.0223
8/30/2016		0.0242
8/31/2016		
10/18/2016		
10/19/2016		0.024
1/31/2017		0.0248
5/2/2017		
5/3/2017		0.0268
6/6/2017		
6/7/2017		0.0256
1/24/2018		0.0254
5/1/2018		
5/2/2018		0.0276
11/27/2018		
11/28/2018		0.0231
1/8/2019	0.0372	
5/29/2019		0.0244
7/31/2019		
10/1/2019		0.0257
10/2/2019	0.0338	
3/31/2020	0.0313	0.0244
4/1/2020		
9/1/2020	0.0399	
9/2/2020		0.0282
5/17/2021		0.0305
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	0.0368	0.0286
5/24/2022		
5/25/2022	0.0574	0.0268

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Constituent: Barium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						0.117	0.111	0.0862	0.0973
3/1/2016	0.0519		0.142		0.114				
4/19/2016						0.099	0.0875	0.0718	0.0802
4/20/2016	0.0517		0.143		0.114				
6/6/2016						0.107			0.0862
6/7/2016	0.0577		0.145				0.0979	0.0754	
6/8/2016					0.128				
8/30/2016			0.147			0.106	0.108	0.0768	0.0841
8/31/2016	0.0614				0.123				
10/18/2016			0.14			0.102	0.103	0.0727	0.0715
10/19/2016	0.0618				0.118				
1/31/2017	0.0576		0.134			0.0944	0.109	0.0698	0.0825
2/1/2017					0.104				
5/2/2017						0.0868	0.125	0.0723	0.0777
5/3/2017	0.0601		0.145		0.126				
6/6/2017						0.0799	0.108	0.07	0.078
6/7/2017	0.054		0.128		0.111				
1/23/2018					0.115	0.0884	0.153	0.0747	0.0825
1/24/2018	0.0568		0.129						
5/1/2018							0.167	0.0877	0.102
5/2/2018	0.063		0.149		0.125	0.137			
11/26/2018									0.0994
11/27/2018			0.143			0.157	0.158	0.0804	
11/28/2018	0.0654				0.119				
1/9/2019		0.112		0.337					
5/28/2019									0.102
5/29/2019	0.059		0.138			0.166	0.172	0.0831	
5/30/2019					0.112				
9/30/2019	0.0648		0.138		0.117				
10/1/2019		0.0541		0.264					
10/2/2019						0.129	0.183	0.089	0.111
3/30/2020	0.059	0.0519	0.141	0.264					
3/31/2020					0.119	0.176	0.171	0.0927	0.129
9/2/2020	0.0745	0.0648	0.151	0.289	0.124				
9/8/2020									0.125
9/9/2020						0.124	0.172	0.0919	
5/11/2021			0.147				0.165	0.0981	0.125
5/12/2021						0.123			
5/18/2021	0.07	0.0805		0.299	0.125				
10/18/2021								0.0935	0.124
10/19/2021						0.103	0.145		
10/26/2021			0.136	0.282					
10/27/2021	0.0664	0.0684			0.117				
5/23/2022				0.277					
5/24/2022	0.0717	0.0803	0.142		0.117				
5/31/2022						0.1	0.153	0.0992	0.129

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Constituent: Beryllium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.00102		<0.00102					
3/2/2016	<0.00102				<0.00102		<0.00102		<0.00102
4/19/2016	<0.00102								
4/20/2016		<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
6/8/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
8/30/2016									<0.00102
8/31/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
10/18/2016									<0.00102
10/19/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
1/31/2017	<0.00102						<0.00102		<0.00102
2/1/2017		<0.00102		<0.00102	<0.00102				
5/2/2017	<0.00102								<0.00102
5/3/2017		<0.00102		<0.00102	<0.00102		<0.00102		
6/6/2017	<0.00102								<0.00102
6/7/2017		<0.00102		<0.00102	<0.00102		0.00103 (J)		
1/22/2018							<0.00102		
1/23/2018		<0.00102		<0.00102	<0.00102				<0.00102
1/24/2018	<0.00102								
5/1/2018	<0.00102								
5/2/2018		<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
11/27/2018									<0.00102
11/28/2018	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
1/8/2019			<0.00102			<0.00102			
5/29/2019	<0.00102			<0.00102	<0.00102		<0.00102		<0.00102
5/30/2019		<0.00102							
9/30/2019		<0.00102		<0.00102					
10/1/2019	<0.00102		<0.00102		<0.00102		<0.00102		<0.00102
10/2/2019						<0.00102			
3/30/2020	<0.00102								
3/31/2020		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
4/1/2020									
9/1/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
9/2/2020								<0.00102	<0.00102
5/11/2021		<0.00102							
5/18/2021	<0.00102		<0.00102		<0.00102	<0.00102			
5/19/2021				<0.00102			<0.00102	<0.00102	
5/25/2021									<0.00102
10/26/2021							<0.00102	<0.00102	
10/27/2021		<0.00102	<0.00102						<0.00102
11/1/2021	<0.00102				<0.00102	<0.00102			
11/2/2021				<0.00102					
5/23/2022				<0.00102	<0.00102	<0.00102			
5/24/2022	<0.00102	<0.00102	<0.00102				<0.00102		
5/25/2022								<0.00102	<0.00102

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Constituent: Beryllium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.00102
4/19/2016		<0.00102
4/20/2016		
6/8/2016		<0.00102
8/30/2016		
8/31/2016		<0.00102
10/18/2016		
10/19/2016		<0.00102
1/31/2017		<0.00102
2/1/2017		
5/2/2017		<0.00102
5/3/2017		
6/6/2017		<0.00102
6/7/2017		
1/22/2018		<0.00102
1/23/2018		
1/24/2018		
5/1/2018		<0.00102
5/2/2018		
11/27/2018		<0.00102
11/28/2018		
1/8/2019		
5/29/2019		<0.00102
5/30/2019		
9/30/2019		
10/1/2019		<0.00102
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.00102
9/1/2020		
9/2/2020	<0.00102	<0.00102
5/11/2021		<0.00102
5/18/2021		
5/19/2021		
5/25/2021	<0.00102	
10/26/2021	<0.00102	<0.00102
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.00102	
5/25/2022		<0.00102

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.00102							<0.00102
4/19/2016		<0.00102							<0.00102
6/8/2016		<0.00102							<0.00102
8/31/2016		<0.00102							<0.00102
10/19/2016		<0.00102							<0.00102
1/31/2017		<0.00102							<0.00102
5/2/2017		<0.00102							<0.00102
6/6/2017		<0.00102							<0.00102
1/23/2018		<0.00102							<0.00102
1/24/2018									<0.00102
5/1/2018		<0.00102							<0.00102
11/27/2018		<0.00102							<0.00102
1/8/2019								<0.00102	
3/20/2019						<0.00102			
5/29/2019		<0.00102							<0.00102
7/31/2019	<0.00102			<0.00102			<0.00102		
10/1/2019	<0.00102	<0.00102				<0.00102	<0.00102		<0.00102
10/2/2019				<0.00102				<0.00102	
3/30/2020								<0.00102	
3/31/2020		<0.00102							<0.00102
4/1/2020				<0.00102		<0.00102			
8/31/2020									<0.00102
9/1/2020	<0.00102			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
9/2/2020		<0.00102	<0.00102						
5/17/2021				<0.00102					
5/18/2021					<0.00102			<0.00102	<0.00102
5/19/2021		<0.00102	<0.00102			<0.00102			
5/25/2021	<0.00102						<0.00102		
10/25/2021				<0.00102	<0.00102	<0.00102	<0.00102		
10/26/2021	<0.00102		<0.00102						
11/1/2021		<0.00102						<0.00102	<0.00102
5/23/2022						<0.00102			
5/24/2022	<0.00102						<0.00102	<0.00102	<0.00102
5/25/2022		<0.00102	<0.00102	<0.00102	<0.00102				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.00102	
10/1/2019	<0.00102	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.00102	
8/31/2020		
9/1/2020	<0.00102	<0.00102
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	<0.00102	<0.00102
5/25/2021		
10/25/2021		
10/26/2021	<0.00102	
11/1/2021		<0.00102
5/23/2022	<0.00102	
5/24/2022		<0.00102
5/25/2022		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.00102	<0.00102
3/2/2016							<0.00102		
4/19/2016							<0.00102	<0.00102	
4/20/2016									<0.00102
6/7/2016							<0.00102	<0.00102	<0.00102
8/30/2016								<0.00102	<0.00102
8/31/2016							<0.00102		
10/18/2016									<0.00102
10/19/2016							<0.00102	<0.00102	
1/31/2017							<0.00102	<0.00102	<0.00102
5/2/2017							<0.00102	<0.00102	
5/3/2017									<0.00102
6/6/2017							<0.00102	<0.00102	
6/7/2017									<0.00102
1/24/2018							<0.00102	<0.00102	<0.00102
5/1/2018							<0.00102	<0.00102	
5/2/2018									<0.00102
11/27/2018							<0.00102	0.00071 (J)	<0.00102
11/28/2018									
1/8/2019				<0.00102					
5/29/2019							<0.00102	<0.00102	<0.00102
7/31/2019	<0.00102	<0.00102							
10/1/2019	<0.00102	<0.00102					<0.00102	<0.00102	<0.00102
10/2/2019				<0.00102					
3/31/2020				<0.00102			<0.00102	<0.00102	<0.00102
4/1/2020		<0.00102							
9/1/2020	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102	<0.00102
9/2/2020				<0.00102	<0.00102	<0.00102			
5/17/2021			<0.00102						
5/18/2021							<0.00102	<0.00102	
5/24/2021		<0.00102			<0.00102	<0.00102			
5/25/2021	<0.00102			<0.00102					
10/26/2021	<0.00102	<0.00102	<0.00102	<0.00102					
11/1/2021							<0.00102	<0.00102	
11/2/2021					<0.00102	<0.00102			<0.00102
5/24/2022	<0.00102			<0.00102					
5/25/2022		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	0.00065 (J)	<0.00102

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.00102
3/2/2016		
4/19/2016		<0.00102
4/20/2016		
6/7/2016		<0.00102
8/30/2016		<0.00102
8/31/2016		
10/18/2016		
10/19/2016		<0.00102
1/31/2017		<0.00102
5/2/2017		
5/3/2017		<0.00102
6/6/2017		
6/7/2017		<0.00102
1/24/2018		<0.00102
5/1/2018		
5/2/2018		<0.00102
11/27/2018		
11/28/2018		<0.00102
1/8/2019	<0.00102	
5/29/2019		<0.00102
7/31/2019		
10/1/2019		<0.00102
10/2/2019	<0.00102	
3/31/2020	<0.00102	<0.00102
4/1/2020		
9/1/2020	<0.00102	
9/2/2020		<0.00102
5/17/2021		<0.00102
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.00102	<0.00102
5/24/2022		
5/25/2022	<0.00102	<0.00102

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.00102	<0.00102	<0.00102	<0.00102
3/1/2016	<0.00102		<0.00102		<0.00102				
4/19/2016						<0.00102	<0.00102	<0.00102	<0.00102
4/20/2016	<0.00102		<0.00102		<0.00102				
6/6/2016						0.000612 (J)			<0.00102
6/7/2016	<0.00102		<0.00102				0.00093 (J)	<0.00102	
6/8/2016					<0.00102				
8/30/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
8/31/2016	<0.00102				<0.00102				
10/18/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
10/19/2016	<0.00102				<0.00102				
1/31/2017	<0.00102		<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
2/1/2017					<0.00102				
5/2/2017						0.00069 (J)	<0.00102	<0.00102	<0.00102
5/3/2017	<0.00102		<0.00102		<0.00102				
6/6/2017						<0.00102	<0.00102	<0.00102	<0.00102
6/7/2017	<0.00102		<0.00102		<0.00102				
1/23/2018					<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
1/24/2018	<0.00102		<0.00102						
5/1/2018							<0.00102	<0.00102	<0.00102
5/2/2018	<0.00102		<0.00102		<0.00102	<0.00102			
11/26/2018									<0.00102
11/27/2018			<0.00102					<0.00102	
11/28/2018	<0.00102				<0.00102				
1/9/2019		<0.00102		<0.00102					
5/28/2019									<0.00102
5/29/2019	<0.00102		<0.00102			<0.00102	<0.00102	<0.00102	
5/30/2019					<0.00102				
9/30/2019	<0.00102		<0.00102		<0.00102				
10/1/2019		<0.00102		<0.00102					
10/2/2019						<0.00102	<0.00102	<0.00102	<0.00102
3/30/2020	<0.00102	<0.00102	<0.00102	<0.00102					
3/31/2020					<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
9/2/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102				
9/8/2020									<0.00102
9/9/2020						<0.00102	<0.00102	<0.00102	
5/11/2021			<0.00102				<0.00102	<0.00102	<0.00102
5/12/2021						0.000694 (J)			
5/18/2021	<0.00102	<0.00102		<0.00102	<0.00102				
10/18/2021								<0.00102	<0.00102
10/19/2021						<0.00102	<0.00102		
10/26/2021			<0.00102	<0.00102					
10/27/2021	<0.00102	<0.00102			<0.00102				
5/23/2022				<0.00102					
5/24/2022	<0.00102	<0.00102	<0.00102		<0.00102				
5/31/2022						<0.00102	0.00041 (J)	<0.00102	<0.00102

Time Series

Constituent: Boron, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		1.39		0.0482 (J)					
3/2/2016	2.03				0.0502 (J)		0.0328 (J)		0.0395 (J)
4/19/2016	2.2								
4/20/2016		1.51		0.059 (J)	0.0672 (J)		0.0434 (J)		0.0549 (J)
6/8/2016	1.61	1.62		0.0568 (J)	0.0659 (J)		0.0391 (J)		0.0593 (J)
8/30/2016									0.0534 (J)
8/31/2016	1.55	1.73		0.0651 (J)	0.065 (J)		0.0401 (J)		
10/18/2016									0.0597 (J)
10/19/2016	1.59	1.77		0.06 (J)	0.0721 (J)		0.0427 (J)		
1/31/2017	1.84						0.034 (J)		0.0479 (J)
2/1/2017		1.42		0.0638 (J)	0.06 (J)				
5/2/2017	1.73								0.0587 (J)
5/3/2017		1.52		0.0655 (J)	0.0768 (J)		0.0416 (J)		
6/6/2017	1.56								0.0428 (J)
6/7/2017		1.52		0.0468 (J)	0.0625 (J)		0.0277 (J)		
9/13/2017	1.87			0.0751 (J)	0.0926 (J)		0.044 (J)		0.0647 (J)
9/14/2017		1.96							
5/1/2018	1.81								
5/2/2018		2		0.0545 (J)	0.064 (J)		0.0393 (J)		0.0484 (J)
11/27/2018									0.0493 (J)
11/28/2018	1.8	2		0.0545 (J)	0.064 (J)		0.0417 (J)		
1/8/2019			0.677			0.0939 (J)			
5/29/2019	1.75			0.082 (J)	0.0952 (J)		0.0528 (J)		0.0682 (J)
5/30/2019		2.11							
9/30/2019		2.02		0.103					
10/1/2019	1.91		1.02		0.0967 (J)		0.0604 (J)		0.0701 (J)
10/2/2019						0.134			
3/30/2020	1.77								
3/31/2020		2.12	1.04	0.0815 (J)	0.0856 (J)	0.101	0.0505 (J)		0.0655 (J)
4/1/2020									
9/1/2020	2.11	2.02	1.06	0.104	0.115	0.149	0.0642 (J)		
9/2/2020								0.112	0.0789 (J)
5/11/2021		1.99							
5/18/2021	1.99		0.971		0.0927 (J)	0.118			
5/19/2021				0.0856 (J)			0.0604 (J)	0.0976 (J)	
5/25/2021									0.074 (J)
10/26/2021							0.0511 (J)	0.0888 (J)	
10/27/2021		2.39	0.933						0.0677 (J)
11/1/2021	2.02				0.0769 (J)	0.0962 (J)			
11/2/2021				0.0691 (J)					
5/23/2022				0.0558 (J)	0.0626 (J)	0.0765 (J)			
5/24/2022	2.08	2.34	0.938				0.0457 (J)		
5/25/2022								0.0852 (J)	0.0618 (J)

Time Series

Constituent: Boron, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		0.0447 (J)
4/19/2016		0.0645 (J)
4/20/2016		
6/8/2016		0.0592 (J)
8/30/2016		
8/31/2016		0.0632 (J)
10/18/2016		
10/19/2016		0.0637 (J)
1/31/2017		0.0536 (J)
2/1/2017		
5/2/2017		0.0775 (J)
5/3/2017		
6/6/2017		0.0535 (J)
6/7/2017		
9/13/2017		0.0937 (J)
9/14/2017		
5/1/2018		0.0683 (J)
5/2/2018		
11/27/2018		0.0715 (J)
11/28/2018		
1/8/2019		
5/29/2019		0.116
5/30/2019		
9/30/2019		
10/1/2019		0.116
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		0.1
9/1/2020		
9/2/2020	0.407	0.148
5/11/2021		0.109
5/18/2021		
5/19/2021		
5/25/2021	0.43	
10/26/2021	0.393	0.0953 (J)
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	0.376	
5/25/2022		0.0826 (J)

Time Series

Constituent: Boron, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		1.47							<0.1015
4/19/2016		1.53							<0.1015
6/8/2016		1.7							<0.1015
8/31/2016		1.68							<0.1015
10/19/2016		1.53							<0.1015
1/31/2017		1.51							<0.1015
5/2/2017		1.64							<0.1015
6/6/2017		1.57							<0.1015
9/12/2017									<0.1015
9/13/2017		2.18							
5/1/2018		1.57							<0.1015
11/27/2018		1.58							<0.1015
1/8/2019								0.0205 (J)	
3/20/2019						0.924			
5/29/2019		1.7							<0.1015
7/31/2019	0.0439 (J)			0.0782 (J)			0.835		
10/1/2019	0.0824 (J)	2.05				1.05	0.931		<0.1015
10/2/2019				0.129				<0.1015	
3/30/2020								0.0347 (J)	
3/31/2020		1.74							<0.1015
4/1/2020				0.073 (J)		0.435			
8/31/2020									<0.1015
9/1/2020	0.0907 (J)			0.146	0.124	0.855	0.895	0.0368 (J)	
9/2/2020		1.9	<0.1015						
5/17/2021				0.0911 (J)					
5/18/2021					0.124			0.0334 (J)	<0.1015
5/19/2021		1.74	<0.1015			0.866			
5/25/2021	0.0617 (J)						0.252		
10/25/2021				0.0887 (J)	0.113	0.934	0.142		
10/26/2021	0.0498 (J)		<0.1015						
11/1/2021		2.18						<0.1015	<0.1015
5/23/2022						0.91			
5/24/2022	0.0376 (J)						0.159	0.0333 (J)	<0.1015
5/25/2022		1.98	<0.1015	0.0597 (J)	0.177				

Time Series

Constituent: Boron, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
9/12/2017		
9/13/2017		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	0.0707 (J)	
10/1/2019	0.101	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	0.046 (J)	
8/31/2020		
9/1/2020	0.106	0.134
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.0909 (J)	0.119
5/25/2021		
10/25/2021		
10/26/2021	0.0784 (J)	
11/1/2021		0.11
5/23/2022	0.0653 (J)	
5/24/2022		0.0977 (J)
5/25/2022		

Time Series

Constituent: Boron, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.1015	0.0462 (J)
3/2/2016							<0.1015		
4/19/2016							<0.1015	<0.1015	
4/20/2016									0.0719 (J)
6/7/2016							<0.1015	<0.1015	0.0591 (J)
8/30/2016								<0.1015	0.0675 (J)
8/31/2016							<0.1015		
10/18/2016									0.0699 (J)
10/19/2016							<0.1015	<0.1015	
1/31/2017							<0.1015	<0.1015	0.0518 (J)
5/2/2017							<0.1015	<0.1015	
5/3/2017									0.0737 (J)
6/6/2017							<0.1015	<0.1015	
6/7/2017									0.0518 (J)
9/12/2017							<0.1015	<0.1015	
9/14/2017									0.0825 (J)
5/1/2018							<0.1015	<0.1015	
5/2/2018									0.0603 (J)
11/27/2018							<0.1015	<0.1015	0.0613 (J)
11/28/2018									
1/8/2019				0.213					
5/29/2019							<0.1015	<0.1015	0.0946 (J)
7/31/2019	0.0643 (J)	0.0531 (J)							
10/1/2019	0.105	0.0856 (J)					<0.1015	<0.1015	0.103
10/2/2019				0.344					
3/31/2020				0.325			<0.1015	<0.1015	0.0782 (J)
4/1/2020		<0.1015							
9/1/2020	0.115	0.0943 (J)	0.307				<0.1015	<0.1015	0.115
9/2/2020				0.382	<0.1015	<0.1015			
5/17/2021			0.32						
5/18/2021							<0.1015	<0.1015	
5/24/2021		0.0785 (J)			<0.1015	<0.1015			
5/25/2021	0.0889 (J)			0.37					
10/26/2021	0.0725 (J)	0.0709 (J)	0.306	0.354					
11/1/2021							<0.1015	<0.1015	
11/2/2021					<0.1015	<0.1015			0.0755 (J)
5/24/2022	0.0562 (J)			0.351					
5/25/2022		0.0526 (J)	0.307		<0.1015	<0.1015	<0.1015	<0.1015	0.063 (J)

Time Series

Constituent: Boron, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.1015
3/2/2016		
4/19/2016		<0.1015
4/20/2016		
6/7/2016		<0.1015
8/30/2016		<0.1015
8/31/2016		
10/18/2016		
10/19/2016		<0.1015
1/31/2017		<0.1015
5/2/2017		
5/3/2017		<0.1015
6/6/2017		
6/7/2017		<0.1015
9/12/2017		
9/14/2017		<0.1015
5/1/2018		
5/2/2018		<0.1015
11/27/2018		
11/28/2018		<0.1015
1/8/2019	0.029 (J)	
5/29/2019		<0.1015
7/31/2019		
10/1/2019		<0.1015
10/2/2019	0.0336 (J)	
3/31/2020	0.0339 (J)	<0.1015
4/1/2020		
9/1/2020	0.0414 (J)	
9/2/2020		<0.1015
5/17/2021		<0.1015
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.1015	<0.1015
5/24/2022		
5/25/2022	<0.1015	<0.1015

Time Series

Constituent: Boron, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						0.0212 (J)	0.0252 (J)	<0.1015	0.0257 (J)
3/1/2016	0.0546 (J)		1.72		1.79				
4/19/2016						<0.1015	<0.1015	<0.1015	<0.1015
4/20/2016	0.0472 (J)		1.7		2.01				
6/6/2016						<0.1015			<0.1015
6/7/2016	0.0417 (J)		1.57				0.0202 (J)	<0.1015	
6/8/2016					2.23				
8/30/2016			1.67			<0.1015	<0.1015	<0.1015	<0.1015
8/31/2016	0.036 (J)				2.14				
10/18/2016			1.4			<0.1015	<0.1015	<0.1015	0.022 (J)
10/19/2016	0.0386 (J)				2.13				
1/31/2017	0.0343 (J)		1.46			<0.1015	<0.1015	<0.1015	<0.1015
2/1/2017					2.17				
5/2/2017						<0.1015	<0.1015	<0.1015	<0.1015
5/3/2017	0.037 (J)		1.45		2.28				
6/6/2017						<0.1015	<0.1015	<0.1015	<0.1015
6/7/2017	0.0227 (J)		1.41		2.25				
9/12/2017									<0.1015
9/13/2017						<0.1015	<0.1015	<0.1015	
9/14/2017	0.0471 (J)		1.16		2.41				
5/1/2018							<0.1015	<0.1015	<0.1015
5/2/2018	0.0313 (J)		1.12		2.34	0.0362 (J)			
11/26/2018									<0.1015
11/27/2018			1.31			0.11		<0.1015	
11/28/2018	0.0311 (J)				2.23				
1/9/2019		0.0615 (J)		0.164					
5/28/2019									<0.1015
5/29/2019	0.042 (J)		1.44			0.188	<0.1015	<0.1015	
5/30/2019					2.45				
9/30/2019	0.0418 (J)		1.38		2.34				
10/1/2019		0.0546 (J)		0.241					
10/2/2019						0.097 (J)	<0.1015	<0.1015	<0.1015
3/30/2020	0.0369 (J)	0.0555 (J)	1.12	0.247					
3/31/2020					2.27	0.157	<0.1015	<0.1015	<0.1015
9/2/2020	0.042 (J)	0.0565 (J)	1.26	0.26	2.05				
9/8/2020									<0.1015
9/9/2020						0.0999 (J)	<0.1015	<0.1015	
5/11/2021			0.971				<0.1015	<0.1015	<0.1015
5/12/2021						0.0841 (J)			
5/18/2021	0.037 (J)	0.0599 (J)		0.247	2.08				
10/18/2021								<0.1015	<0.1015
10/19/2021						0.0708 (J)	<0.1015		
10/26/2021			0.933	0.216					
10/27/2021	0.0427 (J)	0.0546 (J)			2.04				
5/23/2022				0.259					
5/24/2022	0.0369 (J)	0.165	1.12		2.01				
5/31/2022						0.0567 (J)	<0.1015	<0.1015	<0.1015

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.0002		<0.0002					
3/2/2016	<0.0002				<0.0002		<0.0002		<0.0002
4/19/2016	<0.0002								
4/20/2016		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
6/8/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
8/30/2016									<0.0002
8/31/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
10/18/2016									<0.0002
10/19/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/31/2017	<0.0002						<0.0002		<0.0002
2/1/2017		<0.0002		<0.0002	<0.0002				
5/2/2017	<0.0002								<0.0002
5/3/2017		<0.0002		<0.0002	<0.0002		<0.0002		
6/6/2017	<0.0002								<0.0002
6/7/2017		<0.0002		<0.0002	<0.0002		0.00077 (J)		
1/22/2018							<0.0002		
1/23/2018		<0.0002		<0.0002	<0.0002				<0.0002
1/24/2018	<0.0002								
5/1/2018	<0.0002								
5/2/2018		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
11/27/2018									<0.0002
11/28/2018	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/8/2019			<0.0002			<0.0002			
5/29/2019	<0.0002			<0.0002	<0.0002		<0.0002		<0.0002
5/30/2019		<0.0002							
9/30/2019		<0.0002		<0.0002					
10/1/2019	<0.0002		<0.0002		<0.0002		<0.0002		<0.0002
10/2/2019						<0.0002			
3/30/2020	<0.0002								
3/31/2020		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
4/1/2020									
9/1/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
9/2/2020								<0.0002	<0.0002
5/11/2021		<0.0002							
5/18/2021	<0.0002		<0.0002		<0.0002	<0.0002			
5/19/2021				<0.0002			<0.0002	<0.0002	
5/25/2021									<0.0002
10/26/2021							<0.0002	<0.0002	
10/27/2021		<0.0002	<0.0002						<0.0002
11/1/2021	<0.0002				<0.0002	<0.0002			
11/2/2021				<0.0002					
5/23/2022				<0.0002	<0.0002	<0.0002			
5/24/2022	<0.0002	<0.0002	<0.0002				<0.0002		
5/25/2022								<0.0002	<0.0002

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.0002
4/19/2016		<0.0002
4/20/2016		
6/8/2016		<0.0002
8/30/2016		
8/31/2016		<0.0002
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
2/1/2017		
5/2/2017		<0.0002
5/3/2017		
6/6/2017		<0.0002
6/7/2017		
1/22/2018		<0.0002
1/23/2018		
1/24/2018		
5/1/2018		<0.0002
5/2/2018		
11/27/2018		<0.0002
11/28/2018		
1/8/2019		
5/29/2019		<0.0002
5/30/2019		
9/30/2019		
10/1/2019		<0.0002
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.0002
9/1/2020		
9/2/2020	<0.0002	<0.0002
5/11/2021		<0.0002
5/18/2021		
5/19/2021		
5/25/2021	<0.0002	
10/26/2021	<0.0002	<0.0002
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.0002	
5/25/2022		<0.0002

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.0002							<0.0002
4/19/2016		<0.0002							<0.0002
6/8/2016		<0.0002							<0.0002
8/31/2016		<0.0002							<0.0002
10/19/2016		<0.0002							<0.0002
1/31/2017		<0.0002							<0.0002
5/2/2017		<0.0002							<0.0002
6/6/2017		<0.0002							<0.0002
1/23/2018		<0.0002							<0.0002
1/24/2018									<0.0002
5/1/2018		<0.0002							<0.0002
11/27/2018		<0.0002							<0.0002
1/8/2019								<0.0002	
3/20/2019						<0.0002			
5/29/2019		<0.0002							<0.0002
7/31/2019	<0.0002			<0.0002			<0.0002		
10/1/2019	<0.0002	<0.0002				<0.0002	<0.0002		<0.0002
10/2/2019				<0.0002				<0.0002	
3/30/2020								<0.0002	
3/31/2020		<0.0002							<0.0002
4/1/2020				<0.0002		<0.0002			
8/31/2020									<0.0002
9/1/2020	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/2/2020		<0.0002	<0.0002						
5/17/2021				<0.0002					
5/18/2021					<0.0002			<0.0002	<0.0002
5/19/2021		<0.0002	<0.0002			<0.0002			
5/25/2021	<0.0002						<0.0002		
10/25/2021				<0.0002	<0.0002	<0.0002	<0.0002		
10/26/2021	<0.0002		<0.0002						
11/1/2021		<0.0002						<0.0002	<0.0002
5/23/2022						<0.0002			
5/24/2022	0.00018 (J)						<0.0002	<0.0002	<0.0002
5/25/2022		<0.0002	<0.0002	<0.0002	<0.0002				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.0002	
10/1/2019	<0.0002	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.0002	
8/31/2020		
9/1/2020	<0.0002	<0.0002
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	<0.0002	<0.0002
5/25/2021		
10/25/2021		
10/26/2021	<0.0002	
11/1/2021		<0.0002
5/23/2022	<0.0002	
5/24/2022		<0.0002
5/25/2022		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.0002	<0.0002
3/2/2016							<0.0002		
4/19/2016							<0.0002	<0.0002	
4/20/2016									<0.0002
6/7/2016							<0.0002	<0.0002	<0.0002
8/30/2016								<0.0002	<0.0002
8/31/2016							<0.0002		
10/18/2016									<0.0002
10/19/2016							<0.0002	<0.0002	
1/31/2017							<0.0002	<0.0002	<0.0002
5/2/2017							<0.0002	<0.0002	
5/3/2017									<0.0002
6/6/2017							<0.0002	<0.0002	
6/7/2017									<0.0002
1/24/2018							<0.0002	<0.0002	<0.0002
5/1/2018							<0.0002	<0.0002	
5/2/2018									<0.0002
11/27/2018							<0.0002	<0.0002	<0.0002
11/28/2018									
1/8/2019				<0.0002					
5/29/2019							<0.0002	<0.0002	<0.0002
7/31/2019	<0.0002	<0.0002							
10/1/2019	<0.0002	<0.0002					<0.0002	<0.0002	<0.0002
10/2/2019				<0.0002					
3/31/2020				<0.0002			<0.0002	<0.0002	<0.0002
4/1/2020		<0.0002							
9/1/2020	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002	<0.0002
9/2/2020				<0.0002	<0.0002	<0.0002			
5/17/2021			<0.0002						
5/18/2021							<0.0002	<0.0002	
5/24/2021		<0.0002			<0.0002	<0.0002			
5/25/2021	<0.0002			<0.0002					
10/26/2021	<0.0002	<0.0002	<0.0002	<0.0002					
11/1/2021							<0.0002	<0.0002	
11/2/2021					<0.0002	<0.0002			<0.0002
5/24/2022	<0.0002			<0.0002					
5/25/2022		<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.0002
3/2/2016		
4/19/2016		<0.0002
4/20/2016		
6/7/2016		<0.0002
8/30/2016		<0.0002
8/31/2016		
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
5/2/2017		
5/3/2017		<0.0002
6/6/2017		
6/7/2017		<0.0002
1/24/2018		<0.0002
5/1/2018		
5/2/2018		<0.0002
11/27/2018		
11/28/2018		<0.0002
1/8/2019	<0.0002	
5/29/2019		<0.0002
7/31/2019		
10/1/2019		<0.0002
10/2/2019	<0.0002	
3/31/2020	<0.0002	<0.0002
4/1/2020		
9/1/2020	<0.0002	
9/2/2020		<0.0002
5/17/2021		<0.0002
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.0002	7E-05 (J)
5/24/2022		
5/25/2022	<0.0002	0.00031

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.0002	<0.0002	<0.0002	<0.0002
3/1/2016	<0.0002		<0.0002		<0.0002				
4/19/2016						<0.0002	<0.0002	<0.0002	<0.0002
4/20/2016	<0.0002		<0.0002		<0.0002				
6/6/2016						<0.0002			<0.0002
6/7/2016	<0.0002		<0.0002				<0.0002	<0.0002	
6/8/2016					<0.0002				
8/30/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
8/31/2016	<0.0002				<0.0002				
10/18/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
10/19/2016	<0.0002				<0.0002				
1/31/2017	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
2/1/2017					<0.0002				
5/2/2017						<0.0002	<0.0002	<0.0002	<0.0002
5/3/2017	<0.0002		<0.0002		<0.0002				
6/6/2017						<0.0002	<0.0002	<0.0002	<0.0002
6/7/2017	<0.0002		<0.0002		<0.0002				
1/23/2018					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/24/2018	<0.0002		<0.0002						
5/1/2018							<0.0002	<0.0002	<0.0002
5/2/2018	<0.0002		<0.0002		<0.0002	<0.0002			
11/26/2018									<0.0002
11/27/2018			<0.0002			<0.0002	<0.0002	<0.0002	
11/28/2018	<0.0002				<0.0002				
1/9/2019		<0.0002		<0.0002					
5/28/2019									<0.0002
5/29/2019	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	
5/30/2019					<0.0002				
9/30/2019	<0.0002		<0.0002		<0.0002				
10/1/2019		<0.0002		<0.0002					
10/2/2019						<0.0002	<0.0002	<0.0002	<0.0002
3/30/2020	<0.0002	<0.0002	<0.0002	<0.0002					
3/31/2020					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/2/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				
9/8/2020									<0.0002
9/9/2020						<0.0002	<0.0002	<0.0002	
5/11/2021			<0.0002				<0.0002	<0.0002	<0.0002
5/12/2021						<0.0002			
5/18/2021	<0.0002	<0.0002		<0.0002	<0.0002				
10/18/2021								7E-05 (J)	<0.0002
10/19/2021						<0.0002	<0.0002		
10/26/2021			<0.0002	<0.0002					
10/27/2021	<0.0002	<0.0002			<0.0002				
5/23/2022				<0.0002					
5/24/2022	<0.0002	<0.0002	<0.0002		<0.0002				
5/31/2022						<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		50.6		35.3					
3/2/2016	46.5				21		16.7		9.53
4/19/2016	49								
4/20/2016		49.1		28.9	20.1		13.1		9.55
6/8/2016	33.5	48.7		27.6	20.2		11.7		13.1
8/30/2016									12.1
8/31/2016	34.2	57.9		25.4	19.9		11.3		
10/18/2016									11.4
10/19/2016	35.1	52.2		25.7	20.4		11.8		
1/31/2017	38.5						12.5		10.8
2/1/2017		47.6		25.6	20.9				
5/2/2017	35.1								11.9
5/3/2017		51.3		24	20.9		12		
6/6/2017	32.4								12.2
6/7/2017		51.4		25.2	21.2		12.8		
9/13/2017	40.5			25.5	22.1		13.3		13.9
9/14/2017		54.9							
5/1/2018	39.7								
5/2/2018		53.3		25.2	22.2		13.8		10.6
8/28/2018	37.2	56.4							
8/29/2018				25.6	22.3		13.3		11.7
11/27/2018									10.8
11/28/2018	35.8	54.2		24.6	22.1		15.2		
1/8/2019			57.2			33.8			
5/29/2019	33.4			23.9	21.4		12.8		11.2
5/30/2019		60.5							
9/30/2019		63.1		24.6					
10/1/2019	36.7		61.2		23.1		13.4		11.4
10/2/2019						22.2			
3/30/2020	33.7								
3/31/2020		63.6	66.6	25.1	22.4	21.3	13.2		9.04
4/1/2020									
9/1/2020	40.5	57.2	57.3	23.9	22.2	21	12.3		
9/2/2020								12.3	10.8
5/11/2021		62.7							
5/18/2021	39.5		64		23.1	22.1			
5/19/2021				41.5			12.9	12.7	
5/25/2021									11.2
10/26/2021							12.3	11.3	
10/27/2021		64.2	61.6						11.4
11/1/2021	38.4				21.8	21.4			
11/2/2021				25.8					
5/23/2022				26	20.6	20.6			
5/24/2022	43.9	63.9	65				19.2		
5/25/2022								12	11.4

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		6.61
4/19/2016		5.97
4/20/2016		
6/8/2016		6.36
8/30/2016		
8/31/2016		6.28
10/18/2016		
10/19/2016		6.57
1/31/2017		6.77
2/1/2017		
5/2/2017		6.94
5/3/2017		
6/6/2017		6.88
6/7/2017		
9/13/2017		7.43
9/14/2017		
5/1/2018		7.42
5/2/2018		
8/28/2018		
8/29/2018		7.37
11/27/2018		7.58
11/28/2018		
1/8/2019		
5/29/2019		7.22
5/30/2019		
9/30/2019		
10/1/2019		6.9
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		7.32
9/1/2020		
9/2/2020	4.7	7.04
5/11/2021		6.98
5/18/2021		
5/19/2021		
5/25/2021	4.66	
10/26/2021	5.28	6.46
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	7.03	
5/25/2022		6.41

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		14.6							3.86
4/19/2016		13.3							3.22
6/8/2016		13.2							3.17
8/31/2016		11.8							3.07
10/19/2016		12.9							2.91
1/31/2017		13.5							2.94
5/2/2017		13.5							2.82
6/6/2017		13.6							2.79
9/12/2017									2.88
9/13/2017		11.8							
5/1/2018		14							2.82
8/28/2018									2.85
8/29/2018		12.1							
11/27/2018		13.3							2.8
1/8/2019								15.7	
3/20/2019						28.4			
5/29/2019		13.4							2.82
7/31/2019	9.32			19.1			31.4		
10/1/2019	8.41	11.7				27.2	31.1		2.94
10/2/2019				13.2				3.16	
3/30/2020								3.23	
3/31/2020		14.2							2.95
4/1/2020				27		23.1			
8/31/2020									3
9/1/2020	6.9			10.8	20.5	25.6	31.6	3.43	
9/2/2020		13.1	2.02						
5/17/2021				12.8					
5/18/2021					15			3.79	3.17
5/19/2021		14.2	2.26			27.1			
5/25/2021	8.47						23.9		
10/25/2021				10.5	6.58	26.9	18.3		
10/26/2021	8.16		1.96						
11/1/2021		13.4						3.68	3.13
5/23/2022						25.5			
5/24/2022	8.1						18.6	3.55	2.45
5/25/2022		13.9	1.8	11.6	49.6				

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
9/12/2017		
9/13/2017		
5/1/2018		
8/28/2018		
8/29/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	30.3	
10/1/2019	29.4	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	26	
8/31/2020		
9/1/2020	28.8	14.7
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	30.9	15.3
5/25/2021		
10/25/2021		
10/26/2021	30.2	
11/1/2021		15.1
5/23/2022	28.6	
5/24/2022		14.4
5/25/2022		

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								1.07	15
3/2/2016							1.11		
4/19/2016							1.01	0.969	
4/20/2016									14.3
6/7/2016							1.06	1.08	14.8
8/30/2016								0.952	13.7
8/31/2016							0.978		
10/18/2016									13.3
10/19/2016							0.906	1.17	
1/31/2017							1.04	0.946	13.7
5/2/2017							0.969	0.826	
5/3/2017									14.3
6/6/2017							0.902	0.834	
6/7/2017									14.7
9/12/2017							0.988	0.884	
9/14/2017									15.1
5/1/2018							1.07	0.921	
5/2/2018									14.5
8/28/2018							1.02	0.8	
8/29/2018									14.3
11/27/2018							0.999	1.01	13.7
11/28/2018									
1/8/2019				38					
5/29/2019							1.09	0.627	14.5
7/31/2019	15	25.8							
10/1/2019	15.5	27.2					1.08	0.645	13.8
10/2/2019				18.4					
3/31/2020				18.1			1.1	0.898	14.4
4/1/2020		15.8							
9/1/2020	14.8	35.8	1.27				1.08	0.566	13.6
9/2/2020				17.6	0.875	0.547			
5/17/2021			1.33						
5/18/2021							1.12	0.974	
5/24/2021		27.1			0.905	0.554			
5/25/2021	15.2			18.6					
10/26/2021	15.1	29.4	0.837	18.4					
11/1/2021							1.09	0.816	
11/2/2021					1.05	0.567			16.2
5/24/2022	14.4			17.9					
5/25/2022		24.5	0.899		0.949	0.573	1.29	1.69	14.6

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		1.87
3/2/2016		
4/19/2016		1.69
4/20/2016		
6/7/2016		1.75
8/30/2016		1.77
8/31/2016		
10/18/2016		
10/19/2016		1.8
1/31/2017		1.98
5/2/2017		
5/3/2017		1.97
6/6/2017		
6/7/2017		1.98
9/12/2017		
9/14/2017		2.14
5/1/2018		
5/2/2018		2.13
8/28/2018		
8/29/2018		1.92
11/27/2018		
11/28/2018		1.91
1/8/2019	3.7	
5/29/2019		1.72
7/31/2019		
10/1/2019		1.92
10/2/2019	2.43	
3/31/2020	1.88	1.68
4/1/2020		
9/1/2020	2.13	
9/2/2020		1.8
5/17/2021		1.93
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	2.11	1.97
5/24/2022		
5/25/2022	2.62	1.62

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						1.28	1.11	1.77	1.42
3/1/2016	7.65		36.1		40.3				
4/19/2016						1.19	1.09	1.68	1.31
4/20/2016	7.54		34.5		38.2				
6/6/2016						1.19			1.35
6/7/2016	7.71		34.7				1.16	1.68	
6/8/2016					39.2				
8/30/2016			34.1			1.11	1.08	1.62	1.31
8/31/2016	8.1				38.2				
10/18/2016			33.2			1.04	1.03	1.53	1.22
10/19/2016	8.59				38.7				
1/31/2017	8.78		32.3			1.19	1.23	1.65	1.36
2/1/2017					39.2				
5/2/2017						1.05	1.28	1.58	1.24
5/3/2017	8.85		34.1		39.1				
6/6/2017						0.978	1.25	1.55	1.28
6/7/2017	8.99		34.7		40.3				
9/12/2017									1.47
9/13/2017						1.14	1.6	1.71	
9/14/2017	9.64		34.4		40.7				
5/1/2018							1.58	1.76	1.47
5/2/2018	9.14		32.3		40	1.64			
8/28/2018					40				
8/29/2018			32.6						
11/26/2018									1.52
11/27/2018			32.5			2.01	1.49	1.69	
11/28/2018	9.66				39.7				
1/9/2019		37		27.2					
5/28/2019									1.6
5/29/2019	8.88		31.9			1.85	1.59	1.74	
5/30/2019					38.5				
9/30/2019	9.8		33		39.9				
10/1/2019		18.7		24.2					
10/2/2019						1.55	1.7	1.86	1.7
3/30/2020	10.1	20	32.2	24.5					
3/31/2020					40.1	1.96	1.43	1.92	1.78
9/2/2020	10.4	13.9	31.5	23.3	38				
9/8/2020									1.94
9/9/2020						1.43	1.5	1.97	
5/11/2021			33				1.39	2.06	1.93
5/12/2021						1.34			
5/18/2021	10.2	14.1		26.4	40.5				
10/18/2021								2.1	2.01
10/19/2021						1.17	1.32		
10/26/2021			33.5	25.7					
10/27/2021	10	17.2			40.3				
5/23/2022				24.4					
5/24/2022	10.5	8.84	31.5		38.3				
5/31/2022						1.14	1.24	1.95	2.02

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		19.6		21.7					
3/2/2016	2.18 (O)				22.2		47.3		36.6
4/19/2016	9.01 (O)								
4/20/2016		18.8		20.7	21.7		40.5		35.5
6/8/2016	21	18.6		20.4	22		37.2		43.8
8/30/2016									41.6
8/31/2016	21	18.5		20.3	22.3		38.2		
10/18/2016									39.5
10/19/2016	21.4	18.7		20.3	20.8		39.4		
3/21/2017	25								
3/22/2017		21		27	23		49		46
5/2/2017	26								42
5/3/2017		22		27	25		48		
6/6/2017	27								44
6/7/2017		22		24	23		49		
9/13/2017	24			26	23		42		43
9/14/2017		22							
5/1/2018	25								
5/2/2018		23		23	21		47		39
8/28/2018	25	25							
8/29/2018				25	23		43		44
11/27/2018									43
11/28/2018	26	25		25	23		43		
1/8/2019			21.3			23.1			
5/29/2019	27.6			27.8	24.1		44		50.1
5/30/2019		25.9							
9/30/2019		25.7		25					
10/1/2019	24.6		20		26.1		39.6		44.8
10/2/2019						28			
3/30/2020	24.9								
3/31/2020		26.1	20.7	24.1	23.9	25	44.9		44.7
4/1/2020									
9/1/2020	25.7	25	22.9	23.2	23.4	26.4	39.1		
9/2/2020								51.7	47.2
5/11/2021		27.3							
5/18/2021	25.1		21		25.4	25.5			
5/19/2021				23.1			46.8	64.4	
5/25/2021									52.1
10/26/2021							38.4	47.7	
10/27/2021		27.2	21						42.9
11/1/2021	26.2				27.4	26.1			
11/2/2021				25.1					
5/23/2022				25.1	26.2	25.6			
5/24/2022	28.7	27.7	19.4				43.5		
5/25/2022								59.3	45.3

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		20.9
4/19/2016		19.8
4/20/2016		
6/8/2016		24
8/30/2016		
8/31/2016		28
10/18/2016		
10/19/2016		21.3
3/21/2017		34
3/22/2017		
5/2/2017		33
5/3/2017		
6/6/2017		35
6/7/2017		
9/13/2017		36
9/14/2017		
5/1/2018		42
5/2/2018		
8/28/2018		
8/29/2018		38
11/27/2018		43
11/28/2018		
1/8/2019		
5/29/2019		47.2
5/30/2019		
9/30/2019		
10/1/2019		56.3
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		54.7
9/1/2020		
9/2/2020	178	47
5/11/2021		80
5/18/2021		
5/19/2021		
5/25/2021	210	
10/26/2021	191	85.4
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	184	
5/25/2022		80.7

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		16.6							6.08
4/19/2016		15.7							6.2
6/8/2016		15.1							6.2
8/31/2016		15.9							6.51
10/19/2016		15.3							6.85
3/21/2017		19							7.2
5/2/2017		19							8.3
6/6/2017		19							8.5
9/12/2017									8.6
9/13/2017		21							
5/1/2018		18							7.6
8/28/2018									8.5
8/29/2018		20							
11/27/2018		20							8.8
1/8/2019							42		
3/20/2019						17.6			
5/29/2019		20							8.31
7/31/2019	157			18			16.4		
10/1/2019	195	20.3				20.1	16.8		8.19
10/2/2019				17.7				60.7	
3/30/2020								69.1	
3/31/2020		20.8							8.48
4/1/2020				17.2		12.2			
8/31/2020									8.3
9/1/2020	170			18.2	273	19.8	17.6	69	
9/2/2020		20.8	75.6						
5/17/2021				17.1					
5/18/2021					225			79.5	7.89
5/19/2021		21.4	81.2			19.3			
5/25/2021	180						10.7		
10/25/2021				18.4	111	20.5	10.1		
10/26/2021	196		68.3						
11/1/2021		22.3						79.4	8.16
5/23/2022						18.9			
5/24/2022	212						10.4	95.1	9.21
5/25/2022		20	56.6	16	649				

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
3/21/2017		
5/2/2017		
6/6/2017		
9/12/2017		
9/13/2017		
5/1/2018		
8/28/2018		
8/29/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	33.4	
10/1/2019	44.7	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	23.1	
8/31/2020		
9/1/2020	34.6	27.1
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	36.2	32.4
5/25/2021		
10/25/2021		
10/26/2021	34	
11/1/2021		29.6
5/23/2022	44.1	
5/24/2022		35.4
5/25/2022		

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								7.74	19.7
3/2/2016							8.04		
4/19/2016							7.6	7.66	
4/20/2016									18.9
6/7/2016							7.7	11.3	18.5
8/30/2016								10.8	17.9
8/31/2016							7.7		
10/18/2016									18.2
10/19/2016							7.73	11.1	
3/21/2017							7.2	11	
3/22/2017									22
5/2/2017							8.6	12	
5/3/2017									22
6/6/2017							8.3	12	
6/7/2017									21
9/12/2017							8.5	11	
9/14/2017									21
5/1/2018							7.6	9.2	
5/2/2018									20
8/28/2018							8.2	10	
8/29/2018									21
11/27/2018							8.4	10	21
11/28/2018									
1/8/2019				44.6					
5/29/2019							9.01	8.53	19.7
7/31/2019	60.3	8.03							
10/1/2019	70	6.7					8.05	7.35	19.8
10/2/2019				53					
3/31/2020				47.5			9.07	9.54	19.8
4/1/2020		4.46							
9/1/2020	59.9	6.96	117				8.97	7.82	19.1
9/2/2020				43.7	4.62	3.85			
5/17/2021			134						
5/18/2021							9.52	9.53	
5/24/2021		6.33			4.72	3.48			
5/25/2021	65.4			46					
10/26/2021	54.5	5.64	124	41.6					
11/1/2021							9.76	7.99	
11/2/2021					5.07	3.42			21
5/24/2022	57.1			45.7					
5/25/2022		6.63	106		5.32	3.22	15.2	16.1	20

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		5.77
3/2/2016		
4/19/2016		5.57
4/20/2016		
6/7/2016		5.52
8/30/2016		5.5
8/31/2016		
10/18/2016		
10/19/2016		5.55
3/21/2017		
3/22/2017		6
5/2/2017		
5/3/2017		6.4
6/6/2017		
6/7/2017		5.9
9/12/2017		
9/14/2017		6.5
5/1/2018		
5/2/2018		5.5
8/28/2018		
8/29/2018		5.4
11/27/2018		
11/28/2018		6.2
1/8/2019	20.9	
5/29/2019		6.15
7/31/2019		
10/1/2019		5.99
10/2/2019	25.8	
3/31/2020	25.8	5.94
4/1/2020		
9/1/2020	30.6	
9/2/2020		5.94
5/17/2021		6.26
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	30.5	6.4
5/24/2022		
5/25/2022	22.6	6.63

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						3.59	3.99	3.68	3.5
3/1/2016	11.2		24.5		20.4				
4/19/2016						2.89	4.08	3.72	3.63
4/20/2016	10.8		22.5		22.7				
6/6/2016						3.12			3.6
6/7/2016	10.8		21.6				4.28	3.66	
6/8/2016					25.3				
8/30/2016			21.6			3.91	4.26	3.7	3.54
8/31/2016	10.8				24.4				
10/18/2016			20.2			3.9	4.26	3.77	3.68
10/19/2016	10.8				23				
3/20/2017						3.5	4.1	3.7	4.6
3/22/2017	13		24		26				
5/2/2017						3.5 (D)	5 (D)	4.6 (D)	3.9 (D)
5/3/2017	14		25		26				
6/6/2017						3.1 (D)	3.9 (D)	3.4 (D)	3.4 (D)
6/7/2017	14		24		27				
9/12/2017									4.3
9/13/2017						4	4.3	3.9	
9/14/2017	13		24		24				
5/1/2018							3.7	4.1	3.8
5/2/2018	13		23		22	9.9			
8/28/2018					21				
8/29/2018			25						
11/26/2018									3.6
11/27/2018			27			4.7	3.2	3.5	
11/28/2018	13				23				
1/9/2019		16.9		21.9					
5/28/2019									3.6
5/29/2019	13.3		27.4			5.48	2.93	3.58	
5/30/2019					27.7				
9/30/2019	13.1		25.5		21.7				
10/1/2019		13.2		22.6					
10/2/2019						3.65	2.75	3.64	3.5
3/30/2020	13.3	15.5	22.6	22.7					
3/31/2020					20.6	3.17	2.72	3.47	3.34
9/2/2020	12.9	14.2	22.2	22.6	18.5				
9/8/2020									3.29
9/9/2020						2.92	2.32	3.47	
5/11/2021			21.9				2.16	3.42	3.33
5/12/2021						2.18			
5/18/2021	14.2	19		22.7	18.3				
10/18/2021								3.45	3.32
10/19/2021						2.37	2.08		
10/26/2021			21.7	23.9					
10/27/2021	15.3	18.9			19.1				
5/23/2022				22.1					
5/24/2022	13.2	40.4	25		17.3				
5/31/2022						1.93	2.17	3.39	3.31

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.00102		0.00213 (J)					
3/2/2016	0.00591 (J)				0.0042 (J)		0.00656 (J)		0.00552 (J)
4/19/2016	0.0077 (J)								
4/20/2016		<0.00102		0.00214 (J)	0.0034 (J)		0.00661 (J)		0.00572 (J)
6/8/2016	0.00264 (J)	<0.00102		0.00205 (J)	0.00308 (J)		0.0067 (J)		0.00492 (J)
8/30/2016									0.00534 (J)
8/31/2016	0.00246 (J)	<0.00102		0.00221 (J)	0.0032 (J)		0.00693 (J)		
10/18/2016									0.00556 (J)
10/19/2016	0.00248 (J)	<0.00102		0.00213 (J)	0.0035 (J)		0.00732 (J)		
1/31/2017	0.00556 (J)						0.00699 (J)		0.00514 (J)
2/1/2017		<0.00102		0.00228 (J)	0.00371 (J)				
5/2/2017	0.00269 (J)								0.00524 (J)
5/3/2017		<0.00102		0.00229 (J)	0.00369 (J)		0.00712 (J)		
6/6/2017	0.00295 (J)								0.00541 (J)
6/7/2017		<0.00102		0.00233 (J)	0.00372 (J)		0.00752 (J)		
1/22/2018							0.00729 (J)		
1/23/2018		<0.00102		0.00248 (J)	0.00605 (J)				0.00573 (J)
1/24/2018	0.00278 (J)								
5/1/2018	0.00435 (J)								
5/2/2018		<0.00102		0.00273 (J)	0.00351 (J)		0.00642 (J)		0.00534 (J)
11/27/2018									0.00523 (J)
11/28/2018	0.0036 (J)	<0.00102		0.0023 (J)	0.00353 (J)		0.0068 (J)		
1/8/2019			<0.00102			0.0021 (J)			
5/29/2019	0.00223 (J)			0.00211 (J)	0.00333 (J)		0.00727 (J)		0.00455 (J)
5/30/2019		<0.00102							
9/30/2019		<0.00102		0.00228 (J)					
10/1/2019	0.00236 (J)		<0.00102		0.00325 (J)		0.00764 (J)		0.00508 (J)
10/2/2019						<0.00102			
3/30/2020	0.00415 (J)								
3/31/2020		<0.00102	<0.00102	0.00358 (J)	0.0056 (J)	<0.00102	0.00955 (J)		0.00463 (J)
4/1/2020									
9/1/2020	0.00242 (J)	<0.00102	<0.00102	0.00259 (J)	0.00332 (J)	<0.00102	0.00888 (J)		
9/2/2020								0.00525 (J)	0.00482 (J)
5/11/2021		0.000685 (J)							
5/18/2021	0.00294		0.000684 (J)		0.00377	0.00112			
5/19/2021				0.00301			0.00692	0.00416	
5/25/2021									0.00365
10/26/2021							0.00755	0.00606	
10/27/2021		0.00072 (J)	0.00068 (J)						0.00401
11/1/2021	0.00244				0.00423	0.00086 (J)			
11/2/2021				0.00348					
5/23/2022				0.00474	0.00374	0.00081 (J)			
5/24/2022	0.00238	0.00052 (J)	0.00049 (J)				0.00685		
5/25/2022								0.00488	0.00345

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.00102
4/19/2016		<0.00102
4/20/2016		
6/8/2016		<0.00102
8/30/2016		
8/31/2016		<0.00102
10/18/2016		
10/19/2016		<0.00102
1/31/2017		<0.00102
2/1/2017		
5/2/2017		<0.00102
5/3/2017		
6/6/2017		<0.00102
6/7/2017		
1/22/2018		<0.00102
1/23/2018		
1/24/2018		
5/1/2018		<0.00102
5/2/2018		
11/27/2018		<0.00102
11/28/2018		
1/8/2019		
5/29/2019		<0.00102
5/30/2019		
9/30/2019		
10/1/2019		<0.00102
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.00102
9/1/2020		
9/2/2020	<0.00102	<0.00102
5/11/2021		0.000581 (J)
5/18/2021		
5/19/2021		
5/25/2021	0.00113	
10/26/2021	0.00098 (J)	0.00052 (J)
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	0.0006 (J)	
5/25/2022		0.00049 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.00102							<0.00102
4/19/2016		<0.00102							<0.00102
6/8/2016		<0.00102							<0.00102
8/31/2016		0.00215 (J)							<0.00102
10/19/2016		<0.00102							<0.00102
1/31/2017		<0.00102							<0.00102
5/2/2017		<0.00102							<0.00102
6/6/2017		<0.00102							<0.00102
1/23/2018		0.00253 (J)							
1/24/2018									<0.00102
5/1/2018		<0.00102							<0.00102
11/27/2018		<0.00102							<0.00102
1/8/2019								<0.00102	
3/20/2019						0.00236 (J)			
5/29/2019		<0.00102							<0.00102
7/31/2019	<0.00102			<0.00102			<0.00102		
10/1/2019	<0.00102	<0.00102				<0.00102	<0.00102		<0.00102
10/2/2019				<0.00102				<0.00102	
3/30/2020								<0.00102	
3/31/2020		<0.00102							<0.00102
4/1/2020				<0.00102		<0.00102			
8/31/2020									<0.00102
9/1/2020	<0.00102			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
9/2/2020		<0.00102	<0.00102						
5/17/2021				0.000627 (J)					
5/18/2021					0.000973 (J)			0.000447 (J)	0.000394 (J)
5/19/2021		0.00162	0.000385 (J)			0.00132			
5/25/2021	0.000258 (J)						0.000391 (J)		
10/25/2021				0.0006 (J)	0.00062 (J)	0.00134	0.00044 (J)		
10/26/2021	0.00026 (J)		0.0004 (J)						
11/1/2021		0.0018						0.00045 (J)	0.00029 (J)
5/23/2022						0.00133			
5/24/2022	0.00023 (J)						0.00042 (J)	0.00038 (J)	<0.00102
5/25/2022		0.00135	<0.00102	0.00033 (J)	0.00048 (J)				

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	0.00209 (J)	
10/1/2019	0.0025 (J)	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.00102	
8/31/2020		
9/1/2020	0.00283 (J)	<0.00102
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.00284	0.000669 (J)
5/25/2021		
10/25/2021		
10/26/2021	0.00261	
11/1/2021		0.00061 (J)
5/23/2022	0.00233	
5/24/2022		0.00046 (J)
5/25/2022		

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.00102	<0.00102
3/2/2016							<0.00102		
4/19/2016							<0.00102	<0.00102	
4/20/2016									<0.00102
6/7/2016							<0.00102	<0.00102	<0.00102
8/30/2016								<0.00102	<0.00102
8/31/2016							<0.00102		
10/18/2016									<0.00102
10/19/2016							<0.00102	<0.00102	
1/31/2017							<0.00102	<0.00102	<0.00102
5/2/2017							<0.00102	<0.00102	
5/3/2017									<0.00102
6/6/2017							<0.00102	<0.00102	
6/7/2017									<0.00102
1/24/2018							<0.00102	<0.00102	<0.00102
5/1/2018							<0.00102	<0.00102	
5/2/2018									<0.00102
11/27/2018							<0.00102	<0.00102	<0.00102
11/28/2018									
1/8/2019				<0.00102					
5/29/2019							<0.00102	<0.00102	<0.00102
7/31/2019	<0.00102	<0.00102							
10/1/2019	<0.00102	<0.00102					<0.00102	<0.00102	<0.00102
10/2/2019				<0.00102					
3/31/2020				<0.00102			<0.00102	<0.00102	<0.00102
4/1/2020		<0.00102							
9/1/2020	<0.00102	<0.00102	0.00284 (J)				<0.00102	<0.00102	<0.00102
9/2/2020				<0.00102	<0.00102	<0.00102			
5/17/2021			0.00163						
5/18/2021							0.000919 (J)	0.000544 (J)	
5/24/2021		0.000814 (J)			0.00117	0.00119			
5/25/2021	0.000667 (J)			0.000878 (J)					
10/26/2021	0.00062 (J)	0.0007 (J)	0.00061 (J)	0.00104					
11/1/2021							0.00093 (J)	0.00067 (J)	
11/2/2021					0.00098 (J)	0.0013			0.00101 (J)
5/24/2022	0.00057 (J)			0.00081 (J)					
5/25/2022		0.00051 (J)	0.00046 (J)		0.00103	0.00126	0.00104	0.00026 (J)	0.00103

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.00102
3/2/2016		
4/19/2016		<0.00102
4/20/2016		
6/7/2016		<0.00102
8/30/2016		<0.00102
8/31/2016		
10/18/2016		
10/19/2016		<0.00102
1/31/2017		<0.00102
5/2/2017		
5/3/2017		<0.00102
6/6/2017		
6/7/2017		<0.00102
1/24/2018		<0.00102
5/1/2018		
5/2/2018		<0.00102
11/27/2018		
11/28/2018		<0.00102
1/8/2019	<0.00102	
5/29/2019		<0.00102
7/31/2019		
10/1/2019		<0.00102
10/2/2019	<0.00102	
3/31/2020	<0.00102	<0.00102
4/1/2020		
9/1/2020	<0.00102	
9/2/2020		<0.00102
5/17/2021		0.000313 (J)
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	0.00099 (J)	0.00023 (J)
5/24/2022		
5/25/2022	0.00048 (J)	0.00029 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.00102	<0.00102	<0.00102	<0.00102
3/1/2016	<0.00102		<0.00102		<0.00102				
4/19/2016						<0.00102	<0.00102	<0.00102	<0.00102
4/20/2016	<0.00102		<0.00102		<0.00102				
6/6/2016						<0.00102			<0.00102
6/7/2016	<0.00102		<0.00102				<0.00102	<0.00102	
6/8/2016					<0.00102				
8/30/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
8/31/2016	<0.00102				<0.00102				
10/18/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
10/19/2016	<0.00102				<0.00102				
1/31/2017	<0.00102		<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
2/1/2017					<0.00102				
5/2/2017						<0.00102	<0.00102	<0.00102	<0.00102
5/3/2017	<0.00102		<0.00102		<0.00102				
6/6/2017						<0.00102	<0.00102	<0.00102	<0.00102
6/7/2017	<0.00102		<0.00102		<0.00102				
1/23/2018					<0.00102	<0.00102	0.00596 (J)	0.00229 (J)	<0.00102
1/24/2018	<0.00102		<0.00102						
5/1/2018							<0.00102	<0.00102	<0.00102
5/2/2018	0.00328 (J)		<0.00102		<0.00102	<0.00102			
11/26/2018									<0.00102
11/27/2018			<0.00102			<0.00102	<0.00102	<0.00102	
11/28/2018	<0.00102				<0.00102				
1/9/2019		<0.00102		<0.00102					
5/28/2019									<0.00102
5/29/2019	<0.00102		<0.00102			<0.00102	<0.00102	<0.00102	
5/30/2019					<0.00102				
9/30/2019	<0.00102		<0.00102		<0.00102				
10/1/2019		<0.00102		<0.00102					
10/2/2019						<0.00102	<0.00102	<0.00102	<0.00102
3/30/2020	<0.00102	<0.00102	<0.00102	<0.00102					
3/31/2020					<0.00102	<0.00102	<0.00102	<0.00102	0.00604 (J)
9/2/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102				
9/8/2020									<0.00102
9/9/2020						<0.00102	<0.00102	<0.00102	
5/11/2021			0.00156				0.00136	0.00146	0.00159
5/12/2021						0.000296 (J)			
5/18/2021	0.00709	0.000463 (J)		0.00129	0.00078 (J)				
10/18/2021								0.0013	0.00146
10/19/2021						0.0003 (J)	0.00135		
10/26/2021			0.00165	0.00124					
10/27/2021	0.00309	0.00052 (J)			0.00087 (J)				
5/23/2022				0.00124					
5/24/2022	0.00058 (J)	0.00023 (J)	0.00128		0.0007 (J)				
5/31/2022						0.00033 (J)	0.0012	0.00139	0.00156

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.0002		<0.0002					
3/2/2016	<0.0002				0.00235 (J)		<0.0002		<0.0002
4/19/2016	<0.0002								
4/20/2016		<0.0002		<0.0002	0.00212 (J)		<0.0002		<0.0002
6/8/2016	<0.0002	<0.0002		<0.0002	0.00276 (J)		<0.0002		<0.0002
8/30/2016									<0.0002
8/31/2016	<0.0002	<0.0002		<0.0002	0.00261 (J)		<0.0002		
10/18/2016									<0.0002
10/19/2016	<0.0002	<0.0002		<0.0002	0.00256 (J)		<0.0002		
1/31/2017	<0.0002						<0.0002		<0.0002
2/1/2017		<0.0002		<0.0002	0.00231 (J)				
5/2/2017	<0.0002								<0.0002
5/3/2017		<0.0002		<0.0002	0.00279 (J)		<0.0002		
6/6/2017	<0.0002								<0.0002
6/7/2017		<0.0002		<0.0002	0.00262 (J)		<0.0002		
1/22/2018							<0.0002		
1/23/2018		<0.0002		<0.0002	0.00248 (J)				<0.0002
1/24/2018	<0.0002								
5/1/2018	<0.0002								
5/2/2018		<0.0002		<0.0002	0.00271 (J)		<0.0002		<0.0002
11/27/2018									<0.0002
11/28/2018	<0.0002	<0.0002		<0.0002	0.00274 (J)		<0.0002		
1/8/2019			<0.0002			<0.0002			
5/29/2019	<0.0002			<0.0002	0.00358 (J)		<0.0002		<0.0002
5/30/2019		<0.0002							
9/30/2019		<0.0002		<0.0002					
10/1/2019	<0.0002		<0.0002		0.00303 (J)		<0.0002		<0.0002
10/2/2019						<0.0002			
3/30/2020	<0.0002								
3/31/2020		<0.0002	<0.0002	<0.0002	0.00364 (J)	<0.0002	<0.0002		<0.0002
4/1/2020									
9/1/2020	<0.0002	<0.0002	<0.0002	<0.0002	0.0031 (J)	<0.0002	<0.0002		
9/2/2020								<0.0002	<0.0002
5/11/2021		0.000636							
5/18/2021	0.000996		0.000648		0.00336	0.00237			
5/19/2021				0.00257			0.00113	0.000827	
5/25/2021									0.00124
10/26/2021							0.00122	0.00114	
10/27/2021		0.00065	0.00061						0.00125
11/1/2021	0.00091				0.0037	0.00231			
11/2/2021				0.00118					
5/23/2022				0.00118	0.00428	0.00255			
5/24/2022	0.00091	0.00054	0.00062				0.00189		
5/25/2022								0.00119	0.00125

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		0.0279
4/19/2016		0.0269
4/20/2016		
6/8/2016		0.0293
8/30/2016		
8/31/2016		0.0272
10/18/2016		
10/19/2016		0.0285
1/31/2017		0.025
2/1/2017		
5/2/2017		0.0274
5/3/2017		
6/6/2017		0.0285
6/7/2017		
1/22/2018		0.0273
1/23/2018		
1/24/2018		
5/1/2018		0.0298
5/2/2018		
11/27/2018		0.0311
11/28/2018		
1/8/2019		
5/29/2019		0.0343
5/30/2019		
9/30/2019		
10/1/2019		0.0336
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		0.0344
9/1/2020		
9/2/2020	0.00444 (J)	0.0385
5/11/2021		0.0349
5/18/2021		
5/19/2021		
5/25/2021	0.00271	
10/26/2021	0.00419	0.0347
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	0.00327	
5/25/2022		0.0364

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		0.0212							0.00842 (J)
4/19/2016		0.018							0.008 (J)
6/8/2016		0.0176							0.00796 (J)
8/31/2016		0.0134							0.00752 (J)
10/19/2016		0.0193							0.00778 (J)
1/31/2017		0.017							0.00647 (J)
5/2/2017		0.0166							0.00686 (J)
6/6/2017		0.0172							0.00694 (J)
1/23/2018		0.00621 (J)							
1/24/2018									0.00592 (J)
5/1/2018		0.0189							0.00693 (J)
11/27/2018		0.0182							0.0066
1/8/2019								0.00911	
3/20/2019						<0.0002			
5/29/2019		0.0206							0.00745
7/31/2019	0.0632			<0.0002			<0.0002		
10/1/2019	0.0629	0.0107				<0.0002	<0.0002		0.00696
10/2/2019				0.0033 (J)				0.00289 (J)	
3/30/2020								<0.0002	
3/31/2020		0.0199							0.00716
4/1/2020				<0.0002		0.013			
8/31/2020									0.00751
9/1/2020	0.0665			0.00258 (J)	0.022	<0.0002	<0.0002	0.00407 (J)	
9/2/2020		0.0192	0.0163						
5/17/2021				0.0013					
5/18/2021					0.0197			0.00483	0.00746
5/19/2021		0.0182	0.0153			0.00109			
5/25/2021	0.0694						0.00294		
10/25/2021				0.00371	0.00915	0.00101	0.00501		
10/26/2021	0.0757		0.0159						
11/1/2021		0.0139						0.00578	0.00706
5/23/2022						0.00108			
5/24/2022	0.0764						0.00513	0.00765	0.00582
5/25/2022		0.0155	0.0139	0.0013	0.0685				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	0.00433 (J)	
10/1/2019	0.00431 (J)	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	0.00541	
8/31/2020		
9/1/2020	0.0046 (J)	0.012
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.00426	0.0173
5/25/2021		
10/25/2021		
10/26/2021	0.00447	
11/1/2021		0.0236
5/23/2022	0.00423	
5/24/2022		0.0264
5/25/2022		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.0002	<0.0002
3/2/2016							<0.0002		
4/19/2016							<0.0002	<0.0002	
4/20/2016									<0.0002
6/7/2016							<0.0002	0.00424 (J)	<0.0002
8/30/2016								0.00262 (J)	<0.0002
8/31/2016							<0.0002		
10/18/2016									<0.0002
10/19/2016							<0.0002	0.00469 (J)	
1/31/2017							<0.0002	0.0127 (O)	<0.0002
5/2/2017							<0.0002	0.00891 (J)	
5/3/2017									<0.0002
6/6/2017							<0.0002	0.00217 (J)	
6/7/2017									<0.0002
1/24/2018							<0.0002	<0.0002	<0.0002
5/1/2018							<0.0002	0.0126 (O)	
5/2/2018									<0.0002
11/27/2018							<0.0002	0.00363 (J)	<0.0002
11/28/2018									
1/8/2019				0.00243 (J)					
5/29/2019							<0.0002	0.00549	<0.0002
7/31/2019	0.00233 (J)	0.0031 (J)							
10/1/2019	0.00268 (J)	0.00201 (J)					<0.0002	<0.0002	<0.0002
10/2/2019				0.00513					
3/31/2020				0.00528			<0.0002	0.0205	<0.0002
4/1/2020		0.0206							
9/1/2020	0.00294 (J)	0.0273	<0.0002				<0.0002	0.00657	<0.0002
9/2/2020				0.0061	0.00246 (J)	<0.0002			
5/17/2021			0.000217						
5/18/2021							0.000196 (J)	0.018	
5/24/2021		0.00682			0.00156	0.000422			
5/25/2021	0.00264			0.00542					
10/26/2021	0.00285	0.00495	<0.0002	0.00591					
11/1/2021							0.00016 (J)	0.00478	
11/2/2021					0.00146	0.00037			0.00197
5/24/2022	0.0027			0.00571					
5/25/2022		0.002	<0.0002		0.00132	0.00028	0.00028	0.00455	0.00184

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.0002
3/2/2016		
4/19/2016		<0.0002
4/20/2016		
6/7/2016		<0.0002
8/30/2016		<0.0002
8/31/2016		
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
5/2/2017		
5/3/2017		<0.0002
6/6/2017		
6/7/2017		<0.0002
1/24/2018		<0.0002
5/1/2018		
5/2/2018		<0.0002
11/27/2018		
11/28/2018		<0.0002
1/8/2019	<0.0002	
5/29/2019		<0.0002
7/31/2019		
10/1/2019		<0.0002
10/2/2019	<0.0002	
3/31/2020	<0.0002	<0.0002
4/1/2020		
9/1/2020	<0.0002	
9/2/2020		<0.0002
5/17/2021		0.000678
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	0.00013 (J)	0.0006
5/24/2022		
5/25/2022	0.00106	0.00098

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						0.0035 (J)	<0.0002	<0.0002	<0.0002
3/1/2016	0.011		<0.0002		<0.0002				
4/19/2016						0.0038 (J)	<0.0002	<0.0002	<0.0002
4/20/2016	0.0148		<0.0002		<0.0002				
6/6/2016						0.00427 (J)			<0.0002
6/7/2016	0.0172		<0.0002				<0.0002	<0.0002	
6/8/2016					<0.0002				
8/30/2016			<0.0002			0.00348 (J)	<0.0002	<0.0002	<0.0002
8/31/2016	0.0175				<0.0002				
10/18/2016			<0.0002			0.00338 (J)	<0.0002	<0.0002	<0.0002
10/19/2016	0.0189				<0.0002				
1/31/2017	0.0165		<0.0002			0.00308 (J)	<0.0002	<0.0002	<0.0002
2/1/2017					<0.0002				
5/2/2017						0.00314 (J)	<0.0002	<0.0002	<0.0002
5/3/2017	0.0172		<0.0002		<0.0002				
6/6/2017						0.0036 (J)	<0.0002	<0.0002	<0.0002
6/7/2017	0.0173		<0.0002		<0.0002				
1/23/2018					<0.0002	0.00586 (J)	0.0021 (J)	<0.0002	<0.0002
1/24/2018	0.0158		<0.0002						
5/1/2018							<0.0002	<0.0002	<0.0002
5/2/2018	0.0169		<0.0002		<0.0002	0.00702 (J)			
11/26/2018									<0.0002
11/27/2018			<0.0002			0.0157		<0.0002	
11/28/2018	0.0178				<0.0002				
1/9/2019		<0.0002		<0.0002					
5/28/2019									<0.0002
5/29/2019	0.0197		<0.0002			0.0109	0.00248 (J)	<0.0002	
5/30/2019					<0.0002				
9/30/2019	0.0186		<0.0002		<0.0002				
10/1/2019		<0.0002		<0.0002					
10/2/2019						0.0129	0.00244 (J)	<0.0002	<0.0002
3/30/2020	0.0172	<0.0002	<0.0002	<0.0002					
3/31/2020					<0.0002	0.0123	0.00224 (J)	<0.0002	<0.0002
9/2/2020	0.0197	<0.0002	<0.0002	<0.0002	<0.0002				
9/8/2020									<0.0002
9/9/2020						0.00697	0.00219 (J)	<0.0002	
5/11/2021			0.000778				0.00194	0.00142	0.00137
5/12/2021						0.00611			
5/18/2021	0.0189	0.000139 (J)		0.000882	0.000725				
10/18/2021								0.00146	0.00139
10/19/2021						0.00517	0.00192		
10/26/2021			0.00079	0.00088					
10/27/2021	0.0206	0.00013 (J)			0.0007				
5/23/2022				0.00092					
5/24/2022	0.023	0.00011 (J)	0.00067		0.00069				
5/31/2022						0.00487	0.00194	0.00149	0.0015

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<3		<3					
3/2/2016	<3				<3		<3		<3
4/19/2016	3.0268								
4/20/2016		<3		0.667	<3		0.398		<3
6/7/2016					1.08		0.812		
6/8/2016	1.59	1.06		0.704					0.631
8/30/2016									0.693
8/31/2016	2.19	0.871		0.726	0.528		0.46 (U)		
10/18/2016									0.626
10/19/2016		1.575 (D)		0.737	0.81		0.601		
1/31/2017	1.23						1.1		0.0723 (U)
2/1/2017		1		0.766	1.11				
5/2/2017	1.62								0.363 (U)
5/3/2017		1.07		0.515	0.639		0.832		
6/6/2017	1.24								0.198 (U)
6/7/2017		0.254 (U)		1.04	0.705		0.752		
1/22/2018							0.898 (U)		
1/23/2018		0.795 (U)		1.17 (U)	1.1 (U)				0.294 (U)
1/24/2018	1.96 (U)								
5/1/2018	1.6								
5/2/2018		0.405		0.505	1.11		0.752		0.522
11/27/2018									0.576
11/28/2018	1.48	0.609		0.232 (U)	0.846		0.523		
1/8/2019			1.35			1.04			
5/29/2019	2.25			0.726	2.06		1.01		0.437 (U)
5/30/2019		0.0949 (U)							
9/30/2019		0.965		0.489 (U)					
10/1/2019	2.84		1.99		0.984		1.07		1.11
10/2/2019						0.896			
3/30/2020	2.31								
3/31/2020		1.14	0.957	0.462 (U)	1.26	0.923	0.725		0.941
4/1/2020									
6/17/2020								1.22	
5/11/2021		1.12 (U)							
5/18/2021	2.99		1.66		1.11	1.31			
5/19/2021				1.15			1.15	0.783 (U)	
5/25/2021									0.978 (U)
10/26/2021							1.74	1.6	
10/27/2021		1.2 (U)	1.44 (U)						0.587 (U)
11/1/2021	2.22				1.79	0.814 (U)			
11/2/2021				0.504 (U)					
5/23/2022				0.452 (U)	1.4	0.962 (U)			
5/24/2022	2.12	1.36 (U)	1.2				0.915 (U)		
5/25/2022								0.951 (U)	1.25

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<3
4/19/2016		<3
4/20/2016		
6/7/2016		
6/8/2016		0.557
8/30/2016		
8/31/2016		0.765
10/18/2016		
10/19/2016		0.654
1/31/2017		0.402 (U)
2/1/2017		
5/2/2017		0.578
5/3/2017		
6/6/2017		0.128 (U)
6/7/2017		
1/22/2018		0.768 (U)
1/23/2018		
1/24/2018		
5/1/2018		0.651
5/2/2018		
11/27/2018		0.764
11/28/2018		
1/8/2019		
5/29/2019		0.433
5/30/2019		
9/30/2019		
10/1/2019		0.988
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		0.527
6/17/2020	0.726	
5/11/2021		0.684 (U)
5/18/2021		
5/19/2021		
5/25/2021	0.859 (U)	
10/26/2021	1.34 (U)	1.95
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	1.26	
5/25/2022		1.3

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<3							<3
4/19/2016		<3							<3
6/8/2016		0.344 (U)							0.121 (U)
8/31/2016		0.582							0.348 (U)
10/19/2016		0.448							0.48
1/31/2017		0.653							0.00333 (U)
5/2/2017		0.698							0.4 (U)
6/6/2017		0.548							0.083 (U)
1/23/2018		0.98 (U)							
1/24/2018									0.404 (U)
5/1/2018		0.623							0.457
11/27/2018		0.744							0.359 (U)
1/8/2019								1.06	
5/29/2019		2.51							1.18
7/31/2019	1.09 (D)			0.621 (D)			0.272 (UD)		
10/1/2019	1.51	0.443 (U)				0.6	0.817		0.284 (U)
10/2/2019				1.14				1.03	
3/30/2020								0.579	
3/31/2020		0.341 (U)							0.699
4/1/2020				0.797		1.05			
5/12/2020	1.67						0.691		
6/16/2020			0.642		2.17				
6/17/2020									
5/17/2021				1.64					
5/18/2021					1.05 (U)			0.814 (U)	0.72 (U)
5/19/2021		0.321 (U)	0.496 (U)			0.971 (U)			
5/25/2021	1.72						1.04 (U)		
10/25/2021				1.57	1.04 (U)	1.2	1.03 (U)		
10/26/2021	2.53		0.773 (U)						
11/1/2021		1.28						1.3 (U)	0.523 (U)
5/23/2022						1.03 (U)			
5/24/2022	1.85						1.06 (U)	2	0.732 (U)
5/25/2022		0.927 (U)	1.03 (U)	1.71	5.37				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
5/29/2019		
7/31/2019	0.268 (UD)	
10/1/2019	1.22	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	0.968	
5/12/2020		
6/16/2020		
6/17/2020		0.767
5/17/2021		
5/18/2021		
5/19/2021	1.03 (U)	1.43
5/25/2021		
10/25/2021		
10/26/2021	1.28 (U)	
11/1/2021		1.48
5/23/2022	0.657 (U)	
5/24/2022		0.97 (U)
5/25/2022		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<3	<3
3/2/2016							<3		
4/19/2016							<3	<3	
4/20/2016									3.0801
6/7/2016							0.455	0.287 (U)	1.5
8/30/2016								0.585	1.17
8/31/2016							0.329 (U)		
10/18/2016									1.93
10/19/2016							0.536	1.85	
1/31/2017							0.496	0.25 (U)	1
5/2/2017							0.149 (U)	0.391 (U)	
5/3/2017									1.48
6/6/2017							0.191 (U)	0.183 (U)	
6/7/2017									0.915
1/24/2018							0.543 (U)	0.622 (U)	1.74 (U)
5/1/2018							0.372 (U)	0.0917 (U)	
5/2/2018									0.58
11/27/2018							0.591	0.695	1.43
11/28/2018									
1/8/2019				1.49					
5/29/2019							2.31	0.947	2.16
7/31/2019	0.448 (D)	0.331 (UD)							
10/1/2019	0.508	1.05					1.52	0.7	2.14
10/2/2019				1.24					
3/31/2020				0.577			0.478 (U)	0.323 (U)	0.754
4/1/2020		0.618							
5/12/2020	0.61								
6/16/2020			0.752 (U)						
6/17/2020					0.554	0.479			
5/17/2021			0.374 (U)						
5/18/2021							0.749 (U)	0.734 (U)	
5/24/2021		1.1 (U)			0.545 (U)	0.531 (U)			
5/25/2021	1.26			0.695 (U)					
10/26/2021	1.52	1.13 (U)	0.285 (U)	0.987 (U)					
11/1/2021							0.688 (U)	0.888 (U)	
11/2/2021					0.707 (U)	1.05 (U)			2.06
5/24/2022	0.656 (U)			1.08 (U)					
5/25/2022		0.674 (U)	0.285 (U)		0.682 (U)	0.527 (U)	1.72	0.821 (U)	1.71

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<3
3/2/2016		
4/19/2016		<3
4/20/2016		
6/7/2016		0.353 (U)
8/30/2016		0.428 (U)
8/31/2016		
10/18/2016		
10/19/2016		0.449 (U)
1/31/2017		-0.0173 (U)
5/2/2017		
5/3/2017		0.447
6/6/2017		
6/7/2017		0.572
1/24/2018		1.09 (U)
5/1/2018		
5/2/2018		0.187 (U)
11/27/2018		
11/28/2018		0.478 (U)
1/8/2019	0.298 (U)	
5/29/2019		-0.276 (U)
7/31/2019		
10/1/2019		0.742
10/2/2019	0.206 (U)	
3/31/2020	0.024 (U)	0.291 (U)
4/1/2020		
5/12/2020		
6/16/2020		
6/17/2020		
5/17/2021		1.84
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	0.158 (U)	0.773 (U)
5/24/2022		
5/25/2022	1.03 (U)	1.06 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						2.8971 (U)	3 (U)	3 (U)	2.1138
3/1/2016	<3		<3		<3				
4/19/2016						3 (U)	3 (U)	3 (U)	3 (U)
4/20/2016	<3		<3		<3				
6/6/2016						0.841			0.757
6/7/2016	0.555 (U)		0.853				0.652	0.342 (U)	
6/8/2016					0.837				
8/30/2016			0.669			1.74	0.411 (U)	0.702	0.992
8/31/2016	0.284 (U)				0.917				
10/18/2016			1.32			1.47	1	0.791	0.905
10/19/2016	0.557 (U)				1.41				
1/31/2017	0.0949 (U)		0.801			0.952	0.398 (U)	0.0613 (U)	1.08
2/1/2017					0.785				
5/2/2017						0.768	0.66	0.974	1.18
5/3/2017	0.53		0.648		1.33				
6/6/2017						1.04	0.639	0.748	1.1
6/7/2017	-0.231 (U)		0.408 (U)		0.758				
1/23/2018					1.06 (U)	0.513 (U)	0.669 (U)	0.558 (U)	1.32 (U)
1/24/2018	0.691 (U)		0.706 (U)						
5/1/2018							1.06	0.296 (U)	1.19
5/2/2018	0.535		0.572		0.983	0.916			
11/26/2018									0.863
11/27/2018			0.687			1.37	0.636	0.357 (U)	
11/28/2018	0.62				0.747				
1/9/2019		0.527		1.69					
5/28/2019									0.474 (U)
5/29/2019	0.244 (U)		0.627 (U)			1.57	0.579 (U)	0.275 (U)	
5/30/2019					1.08				
9/30/2019	0.388 (U)		0.321 (U)		0.58				
10/1/2019		1.01		1.66					
10/2/2019						0.905	1.33	0.458 (U)	0.624 (U)
3/30/2020	0.744	0.604	0.6	0.787					
3/31/2020					0.82	1.77	0.814	0.941	1.09
5/11/2021			0.648 (U)				0.945 (U)	0.521 (U)	0.969 (U)
5/12/2021						0.639 (U)			
5/18/2021	0.597 (U)	0.199 (U)		0.975 (U)	0.98 (U)				
10/18/2021								1.75	2.19
10/19/2021						1.77	1.85		
10/26/2021			1.61	1.61					
10/27/2021	1.46 (U)	0.914 (U)			1.07 (U)				
5/23/2022				1.13					
5/24/2022	1.05 (U)	0.619 (U)	0.733 (U)		2.11				
5/31/2022						1.34	1.38	1.67	1.47

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		0.02 (J)		0.06 (J)					
3/2/2016	0.03 (J)				0.04 (J)		0.05 (J)		0.07 (J)
4/19/2016	0.052 (J)								
4/20/2016		0.034 (J)		0.073 (J)	0.059 (J)		0.064 (J)		0.076 (J)
6/8/2016	0.069 (J)	0.061 (J)		0.085 (J)	0.08 (J)		0.082 (J)		0.105 (J)
8/30/2016									0.083 (J)
8/31/2016	0.043 (J)	0.04 (J)		0.064 (J)	0.059 (J)		0.062 (J)		
10/18/2016									0.067 (J)
10/19/2016	<0.125	0.03 (J)		0.05 (J)	0.045 (J)		0.049 (J)		
3/21/2017	0.04 (J)								
3/22/2017		<0.125		0.05 (J)	0.04 (J)		0.05 (J)		0.06 (J)
5/2/2017	0.05 (J)								0.08 (J)
5/3/2017		0.04 (J)		0.06 (J)	0.06 (J)		0.06 (J)		
6/6/2017	0.049 (J)								0.077 (J)
6/7/2017		0.04 (J)		0.06 (J)	0.06 (J)		0.07 (J)		
9/13/2017	<0.125 (U*)			<0.125 (U*)	<0.125 (U*)		<0.125 (U*)		<0.125 (U*)
9/14/2017		0.04 (J)							
1/22/2018							0.06 (J)		
1/23/2018		<0.125		0.06 (J)	0.05 (J)				0.08 (J)
1/24/2018	0.05 (J)								
5/1/2018	0.05 (J)								
5/2/2018		<0.125		0.06 (J)	0.06 (J)		0.07 (J)		0.08 (J)
11/27/2018									0.06 (J)
11/28/2018	<0.125	<0.125		0.05 (J)	0.04 (J)		0.05 (J)		
1/8/2019			0.123			0.0729 (J)			
5/29/2019	0.0858 (J)			0.0759 (J)	0.0677 (J)		0.0679 (J)		0.0781 (J)
5/30/2019		0.0573 (J)							
9/30/2019		<0.125		0.0733 (J)					
10/1/2019	0.0744 (J)		0.0517 (J)		0.0682 (J)		0.0703 (J)		0.0885 (J)
10/2/2019						0.12			
3/30/2020	0.0726 (J)								
3/31/2020		<0.125	<0.125	0.078 (J)	0.0755 (J)	0.0828 (J)	0.0665 (J)		0.0867 (J)
4/1/2020									
9/1/2020	0.194	0.0794 (J)	0.0695 (J)	0.0841 (J)	0.0845 (J)	0.0947 (J)	0.0757 (J)		
9/2/2020								0.0864 (J)	0.0957 (J)
5/11/2021		0.105							
5/18/2021	0.0884 (J)		<0.125		0.0614 (J)	0.0783 (J)			
5/19/2021				0.0994 (J)			0.0748 (J)	0.0884 (J)	
5/25/2021									0.0957 (J)
10/26/2021							0.0641 (J)	0.096 (J)	
10/27/2021		<0.125	<0.125						0.0651 (J)
11/1/2021	0.181				0.0928 (J)	0.123			
11/2/2021				0.101					
5/23/2022				0.0709 (J)	0.0873 (J)	<0.125			
5/24/2022	0.0801 (J)	<0.125 (D)	<0.125				0.0769 (J)		
5/25/2022								<0.125	0.0733 (J)

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		0.18 (J)
4/19/2016		0.21 (J)
4/20/2016		
6/8/2016		0.223 (J)
8/30/2016		
8/31/2016		0.196 (J)
10/18/2016		
10/19/2016		0.166 (J)
3/21/2017		0.18
3/22/2017		
5/2/2017		0.18
5/3/2017		
6/6/2017		0.18
6/7/2017		
9/13/2017		<0.125 (U*)
9/14/2017		
1/22/2018		0.19
1/23/2018		
1/24/2018		
5/1/2018		0.19
5/2/2018		
11/27/2018		0.18
11/28/2018		
1/8/2019		
5/29/2019		0.168
5/30/2019		
9/30/2019		
10/1/2019		0.185
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		0.187
9/1/2020		
9/2/2020	0.359	0.18
5/11/2021		0.214
5/18/2021		
5/19/2021		
5/25/2021	0.378	
10/26/2021	0.384	0.171
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	0.291	
5/25/2022		0.214

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		0.04 (J)							0.04 (J)
4/19/2016		0.05 (J)							0.038 (J)
6/8/2016		0.073 (J)							0.067 (J)
8/31/2016		0.051 (J)							0.05 (J)
10/19/2016		<0.125							<0.125
3/21/2017		0.04 (J)							<0.125
5/2/2017		0.05 (J)							0.04 (J)
6/6/2017		0.053 (J)							0.04 (J)
9/12/2017									0.037 (J)
9/13/2017		<0.125 (U*)							
1/23/2018		0.05 (J)							
1/24/2018									<0.125
5/1/2018		0.05 (J)							<0.125
11/27/2018		<0.125							<0.125
1/8/2019								0.0548 (J)	
3/20/2019						0.215			
5/29/2019		0.0683 (J)							<0.125
7/31/2019	0.0515 (J)			0.178			0.153		
10/1/2019	0.0931 (J)	0.0774 (J)				0.071 (J)	0.0712 (J)		<0.125
10/2/2019				0.254				0.0595 (J)	
3/30/2020								<0.125	
3/31/2020		0.0602 (J)							<0.125
4/1/2020				0.151		0.0722 (J)			
8/31/2020									<0.125
9/1/2020	0.0624 (J)			0.196	0.144	0.0784 (J)	0.0752 (J)	<0.125	
9/2/2020		<0.125	<0.125						
5/17/2021				0.148					
5/18/2021					0.16			<0.125	<0.125
5/19/2021		0.0793 (J)	<0.125			0.0886 (J)			
5/25/2021	<0.125						0.0673 (J)		
10/25/2021				0.162	0.172	0.11	<0.125		
10/26/2021	0.0808 (J)		<0.125						
11/1/2021		0.0887 (J)						<0.125	<0.125
5/23/2022						0.0857 (J)			
5/24/2022	<0.125 (D)						<0.125	<0.125	<0.125
5/25/2022		<0.125	<0.125	0.138	0.0799 (J)				

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
3/21/2017		
5/2/2017		
6/6/2017		
9/12/2017		
9/13/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	0.0934 (J)	
10/1/2019	0.0838 (J)	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	0.0793 (J)	
8/31/2020		
9/1/2020	0.0954 (J)	0.106
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.0852 (J)	0.123
5/25/2021		
10/25/2021		
10/26/2021	0.114	
11/1/2021		0.14
5/23/2022	0.124 (J)	
5/24/2022		0.0811 (J)
5/25/2022		

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								0.02 (J)	0.04 (J)
3/2/2016							0.01 (J)		
4/19/2016							0.014 (J)	0.016 (J)	
4/20/2016									0.043 (J)
6/7/2016							0.049 (J)	0.047 (J)	0.075 (J)
8/30/2016								0.035 (J)	0.057 (J)
8/31/2016							0.034 (J)		
10/18/2016									0.049 (J)
10/19/2016							0.023 (J)	0.025 (J)	
3/21/2017							<0.125	<0.125	
3/22/2017									0.04 (J)
5/2/2017							<0.125	<0.125	
5/3/2017									0.05 (J)
6/6/2017							<0.125	<0.125	
6/7/2017									0.05 (J)
9/12/2017							<0.125	<0.125	
9/14/2017									0.06 (J)
1/24/2018							<0.125	<0.125	0.05 (J)
5/1/2018							<0.125	<0.125	
5/2/2018									0.05 (J)
11/27/2018							<0.125	<0.125	<0.125
11/28/2018									
1/8/2019				0.147					
5/29/2019							<0.125	<0.125	0.0923 (J)
7/31/2019	0.257	0.0766 (J)							
10/1/2019	0.268	0.0804 (J)					<0.125	<0.125	0.0557 (J)
10/2/2019				0.183					
3/31/2020				0.148			<0.125	<0.125	0.0735 (J)
4/1/2020		0.0607 (J)							
9/1/2020	0.301	0.0919 (J)	0.401				<0.125	<0.125	0.0921 (J)
9/2/2020				0.158	<0.125	<0.125			
5/17/2021			0.379						
5/18/2021							<0.125	<0.125	
5/24/2021		0.0734 (J)			<0.125	<0.125			
5/25/2021	0.282			0.156					
10/26/2021	0.323	0.0709 (J)	0.445	0.158					
11/1/2021							<0.125	<0.125	
11/2/2021					<0.125	<0.125			0.0964 (J)
5/24/2022	0.318			0.135					
5/25/2022		<0.125	0.385		<0.125	<0.125	<0.125	<0.125	<0.125

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.125
3/2/2016		
4/19/2016		0.016 (J)
4/20/2016		
6/7/2016		0.048 (J)
8/30/2016		0.034 (J)
8/31/2016		
10/18/2016		
10/19/2016		0.023 (J)
3/21/2017		
3/22/2017		<0.125
5/2/2017		
5/3/2017		<0.125
6/6/2017		
6/7/2017		<0.125
9/12/2017		
9/14/2017		<0.125
1/24/2018		<0.125
5/1/2018		
5/2/2018		<0.125
11/27/2018		
11/28/2018		<0.125
1/8/2019	<0.125	
5/29/2019		<0.125
7/31/2019		
10/1/2019		<0.125
10/2/2019	0.0777 (J)	
3/31/2020	<0.125	<0.125
4/1/2020		
9/1/2020	0.0807 (J)	
9/2/2020		<0.125
5/17/2021		<0.125
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	0.0627 (J)	<0.125
5/24/2022		
5/25/2022	<0.125	<0.125

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						0.03 (J)	0.02 (J)	0.02 (J)	0.02 (J)
3/1/2016	0.06 (J)		0.03 (J)		0.04 (J)				
4/19/2016						0.023 (J)	0.021 (J)	0.016 (J)	0.015 (J)
4/20/2016	0.078 (J)		0.043 (J)		0.052 (J)				
6/6/2016						0.062 (J)			0.05 (J)
6/7/2016	0.101 (J)		0.069 (J)				0.06 (J)	0.052 (J)	
6/8/2016					0.077 (J)				
8/30/2016			0.052 (J)			0.053 (J)	0.05 (J)	0.038 (J)	0.036 (J)
8/31/2016	0.086 (J)				0.056 (J)				
10/18/2016			0.042 (J)			0.042 (J)	0.04 (J)	0.03 (J)	0.025 (J)
10/19/2016	0.075 (J)				0.045 (J)				
3/20/2017						<0.125	<0.125	<0.125	<0.125
3/22/2017	0.06 (J)		<0.125		0.05 (J)				
5/2/2017						0.04 (JD)	0.04 (JD)	0.075 (D)	0.075 (D)
5/3/2017	0.08 (J)		0.05 (J)		0.06 (J)				
6/6/2017						0.075 (D)	0.04 (JD)	0.075 (D)	0.075 (D)
6/7/2017	0.08 (J)		0.05 (J)		0.06 (J)				
9/12/2017									<0.125
9/13/2017						0.04 (J)	0.043 (J)	<0.125	
9/14/2017	0.07 (J)		0.05 (J)		0.07 (J)				
1/23/2018					0.06 (J)	<0.125	0.04 (J)	<0.125	<0.125
1/24/2018	0.09 (J)		0.04 (J)						
5/1/2018							0.04 (J)	<0.125	<0.125
5/2/2018	0.08 (J)		0.04 (J)		0.05 (J)	0.04 (J)			
11/26/2018									<0.125
11/27/2018			<0.125			<0.125	<0.125	<0.125	
11/28/2018	0.07 (J)				0.04 (J)				
1/9/2019		0.139		0.0831 (J)					
5/28/2019									<0.125
5/29/2019	0.0937 (J)		0.0958 (J)			0.0502 (J)	<0.125	<0.125	
5/30/2019					0.0763 (J)				
9/30/2019	0.0925 (J)		0.0559 (J)		0.0679 (J)				
10/1/2019		0.0871 (J)		0.0832 (J)					
10/2/2019						<0.125	<0.125	<0.125	<0.125
3/30/2020	0.0933 (J)	0.127	0.0701 (J)	0.0935 (J)					
3/31/2020					0.0655 (J)	<0.125	<0.125	<0.125	<0.125
9/2/2020	0.109	0.126	<0.125	0.098 (J)	0.0804 (J)				
9/8/2020									<0.125
9/9/2020						<0.125	<0.125	<0.125	
5/11/2021			0.094 (J)				<0.125	<0.125	<0.125
5/12/2021						<0.125			
5/18/2021	0.11	0.112		0.0958 (J)	0.0709 (J)				
10/18/2021								<0.125	<0.125
10/19/2021						<0.125	<0.125		
10/26/2021			<0.125	0.107					
10/27/2021	0.0823 (J)	0.0795 (J)			0.0803 (J)				
5/23/2022				0.108 (J)					
5/24/2022	0.0724 (J)	0.0869 (J)	0.0713 (J)		<0.125				
5/31/2022						<0.125	<0.125	<0.125	<0.125

Time Series

Constituent: Lead (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.0002		<0.0002					
3/2/2016	<0.0002				<0.0002		<0.0002		<0.0002
4/19/2016	<0.0002								
4/20/2016		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
6/8/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
8/30/2016									<0.0002
8/31/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
10/18/2016									<0.0002
10/19/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/31/2017	<0.0002						<0.0002		<0.0002
2/1/2017		<0.0002		<0.0002	<0.0002				
5/2/2017	<0.0002								<0.0002
5/3/2017		<0.0002		<0.0002	<0.0002		<0.0002		
6/6/2017	<0.0002								<0.0002
6/7/2017		<0.0002		<0.0002	<0.0002		<0.0002		
1/22/2018							<0.0002		
1/23/2018		<0.0002		<0.0002	<0.0002				<0.0002
1/24/2018	<0.0002								
5/1/2018	<0.0002								
5/2/2018		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
11/27/2018									<0.0002
11/28/2018	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/8/2019			<0.0002			<0.0002			
5/29/2019	<0.0002			<0.0002	<0.0002		<0.0002		<0.0002
5/30/2019		<0.0002							
9/30/2019		<0.0002		<0.0002					
10/1/2019	<0.0002		<0.0002		<0.0002		<0.0002		<0.0002
10/2/2019						<0.0002			
3/30/2020	<0.0002								
3/31/2020		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
4/1/2020									
9/1/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
9/2/2020								<0.0002	<0.0002
5/11/2021		<0.0002							
5/18/2021	<0.0002		<0.0002		0.000326	8.16E-05 (J)			
5/19/2021				0.000102 (J)			<0.0002	<0.0002	
5/25/2021									7.64E-05 (J)
10/26/2021							<0.0002	<0.0002	
10/27/2021		<0.0002	<0.0002						9E-05 (J)
11/1/2021	<0.0002				0.00029	<0.0002			
11/2/2021				0.00013 (J)					
5/23/2022				9E-05 (J)	0.00018 (J)	<0.0002			
5/24/2022	<0.0002	<0.0002	<0.0002				0.00015 (J)		
5/25/2022								<0.0002	0.0001 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.0002
4/19/2016		<0.0002
4/20/2016		
6/8/2016		<0.0002
8/30/2016		
8/31/2016		<0.0002
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
2/1/2017		
5/2/2017		<0.0002
5/3/2017		
6/6/2017		<0.0002
6/7/2017		
1/22/2018		<0.0002
1/23/2018		
1/24/2018		
5/1/2018		<0.0002
5/2/2018		
11/27/2018		<0.0002
11/28/2018		
1/8/2019		
5/29/2019		<0.0002
5/30/2019		
9/30/2019		
10/1/2019		<0.0002
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.0002
9/1/2020		
9/2/2020	<0.0002	<0.0002
5/11/2021		<0.0002
5/18/2021		
5/19/2021		
5/25/2021	7.24E-05 (J)	
10/26/2021	<0.0002	<0.0002
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.0002	
5/25/2022		<0.0002

Time Series

Constituent: Lead (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.0002							<0.0002
4/19/2016		<0.0002							<0.0002
6/8/2016		<0.0002							<0.0002
8/31/2016		<0.0002							<0.0002
10/19/2016		<0.0002							<0.0002
1/31/2017		<0.0002							<0.0002
5/2/2017		<0.0002							<0.0002
6/6/2017		<0.0002							<0.0002
1/23/2018		<0.0002							<0.0002
1/24/2018									<0.0002
5/1/2018		<0.0002							<0.0002
11/27/2018		<0.0002							<0.0002
1/8/2019								<0.0002	
3/20/2019						<0.0002			
5/29/2019		<0.0002							<0.0002
7/31/2019	<0.0002			<0.0002			<0.0002		
10/1/2019	<0.0002	<0.0002				<0.0002	<0.0002		<0.0002
10/2/2019				<0.0002				<0.0002	
3/30/2020								<0.0002	
3/31/2020		<0.0002							<0.0002
4/1/2020				<0.0002		<0.0002			
8/31/2020									<0.0002
9/1/2020	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/2/2020		<0.0002	<0.0002						
5/17/2021				9.09E-05 (J)					
5/18/2021					0.000137 (J)			<0.0002	<0.0002
5/19/2021		0.000191 (J)	<0.0002			<0.0002			
5/25/2021	<0.0002						<0.0002		
10/25/2021				<0.0002	<0.0002	<0.0002	<0.0002		
10/26/2021	<0.0002		<0.0002						
11/1/2021		<0.0002						<0.0002	<0.0002
5/23/2022						<0.0002			
5/24/2022	0.00011 (J)						<0.0002	<0.0002	<0.0002
5/25/2022		<0.0002	<0.0002	<0.0002	7E-05 (J)				

Time Series

Constituent: Lead (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.0002	
10/1/2019	<0.0002	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.0002	
8/31/2020		
9/1/2020	<0.0002	<0.0002
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.000224	<0.0002
5/25/2021		
10/25/2021		
10/26/2021	<0.0002	
11/1/2021		<0.0002
5/23/2022	<0.0002	
5/24/2022		<0.0002
5/25/2022		

Time Series

Constituent: Lead (mg/L) Analysis Run 7/21/2022 3:45 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.0002	<0.0002
3/2/2016							<0.0002		
4/19/2016							<0.0002	<0.0002	
4/20/2016									<0.0002
6/7/2016							<0.0002	<0.0002	<0.0002
8/30/2016								<0.0002	<0.0002
8/31/2016							<0.0002		
10/18/2016									<0.0002
10/19/2016							<0.0002	<0.0002	
1/31/2017							<0.0002	<0.0002	<0.0002
5/2/2017							<0.0002	<0.0002	
5/3/2017									<0.0002
6/6/2017							<0.0002	<0.0002	
6/7/2017									<0.0002
1/24/2018							<0.0002	<0.0002	<0.0002
5/1/2018							<0.0002	<0.0002	
5/2/2018									<0.0002
11/27/2018							<0.0002	<0.0002	<0.0002
11/28/2018									
1/8/2019				<0.0002					
5/29/2019							<0.0002	<0.0002	<0.0002
7/31/2019	<0.0002	<0.0002							
10/1/2019	<0.0002	<0.0002					<0.0002	<0.0002	<0.0002
10/2/2019				<0.0002					
3/31/2020				<0.0002			<0.0002	<0.0002	<0.0002
4/1/2020		<0.0002							
9/1/2020	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002	<0.0002
9/2/2020				<0.0002	<0.0002	<0.0002			
5/17/2021			0.000216						
5/18/2021							<0.0002	0.00013 (J)	
5/24/2021		<0.0002			<0.0002	<0.0002			
5/25/2021	<0.0002			<0.0002					
10/26/2021	<0.0002	<0.0002	0.0001 (J)	<0.0002					
11/1/2021							<0.0002	7E-05 (J)	
11/2/2021					<0.0002	<0.0002			<0.0002
5/24/2022	<0.0002			<0.0002					
5/25/2022		<0.0002	0.00012 (J)		<0.0002	<0.0002	<0.0002	0.00018 (J)	<0.0002

Time Series

Constituent: Lead (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.0002
3/2/2016		
4/19/2016		<0.0002
4/20/2016		
6/7/2016		<0.0002
8/30/2016		<0.0002
8/31/2016		
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
5/2/2017		
5/3/2017		<0.0002
6/6/2017		
6/7/2017		<0.0002
1/24/2018		<0.0002
5/1/2018		
5/2/2018		<0.0002
11/27/2018		
11/28/2018		<0.0002
1/8/2019	<0.0002	
5/29/2019		0.00185 (J)
7/31/2019		
10/1/2019		0.00545
10/2/2019	<0.0002	
3/31/2020	<0.0002	0.00276 (J)
4/1/2020		
9/1/2020	<0.0002	
9/2/2020		0.00171 (J)
5/17/2021		0.00162
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.0002	0.00336
5/24/2022		
5/25/2022	<0.0002	0.0112

Time Series

Constituent: Lead (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.0002	<0.0002	<0.0002	<0.0002
3/1/2016	<0.0002		<0.0002		<0.0002				
4/19/2016						<0.0002	<0.0002	<0.0002	<0.0002
4/20/2016	<0.0002		<0.0002		<0.0002				
6/6/2016						<0.0002			<0.0002
6/7/2016	<0.0002		<0.0002				<0.0002	<0.0002	
6/8/2016					<0.0002				
8/30/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
8/31/2016	<0.0002				<0.0002				
10/18/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
10/19/2016	<0.0002				<0.0002				
1/31/2017	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
2/1/2017					<0.0002				
5/2/2017						<0.0002	<0.0002	<0.0002	<0.0002
5/3/2017	<0.0002		<0.0002		<0.0002				
6/6/2017						<0.0002	<0.0002	<0.0002	<0.0002
6/7/2017	<0.0002		<0.0002		<0.0002				
1/23/2018					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/24/2018	<0.0002		<0.0002						
5/1/2018							<0.0002	<0.0002	<0.0002
5/2/2018	<0.0002		<0.0002		<0.0002	<0.0002			
11/26/2018									<0.0002
11/27/2018			<0.0002			<0.0002	<0.0002	<0.0002	
11/28/2018	<0.0002				<0.0002				
1/9/2019		<0.0002		<0.0002					
5/28/2019									<0.0002
5/29/2019	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	
5/30/2019					0.00108 (J)				
9/30/2019	<0.0002		<0.0002		<0.0002				
10/1/2019		<0.0002		<0.0002					
10/2/2019						<0.0002	<0.0002	<0.0002	<0.0002
3/30/2020	<0.0002	<0.0002	<0.0002	<0.0002					
3/31/2020					<0.0002	<0.0002	<0.0002	<0.0002	0.00126 (J)
9/2/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				
9/8/2020									<0.0002
9/9/2020						<0.0002	<0.0002	<0.0002	
5/11/2021			<0.0002				0.000118 (J)	<0.0002	0.000159 (J)
5/12/2021						9.79E-05 (J)			
5/18/2021	<0.0002	<0.0002		<0.0002	<0.0002				
10/18/2021								<0.0002	0.00012 (J)
10/19/2021						0.00012 (J)	0.0001 (J)		
10/26/2021			<0.0002	<0.0002					
10/27/2021	<0.0002	<0.0002			<0.0002				
5/23/2022				<0.0002					
5/24/2022	<0.0002	<0.0002	<0.0002		<0.0002				
5/31/2022						8E-05 (J)	8E-05 (J)	<0.0002	0.00017 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.02		<0.02					
3/2/2016	<0.02				<0.02		<0.02		<0.02
4/19/2016	<0.02								
4/20/2016		<0.02		<0.02	<0.02		<0.02		<0.02
6/8/2016	<0.02	<0.02		<0.02	<0.02		<0.02		<0.02
8/30/2016									<0.02
8/31/2016	<0.02	<0.02		<0.02	<0.02		<0.02		
10/18/2016									<0.02
10/19/2016	<0.02	<0.02		<0.02	<0.02		<0.02		
1/31/2017	<0.02						<0.02		<0.02
2/1/2017		<0.02		<0.02	<0.02				
5/2/2017	<0.02								<0.02
5/3/2017		<0.02		<0.02	<0.02		<0.02		
6/6/2017	<0.02								<0.02
6/7/2017		<0.02		<0.02	<0.02		<0.02		
1/22/2018							<0.02		
1/23/2018		<0.02		<0.02	<0.02				<0.02
1/24/2018	<0.02								
5/1/2018	<0.02								
5/2/2018		<0.02		0.0384 (J)	<0.02		<0.02		<0.02
11/27/2018									<0.02
11/28/2018	<0.02	<0.02		0.0262	<0.02		<0.02		
1/8/2019			0.0313			0.0148 (J)			
5/29/2019	<0.02			0.0321	<0.02		<0.02		<0.02
5/30/2019		<0.02							
9/30/2019		<0.02		0.0228					
10/1/2019	<0.02		<0.02		<0.02		<0.02		<0.02
10/2/2019						<0.02			
3/30/2020	<0.02								
3/31/2020		<0.02	<0.02	0.022	<0.02	<0.02	<0.02		<0.02
4/1/2020									
9/1/2020	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
9/2/2020								<0.02	<0.02
5/11/2021		<0.02							
5/18/2021	<0.02		<0.02		<0.02	<0.02			
5/19/2021				0.00754 (J)			<0.02	<0.02	
5/25/2021									<0.02
10/26/2021							<0.02	0.0484	
10/27/2021		<0.02	<0.02						<0.02
11/1/2021	<0.02				<0.02	<0.02			
11/2/2021				<0.02					
5/23/2022				0.0269	<0.02	<0.02			
5/24/2022	<0.02	<0.02	<0.02				<0.02		
5/25/2022								0.0318	<0.02

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.02
4/19/2016		<0.02
4/20/2016		
6/8/2016		<0.02
8/30/2016		
8/31/2016		<0.02
10/18/2016		
10/19/2016		<0.02
1/31/2017		<0.02
2/1/2017		
5/2/2017		<0.02
5/3/2017		
6/6/2017		<0.02
6/7/2017		
1/22/2018		<0.02
1/23/2018		
1/24/2018		
5/1/2018		<0.02
5/2/2018		
11/27/2018		0.0169 (J)
11/28/2018		
1/8/2019		
5/29/2019		0.0254
5/30/2019		
9/30/2019		
10/1/2019		0.0248
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		0.0174 (J)
9/1/2020		
9/2/2020	<0.02	<0.02
5/11/2021		0.00788 (J)
5/18/2021		
5/19/2021		
5/25/2021	<0.02	
10/26/2021	<0.02	0.0117 (J)
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.02	
5/25/2022		0.0118 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.02							<0.02
4/19/2016		<0.02							<0.02
6/8/2016		<0.02							<0.02
8/31/2016		<0.02							<0.02
10/19/2016		<0.02							<0.02
1/31/2017		<0.02							<0.02
5/2/2017		<0.02							<0.02
6/6/2017		<0.02							<0.02
1/23/2018		<0.02							<0.02
1/24/2018									<0.02
5/1/2018		<0.02							<0.02
11/27/2018		<0.02							<0.02
1/8/2019								0.0219	
3/20/2019						<0.02			
5/29/2019		<0.02							<0.02
7/31/2019	<0.02			<0.02			<0.02		
10/1/2019	<0.02	<0.02				<0.02	<0.02		<0.02
10/2/2019				<0.02				<0.02	
3/30/2020								<0.02	
3/31/2020		<0.02							<0.02
4/1/2020				<0.02		<0.02			
8/31/2020									<0.02
9/1/2020	<0.02			<0.02	<0.02	<0.02	<0.02	<0.02	
9/2/2020		<0.02	<0.02						
5/17/2021				<0.02					
5/18/2021					<0.02			<0.02	<0.02
5/19/2021		<0.02	<0.02			<0.02			
5/25/2021	<0.02						<0.02		
10/25/2021				<0.02	<0.02	<0.02	<0.02		
10/26/2021	<0.02		<0.02						
11/1/2021		<0.02						<0.02	<0.02
5/23/2022						<0.02			
5/24/2022	<0.02						<0.02	<0.02	<0.02
5/25/2022		<0.02	<0.02	<0.02	<0.02				

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.02	
10/1/2019	<0.02	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.02	
8/31/2020		
9/1/2020	<0.02	<0.02
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	<0.02	<0.02
5/25/2021		
10/25/2021		
10/26/2021	<0.02	
11/1/2021		<0.02
5/23/2022	<0.02	
5/24/2022		<0.02
5/25/2022		

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.02	<0.02
3/2/2016							<0.02		
4/19/2016							<0.02	<0.02	
4/20/2016									<0.02
6/7/2016							<0.02	<0.02	<0.02
8/30/2016								<0.02	<0.02
8/31/2016							<0.02		
10/18/2016									<0.02
10/19/2016							<0.02	<0.02	
1/31/2017							<0.02	<0.02	<0.02
5/2/2017							<0.02	<0.02	
5/3/2017									<0.02
6/6/2017							<0.02	<0.02	
6/7/2017									<0.02
1/24/2018							<0.02	<0.02	<0.02
5/1/2018							<0.02	<0.02	
5/2/2018									<0.02
11/27/2018							<0.02	<0.02	<0.02
11/28/2018									
1/8/2019				0.0183 (J)					
5/29/2019							<0.02	<0.02	<0.02
7/31/2019	<0.02	<0.02							
10/1/2019	<0.02	<0.02					<0.02	<0.02	<0.02
10/2/2019				<0.02					
3/31/2020				<0.02			<0.02	<0.02	<0.02
4/1/2020		<0.02							
9/1/2020	<0.02	<0.02	<0.02				<0.02	<0.02	<0.02
9/2/2020				<0.02	<0.02	<0.02			
5/17/2021			<0.02						
5/18/2021							<0.02	<0.02	
5/24/2021		<0.02			<0.02	<0.02			
5/25/2021	<0.02			<0.02					
10/26/2021	<0.02	<0.02	<0.02	<0.02					
11/1/2021							<0.02	<0.02	
11/2/2021					<0.02	<0.02			<0.02
5/24/2022	<0.02			<0.02					
5/25/2022		<0.02	<0.02		<0.02	<0.02	<0.02	<0.02	<0.02

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.02
3/2/2016		
4/19/2016		<0.02
4/20/2016		
6/7/2016		<0.02
8/30/2016		<0.02
8/31/2016		
10/18/2016		
10/19/2016		<0.02
1/31/2017		<0.02
5/2/2017		
5/3/2017		<0.02
6/6/2017		
6/7/2017		<0.02
1/24/2018		<0.02
5/1/2018		
5/2/2018		<0.02
11/27/2018		
11/28/2018		<0.02
1/8/2019	<0.02	
5/29/2019		<0.02
7/31/2019		
10/1/2019		<0.02
10/2/2019	<0.02	
3/31/2020	<0.02	<0.02
4/1/2020		
9/1/2020	<0.02	
9/2/2020		<0.02
5/17/2021		<0.02
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.02	<0.02
5/24/2022		
5/25/2022	<0.02	<0.02

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.02	<0.02	<0.02	<0.02
3/1/2016	<0.02		<0.02		<0.02				
4/19/2016						<0.02	<0.02	<0.02	<0.02
4/20/2016	<0.02		<0.02		<0.02				
6/6/2016						<0.02			<0.02
6/7/2016	<0.02		<0.02				<0.02	<0.02	
6/8/2016					<0.02				
8/30/2016			<0.02			<0.02	<0.02	<0.02	<0.02
8/31/2016	<0.02				<0.02				
10/18/2016			<0.02			<0.02	<0.02	<0.02	<0.02
10/19/2016	<0.02				<0.02				
1/31/2017	<0.02		<0.02			<0.02	<0.02	<0.02	<0.02
2/1/2017					<0.02				
5/2/2017						<0.02	<0.02	<0.02	<0.02
5/3/2017	<0.02		<0.02		<0.02				
6/6/2017						<0.02	<0.02	<0.02	<0.02
6/7/2017	<0.02		<0.02		<0.02				
1/23/2018					<0.02	<0.02	<0.02	<0.02	<0.02
1/24/2018	<0.02		<0.02						
5/1/2018							<0.02	<0.02	<0.02
5/2/2018	0.0108 (J)		<0.02		<0.02	<0.02			
11/26/2018									<0.02
11/27/2018			<0.02			<0.02	<0.02	<0.02	
11/28/2018	<0.02				<0.02				
1/9/2019		0.0662		0.0217					
5/28/2019									<0.02
5/29/2019	<0.02		<0.02			<0.02	<0.02	<0.02	
5/30/2019					<0.02				
9/30/2019	<0.02		<0.02		<0.02				
10/1/2019		<0.02		<0.02					
10/2/2019						<0.02	<0.02	<0.02	<0.02
12/2/2019		<0.02							
3/30/2020	0.0102 (J)	<0.02	<0.02	<0.02					
3/31/2020					<0.02	<0.02	<0.02	<0.02	<0.02
9/2/2020	<0.02	<0.02	<0.02	<0.02	<0.02				
9/8/2020									<0.02
9/9/2020						<0.02	<0.02	<0.02	
5/11/2021			<0.02				<0.02	<0.02	<0.02
5/12/2021						<0.02			
5/18/2021	0.0882	<0.02		<0.02	<0.02				
10/18/2021								<0.02	<0.02
10/19/2021						<0.02	<0.02		
10/26/2021			<0.02	<0.02					
10/27/2021	<0.02	0.00746 (J)			<0.02				
5/23/2022				<0.02					
5/24/2022	<0.02	<0.02	<0.02		<0.02				
5/31/2022						<0.02	<0.02	<0.02	<0.02

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.0005		<0.0005					
3/2/2016	<0.0005				<0.0005		<0.0005		<0.0005
4/19/2016	<0.0005								
4/20/2016		<0.0005		<0.0005	<0.0005		<0.0005		<0.0005
6/8/2016	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005		<0.0005
8/30/2016									<0.0005
8/31/2016	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005		
10/18/2016									<0.0005
10/19/2016	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005		
1/31/2017	<0.0005						<0.0005		<0.0005
2/1/2017		<0.0005		<0.0005	<0.0005				
5/2/2017	<0.0005								<0.0005
5/3/2017		<0.0005		<0.0005	<0.0005		<0.0005		
6/6/2017	<0.0005								<0.0005
6/7/2017		<0.0005		<0.0005	<0.0005		<0.0005		
1/22/2018							<0.0005		
1/23/2018		<0.0005		<0.0005	<0.0005				<0.0005
1/24/2018	<0.0005								
5/1/2018	<0.0005								
5/2/2018		<0.0005		<0.0005	<0.0005		<0.0005		<0.0005
11/27/2018									<0.0005
11/28/2018	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005		
1/8/2019			<0.0005			<0.0005			
5/29/2019	<0.0005			<0.0005	<0.0005		<0.0005		<0.0005
5/30/2019		<0.0005							
7/31/2019		<0.0005							
9/30/2019		<0.0005		<0.0005					
10/1/2019	<0.0005		<0.0005		<0.0005		<0.0005		<0.0005
10/2/2019						<0.0005			
3/30/2020	<0.0005								
3/31/2020		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
4/1/2020									
9/1/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
9/2/2020								<0.0005	<0.0005
5/11/2021		<0.0005							
5/18/2021	<0.0005		<0.0005		<0.0005	<0.0005			
5/19/2021				<0.0005			<0.0005	<0.0005	
5/25/2021									<0.0005
10/26/2021							<0.0005	<0.0005	
10/27/2021		<0.0005	<0.0005						<0.0005
11/1/2021	<0.0005				<0.0005	<0.0005			
11/2/2021				<0.0005					
5/23/2022				<0.0005	<0.0005	<0.0005			
5/24/2022	<0.0005	<0.0005	<0.0005				<0.0005		
5/25/2022								<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.0005
4/19/2016		<0.0005
4/20/2016		
6/8/2016		<0.0005
8/30/2016		
8/31/2016		<0.0005
10/18/2016		
10/19/2016		<0.0005
1/31/2017		<0.0005
2/1/2017		
5/2/2017		<0.0005
5/3/2017		
6/6/2017		<0.0005
6/7/2017		
1/22/2018		<0.0005
1/23/2018		
1/24/2018		
5/1/2018		<0.0005
5/2/2018		
11/27/2018		<0.0005
11/28/2018		
1/8/2019		
5/29/2019		<0.0005
5/30/2019		
7/31/2019		
9/30/2019		
10/1/2019		<0.0005
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.0005
9/1/2020		
9/2/2020	<0.0005	<0.0005
5/11/2021		<0.0005
5/18/2021		
5/19/2021		
5/25/2021	<0.0005	
10/26/2021	<0.0005	<0.0005
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.0005	
5/25/2022		<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.0005							<0.0005
4/19/2016		<0.0005							<0.0005
6/8/2016		<0.0005							<0.0005
8/31/2016		<0.0005							<0.0005
10/19/2016		<0.0005							<0.0005
1/31/2017		<0.0005							<0.0005
5/2/2017		<0.0005							<0.0005
6/6/2017		<0.0005							<0.0005
1/23/2018		<0.0005							<0.0005
1/24/2018									<0.0005
5/1/2018		<0.0005							<0.0005
11/27/2018		<0.0005							<0.0005
1/8/2019								<0.0005	
3/20/2019						<0.0005			
5/29/2019		<0.0005							<0.0005
7/31/2019	<0.0005			<0.0005			<0.0005		
10/1/2019	<0.0005	<0.0005				<0.0005	<0.0005		<0.0005
10/2/2019				<0.0005				<0.0005	
3/30/2020								<0.0005	
3/31/2020		<0.0005							<0.0005
4/1/2020				<0.0005		<0.0005			
8/31/2020									<0.0005
9/1/2020	<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/2/2020		<0.0005	<0.0005						
5/17/2021				<0.0005					
5/18/2021					<0.0005			<0.0005	<0.0005
5/19/2021		<0.0005	<0.0005			<0.0005			
5/25/2021	<0.0005						<0.0005		
10/25/2021				<0.0005	<0.0005	<0.0005	<0.0005		
10/26/2021	<0.0005		<0.0005						
11/1/2021		<0.0005						<0.0005	<0.0005
5/23/2022						<0.0005			
5/24/2022	<0.0005						<0.0005	<0.0005	<0.0005
5/25/2022		<0.0005	<0.0005	<0.0005	<0.0005				

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.0005	
10/1/2019	<0.0005	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.0005	
8/31/2020		
9/1/2020	<0.0005	<0.0005
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	<0.0005	<0.0005
5/25/2021		
10/25/2021		
10/26/2021	<0.0005	
11/1/2021		<0.0005
5/23/2022	<0.0005	
5/24/2022		<0.0005
5/25/2022		

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.0005	<0.0005
3/2/2016							<0.0005		
4/19/2016							<0.0005	<0.0005	
4/20/2016									<0.0005
6/7/2016							<0.0005	<0.0005	<0.0005
8/30/2016								<0.0005	<0.0005
8/31/2016							<0.0005		
10/18/2016									<0.0005
10/19/2016							<0.0005	<0.0005	
1/31/2017							<0.0005	<0.0005	<0.0005
5/2/2017							<0.0005	<0.0005	
5/3/2017									<0.0005
6/6/2017							<0.0005	<0.0005	
6/7/2017									<0.0005
1/24/2018							<0.0005	<0.0005	<0.0005
5/1/2018							<0.0005	<0.0005	
5/2/2018									<0.0005
11/27/2018							<0.0005	<0.0005	<0.0005
11/28/2018									
1/8/2019				<0.0005					
5/29/2019							<0.0005	<0.0005	<0.0005
7/31/2019	<0.0005	<0.0005							
10/1/2019	<0.0005	<0.0005					<0.0005	<0.0005	<0.0005
10/2/2019				<0.0005					
3/31/2020				<0.0005			<0.0005	<0.0005	<0.0005
4/1/2020		<0.0005							
9/1/2020	<0.0005	<0.0005	<0.0005				<0.0005	<0.0005	<0.0005
9/2/2020				<0.0005	<0.0005	<0.0005			
5/17/2021			<0.0005						
5/18/2021							<0.0005	<0.0005	
5/24/2021		<0.0005			<0.0005	<0.0005			
5/25/2021	<0.0005			<0.0005					
10/26/2021	<0.0005	<0.0005	<0.0005	<0.0005					
11/1/2021							<0.0005	<0.0005	
11/2/2021					<0.0005	<0.0005			<0.0005
5/24/2022	<0.0005			<0.0005					
5/25/2022		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.0005
3/2/2016		
4/19/2016		<0.0005
4/20/2016		
6/7/2016		<0.0005
8/30/2016		<0.0005
8/31/2016		
10/18/2016		
10/19/2016		<0.0005
1/31/2017		<0.0005
5/2/2017		
5/3/2017		<0.0005
6/6/2017		
6/7/2017		<0.0005
1/24/2018		<0.0005
5/1/2018		
5/2/2018		<0.0005
11/27/2018		
11/28/2018		<0.0005
1/8/2019	<0.0005	
5/29/2019		<0.0005
7/31/2019		
10/1/2019		<0.0005
10/2/2019	<0.0005	
3/31/2020	<0.0005	<0.0005
4/1/2020		
9/1/2020	<0.0005	
9/2/2020		<0.0005
5/17/2021		<0.0005
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.0005	<0.0005
5/24/2022		
5/25/2022	<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.0005	<0.0005	<0.0005	<0.0005
3/1/2016	<0.0005		<0.0005		<0.0005				
4/19/2016						<0.0005	<0.0005	<0.0005	<0.0005
4/20/2016	<0.0005		<0.0005		<0.0005				
6/6/2016						<0.0005			<0.0005
6/7/2016	<0.0005		<0.0005				<0.0005	<0.0005	
6/8/2016					<0.0005				
8/30/2016			<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
8/31/2016	<0.0005				<0.0005				
10/18/2016			<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
10/19/2016	<0.0005				<0.0005				
1/31/2017	<0.0005		<0.0005			<0.0005	<0.0005	<0.0005	<0.0005
2/1/2017					<0.0005				
5/2/2017						<0.0005	<0.0005	<0.0005	<0.0005
5/3/2017	<0.0005		<0.0005		<0.0005				
6/6/2017						<0.0005	<0.0005	<0.0005	<0.0005
6/7/2017	<0.0005		<0.0005		<0.0005				
1/23/2018					<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1/24/2018	<0.0005		<0.0005						
5/1/2018							<0.0005	<0.0005	<0.0005
5/2/2018	<0.0005		<0.0005		<0.0005	<0.0005			
11/26/2018									<0.0005
11/27/2018			<0.0005			<0.0005	<0.0005	<0.0005	
11/28/2018	<0.0005				<0.0005				
1/9/2019		<0.0005		<0.0005					
5/28/2019									<0.0005
5/29/2019	<0.0005		<0.0005			<0.0005	<0.0005	<0.0005	
5/30/2019					<0.0005				
9/30/2019	<0.0005		<0.0005		<0.0005				
10/1/2019		<0.0005		<0.0005					
10/2/2019						<0.0005	<0.0005	<0.0005	<0.0005
3/30/2020	<0.0005	<0.0005	<0.0005	<0.0005					
3/31/2020					<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
9/2/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
9/8/2020									<0.0005
9/9/2020						<0.0005	<0.0005	<0.0005	
5/11/2021			<0.0005				<0.0005	<0.0005	<0.0005
5/12/2021						<0.0005			
5/18/2021	<0.0005	<0.0005		<0.0005	<0.0005				
10/18/2021								<0.0005	<0.0005
10/19/2021						<0.0005	<0.0005		
10/26/2021			<0.0005	<0.0005					
10/27/2021	<0.0005	<0.0005			<0.0005				
5/23/2022				<0.0005					
5/24/2022	<0.0005	<0.0005	<0.0005		<0.0005				
5/31/2022						<0.0005	<0.0005	<0.0005	<0.0005

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.0002		<0.0002					
3/2/2016	<0.0002				<0.0002		<0.0002		<0.0002
4/19/2016	<0.0002								
4/20/2016		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
6/8/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
8/30/2016									<0.0002
8/31/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
10/18/2016									<0.0002
10/19/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/31/2017	<0.0002						<0.0002		<0.0002
2/1/2017		<0.0002		<0.0002	<0.0002				
5/2/2017	<0.0002								<0.0002
5/3/2017		<0.0002		<0.0002	<0.0002		<0.0002		
6/6/2017	<0.0002								<0.0002
6/7/2017		<0.0002		<0.0002	<0.0002		<0.0002		
1/22/2018							<0.0002		
1/23/2018		<0.0002		<0.0002	<0.0002				<0.0002
1/24/2018	<0.0002								
5/1/2018	<0.0002								
5/2/2018		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
11/27/2018									<0.0002
11/28/2018	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/8/2019			0.00335 (J)			0.00303 (J)			
5/29/2019	<0.0002			<0.0002	<0.0002		<0.0002		<0.0002
5/30/2019		<0.0002							
9/30/2019		<0.0002		<0.0002					
10/1/2019	<0.0002		<0.0002		<0.0002		<0.0002		<0.0002
10/2/2019						<0.0002			
3/30/2020	<0.0002								
3/31/2020		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
4/1/2020									
9/1/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
9/2/2020								<0.0002	<0.0002
5/11/2021		<0.0002							
5/18/2021	0.000106 (J)		0.000148 (J)		0.000947	0.00106			
5/19/2021				0.00652			0.000437	0.000642	
5/25/2021									0.000701
10/26/2021							0.00043	0.00135	
10/27/2021		<0.0002	0.00014 (J)						0.00053
11/1/2021	8E-05 (J)				0.00099	0.00118			
11/2/2021				0.00161					
5/23/2022				0.00141	0.00109	0.00123			
5/24/2022	<0.0002	<0.0002	0.00011 (J)				0.00356		
5/25/2022								0.0008	0.00052

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		0.00238 (J)
4/19/2016		0.00203 (J)
4/20/2016		
6/8/2016		<0.0002
8/30/2016		
8/31/2016		<0.0002
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
2/1/2017		
5/2/2017		0.00201 (J)
5/3/2017		
6/6/2017		<0.0002
6/7/2017		
1/22/2018		0.00211 (J)
1/23/2018		
1/24/2018		
5/1/2018		<0.0002
5/2/2018		
11/27/2018		<0.0002
11/28/2018		
1/8/2019		
5/29/2019		<0.0002
5/30/2019		
9/30/2019		
10/1/2019		<0.0002
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.0002
9/1/2020		
9/2/2020	0.00229 (J)	0.00209 (J)
5/11/2021		0.00171
5/18/2021		
5/19/2021		
5/25/2021	0.00135	
10/26/2021	0.0012	0.00206
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	0.0031	
5/25/2022		0.0018

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.0002							<0.0002
4/19/2016		<0.0002							<0.0002
6/8/2016		<0.0002							<0.0002
8/31/2016		<0.0002							<0.0002
10/19/2016		<0.0002							<0.0002
1/31/2017		<0.0002							<0.0002
5/2/2017		<0.0002							<0.0002
6/6/2017		<0.0002							<0.0002
1/23/2018		<0.0002							<0.0002
1/24/2018									<0.0002
5/1/2018		<0.0002							<0.0002
11/27/2018		<0.0002							<0.0002
1/8/2019								<0.0002	
3/20/2019						<0.0002			
5/29/2019		<0.0002							<0.0002
7/31/2019	<0.0002			<0.0002			<0.0002		
10/1/2019	<0.0002	<0.0002				<0.0002	<0.0002		<0.0002
10/2/2019				<0.0002				<0.0002	
3/30/2020								<0.0002	
3/31/2020		<0.0002							<0.0002
4/1/2020				<0.0002		<0.0002			
8/31/2020									<0.0002
9/1/2020	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/2/2020		<0.0002	<0.0002						
5/17/2021				0.000469					
5/18/2021					0.000571			0.00018 (J)	<0.0002
5/19/2021		0.000136 (J)	<0.0002			0.00025			
5/25/2021	0.000106 (J)						0.000124 (J)		
10/25/2021				0.00078	0.00088	0.00025	8E-05 (J)		
10/26/2021	0.00011 (J)		<0.0002						
11/1/2021		<0.0002						0.00013 (J)	<0.0002
5/23/2022						0.00036			
5/24/2022	<0.0002						<0.0002	0.00011 (J)	<0.0002
5/25/2022		<0.0002	<0.0002	0.00045	0.00043				

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.0002	
10/1/2019	<0.0002	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.0002	
8/31/2020		
9/1/2020	<0.0002	<0.0002
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	0.000503	0.00155
5/25/2021		
10/25/2021		
10/26/2021	0.00048	
11/1/2021		0.00181
5/23/2022	0.00054	
5/24/2022		0.00164
5/25/2022		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.0002	<0.0002
3/2/2016							<0.0002		
4/19/2016							<0.0002	<0.0002	
4/20/2016									<0.0002
6/7/2016							<0.0002	<0.0002	<0.0002
8/30/2016								<0.0002	<0.0002
8/31/2016							<0.0002		
10/18/2016									<0.0002
10/19/2016							<0.0002	<0.0002	
1/31/2017							<0.0002	<0.0002	<0.0002
5/2/2017							<0.0002	<0.0002	
5/3/2017									<0.0002
6/6/2017							<0.0002	<0.0002	
6/7/2017									<0.0002
1/24/2018							<0.0002	<0.0002	<0.0002
5/1/2018							<0.0002	<0.0002	
5/2/2018									<0.0002
11/27/2018							<0.0002	<0.0002	<0.0002
11/28/2018									
1/8/2019				0.00399 (J)					
5/29/2019							<0.0002	<0.0002	<0.0002
7/31/2019	0.00426 (J)	<0.0002							
10/1/2019	<0.0002	<0.0002					<0.0002	<0.0002	<0.0002
10/2/2019				<0.0002					
3/31/2020				<0.0002			<0.0002	<0.0002	<0.0002
4/1/2020		<0.0002							
9/1/2020	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002	<0.0002
9/2/2020				<0.0002	<0.0002	<0.0002			
5/17/2021			0.00147						
5/18/2021							<0.0002	<0.0002	
5/24/2021		0.00069			0.000102 (J)	9.23E-05 (J)			
5/25/2021	0.00137			0.000869					
10/26/2021	0.00136	0.00035	0.00124	0.00096					
11/1/2021							<0.0002	<0.0002	
11/2/2021					0.00014 (J)	<0.0002			0.00012 (J)
5/24/2022	0.00145			0.00092					
5/25/2022		0.00013 (J)	0.00142		0.0001 (J)	<0.0002	<0.0002	<0.0002	0.00011 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.0002
3/2/2016		
4/19/2016		<0.0002
4/20/2016		
6/7/2016		<0.0002
8/30/2016		<0.0002
8/31/2016		
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
5/2/2017		
5/3/2017		<0.0002
6/6/2017		
6/7/2017		<0.0002
1/24/2018		<0.0002
5/1/2018		
5/2/2018		<0.0002
11/27/2018		
11/28/2018		<0.0002
1/8/2019	<0.0002	
5/29/2019		<0.0002
7/31/2019		
10/1/2019		<0.0002
10/2/2019	<0.0002	
3/31/2020	<0.0002	<0.0002
4/1/2020		
9/1/2020	<0.0002	
9/2/2020		<0.0002
5/17/2021		0.000117 (J)
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	8E-05 (J)	0.00011 (J)
5/24/2022		
5/25/2022	<0.0002	0.00033

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.0002	<0.0002	<0.0002	<0.0002
3/1/2016	<0.0002		<0.0002		<0.0002				
4/19/2016						<0.0002	<0.0002	<0.0002	<0.0002
4/20/2016	<0.0002		<0.0002		<0.0002				
6/6/2016						<0.0002			<0.0002
6/7/2016	<0.0002		<0.0002				<0.0002	<0.0002	
6/8/2016					<0.0002				
8/30/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
8/31/2016	<0.0002				<0.0002				
10/18/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
10/19/2016	<0.0002				<0.0002				
1/31/2017	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
2/1/2017					<0.0002				
5/2/2017						<0.0002	<0.0002	<0.0002	<0.0002
5/3/2017	<0.0002		<0.0002		<0.0002				
6/6/2017						<0.0002	<0.0002	<0.0002	<0.0002
6/7/2017	<0.0002		<0.0002		<0.0002				
1/23/2018					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/24/2018	<0.0002		<0.0002						
5/1/2018							<0.0002	<0.0002	<0.0002
5/2/2018	<0.0002		<0.0002		<0.0002	<0.0002			
11/26/2018									<0.0002
11/27/2018			<0.0002			<0.0002	<0.0002	<0.0002	
11/28/2018	<0.0002				<0.0002				
1/9/2019		0.00511 (J)		0.00243 (J)					
5/28/2019									<0.0002
5/29/2019	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	
5/30/2019					<0.0002				
9/30/2019	<0.0002		<0.0002		<0.0002				
10/1/2019		<0.0002		<0.0002					
10/2/2019						<0.0002	<0.0002	<0.0002	<0.0002
3/30/2020	<0.0002	<0.0002	<0.0002	<0.0002					
3/31/2020					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/2/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				
9/8/2020									<0.0002
9/9/2020						<0.0002	<0.0002	<0.0002	
5/11/2021			0.000321				<0.0002	<0.0002	<0.0002
5/12/2021						<0.0002			
5/18/2021	0.000214	0.00021		0.000363	0.00022				
10/18/2021								<0.0002	<0.0002
10/19/2021						<0.0002	<0.0002		
10/26/2021			0.00019 (J)	0.00028					
10/27/2021	0.00018 (J)	0.00046			0.00021				
5/23/2022				0.00029					
5/24/2022	0.00018 (J)	0.00074	0.00023		0.00024				
5/31/2022						<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		6.33		6.34					
3/2/2016	5.78				6.16		6.1		6.08
4/19/2016	5.8								
4/20/2016		6.31		6.31	6.17		6.14		6.04
6/8/2016	5.83	6.34		6.33	6.25		6.11		6.13
8/30/2016									6.08
8/31/2016	5.85	6.35		6.29	6.23		6.1		
10/18/2016									6.13
10/19/2016	5.87	6.35		6.26	6.2		6.1		
1/31/2017	5.83						6.07		6.06
2/1/2017		6.27		6.22	6.08				
3/21/2017	5.83								
3/22/2017		6.29		6.22	6.12		6.07		6.09
5/2/2017	5.73								5.94
5/3/2017		6.23		6.15	6.12		6.1		
6/6/2017	5.83								6.1
6/7/2017		6.27		6.21	6.13		6.07		
9/13/2017	5.91			6.26	6.19		6.12		6.11
9/14/2017		6.27							
1/22/2018							6.12		
1/23/2018		6.32		6.28	6.17				6.12
1/24/2018	5.9								
5/1/2018	5.83								
5/2/2018		6.36		6.33	6.15		6.13		6.13
8/28/2018	5.78	6.31							
8/29/2018				6.3	6.19		6.1		6.14
11/27/2018									6.07
11/28/2018	5.82	6.32		6.28	6.11		6.04		
1/8/2019			6.5			6.48			
5/29/2019	5.82			6.24	6.13		6.01		6.07
5/30/2019		6.23							
9/30/2019		6.11		5.85					
10/1/2019	5.47		6.05		6		6.02		6.01
10/2/2019						5.9			
3/30/2020	5.79								
3/31/2020		6.37	6.38	6.26	6.21	6.33	5.98		5.76
4/1/2020									
9/1/2020	5.89	6.33	6.34	5.87	6.19	6.2	5.82		
9/2/2020								6.23	5.8
5/11/2021		6.4							
5/18/2021	5.86		6.34		5.58	5.92			
5/19/2021				6.33			5.79	6.2	
5/25/2021									5.82
10/26/2021							5.69	6.81	
10/27/2021		5.91	6.1						6.41
11/1/2021	6.01				5.75	6.09			
11/2/2021				5.84					
5/23/2022				6.32	6.12	6.22			
5/24/2022	5.44	5.81	5.77				5.5		
5/25/2022								6.3	6.14

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		6.61
4/19/2016		6.75
4/20/2016		
6/8/2016		6.63
8/30/2016		
8/31/2016		6.71
10/18/2016		
10/19/2016		6.66
1/31/2017		6.73
2/1/2017		
3/21/2017		6.62
3/22/2017		
5/2/2017		6.49
5/3/2017		
6/6/2017		6.7
6/7/2017		
9/13/2017		6.66
9/14/2017		
1/22/2018		6.73
1/23/2018		
1/24/2018		
5/1/2018		6.62
5/2/2018		
8/28/2018		
8/29/2018		6.68
11/27/2018		6.58
11/28/2018		
1/8/2019		
5/29/2019		6.63
5/30/2019		
9/30/2019		
10/1/2019		6.2
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		6.72
9/1/2020		
9/2/2020	7.02	6.57
5/11/2021		6.76
5/18/2021		
5/19/2021		
5/25/2021	7.2	
10/26/2021	6.91	6.7
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	6.71	
5/25/2022		6.68

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		5.79							6.08
4/19/2016		5.78							5.92
6/8/2016		5.8							5.9
8/31/2016		5.83							5.87
10/19/2016		5.81							5.82
1/31/2017		5.84							5.87
3/21/2017		5.79							5.85
5/2/2017		5.68							5.61
6/6/2017		5.8							5.82
9/12/2017									5.61
9/13/2017		5.86							
1/23/2018		5.86							
1/24/2018									5.83
5/1/2018		5.85							5.8
8/28/2018									5.56
8/29/2018		5.87							
11/27/2018		5.76							5.71
1/8/2019							6.38		
3/20/2019					6.19				
5/29/2019		5.76							5.7
7/31/2019	5.37			6.64			6.21		
10/1/2019	5.68	5.23				6.26	6.33		4.97
10/2/2019				6.58				5.27	
3/30/2020								5.65	
3/31/2020		5.75							5.71
4/1/2020				6.52		6.48			
8/31/2020									5.57
9/1/2020	5.91			6.56	6.49	6.15	6.31	5.62	
9/2/2020		5.47	5.23						
5/17/2021				6.35					
5/18/2021					6.55			5.55	5.83
5/19/2021		5.8	5.24			6.23			
5/25/2021	5.6						6.1		
10/25/2021				6.48	6.53	6.76	6.13		
10/26/2021	5.93		5.26						
11/1/2021		5.36						5.76	5.2
5/23/2022						6.24			
5/24/2022	5.7						5.8	4.9	4.78
5/25/2022		5.74	5.26	6.21	6.34				

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
3/21/2017		
5/2/2017		
6/6/2017		
9/12/2017		
9/13/2017		
1/23/2018		
1/24/2018		
5/1/2018		
8/28/2018		
8/29/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	6.22	
10/1/2019	6.24	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	6.45	
8/31/2020		
9/1/2020	6.15	6.03
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	6.17	6.44
5/25/2021		
10/25/2021		
10/26/2021	6.49	
11/1/2021		6
5/23/2022	6.15	
5/24/2022		6.28
5/25/2022		

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								5.19	5.99
3/2/2016							5.14		
4/19/2016							5.06	5.06	
4/20/2016									5.96
6/7/2016							5.13	4.7	6.03
8/30/2016								4.77	6
8/31/2016							5.11		
10/18/2016									5.99
10/19/2016							5.05	4.67	
1/31/2017							5.14	4.42	5.96
3/21/2017							5.13	4.45	
3/22/2017									6.01
5/2/2017							4.85	4.46	
5/3/2017									5.99
6/6/2017							5.15	4.89	
6/7/2017									6.01
9/12/2017							4.96	4.71	
9/14/2017									6
1/24/2018							5.22	5.03	5.98
5/1/2018							5.11	4.44	
5/2/2018									5.99
8/28/2018							4.92	4.85	
8/29/2018									6.03
11/27/2018							5.05	4.78	6.01
11/28/2018									
1/8/2019				6.51					
5/29/2019							5.05	4.65	5.93
7/31/2019	6.54	6.08							
10/1/2019	6.6	6.03					4.37	4.28	5.47
10/2/2019				6.21					
3/31/2020				6.23			5.08	4.69	6.01
4/1/2020		6.44							
9/1/2020	6.48	6.14	7.98				4.24	4.23	5.93
9/2/2020				6.01	5.39	5.32			
5/17/2021			7.87						
5/18/2021							4.93	4.17	
5/24/2021		6.19			4.12	5.24			
5/25/2021	6.44			6.16					
10/26/2021	6.86	6.54	8.31	6.2					
11/1/2021							4.94	5.18	
11/2/2021					5.01	5.13			6.36
5/24/2022	6.57			6.22					
5/25/2022		5.92	7.44		5.23	5.45	4.64	4.6	5.99

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		5.59
3/2/2016		
4/19/2016		5.55
4/20/2016		
6/7/2016		5.43
8/30/2016		5.39
8/31/2016		
10/18/2016		
10/19/2016		5.31
1/31/2017		5.26
3/21/2017		
3/22/2017		5.32
5/2/2017		
5/3/2017		5.35
6/6/2017		
6/7/2017		5.32
9/12/2017		
9/14/2017		5.29
1/24/2018		5.32
5/1/2018		
5/2/2018		5.33
8/28/2018		
8/29/2018		5.41
11/27/2018		
11/28/2018		5.46
1/8/2019	6.07	
5/29/2019		5.31
7/31/2019		
10/1/2019		4.7
10/2/2019	5.9	
3/31/2020	6.05	5.22
4/1/2020		
9/1/2020	5.7	
9/2/2020		5.16
5/17/2021		5.21
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	6.35	5.59
5/24/2022		
5/25/2022	5.88	4.57

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						4.62	4.79	4.96	4.74
3/1/2016	6.36		6.21		6.26				
4/19/2016						4.74	4.84	4.94	4.86
4/20/2016	6.31		6.22		6.26				
6/6/2016						4.65			4.88
6/7/2016	6.3		6.26				4.81	4.96	
6/8/2016					6.25				
8/30/2016			6.21			4.64	4.76	4.92	4.91
8/31/2016	6.31				6.29				
10/18/2016			6.21			4.74	4.84	4.98	4.95
10/19/2016	6.23				6.22				
1/31/2017	6.26		6.17			4.54	4.6	4.74	4.71
2/1/2017					6.24				
3/20/2017						4.67	4.71	4.9	4.83
3/22/2017	6.32		6.22		6.28				
5/2/2017						4.79	4.8	4.98	4.93
5/3/2017	6.29		6.22		6.17				
6/6/2017						4.76	4.72	4.94	4.9
6/7/2017	6.27		6.21		6.24				
9/12/2017									4.82
9/13/2017						4.81	4.71	4.93	
9/14/2017	6.25		6.18		6.24				
1/23/2018					6.3	4.79	4.67	4.91	4.85
1/24/2018	6.35		6.16						
5/1/2018							4.61	4.87	4.8
5/2/2018	6.29		6.17		6.31	4.62			
8/28/2018					6.28				
8/29/2018			6.21						
11/26/2018									4.88
11/27/2018			6.18			4.73	4.72	4.94	
11/28/2018	6.33				6.32				
1/9/2019		7.12		6.38					
5/28/2019									4.73
5/29/2019	6.18		6.11			4.65	4.58	4.8	
5/30/2019					6.14				
9/30/2019	6.36		6.19		6.07				
10/1/2019		6.67		6.16					
10/2/2019						4.57	4.43	4.52	4.67
3/30/2020	6.32	6.69	6.2	6.2					
3/31/2020					6.31	4.64	4.6	4.4	4.51
9/2/2020	6.25	6.49	5.89	5.79	5.97				
9/8/2020									4.75
9/9/2020						4.65	4.67	4.76	
5/11/2021			6.25				4.29	4.53	4.67
5/12/2021						4.74			
5/18/2021	6.4	6.53		6.33	6.3				
10/18/2021								4.55	4.38
10/19/2021						4.67	4.6		
10/26/2021			6.26	6.26					
10/27/2021	6.35	6.78			6.13				
5/23/2022				6.08					
5/24/2022	6.32	6.92	5.6		6.03				

Time Series

Constituent: pH, field (SU) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
5/31/2022						3.89	3.31	3.54	3.97

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.00102		<0.00102					
3/2/2016	<0.00102				<0.00102		<0.00102		<0.00102
4/19/2016	<0.00102								
4/20/2016		<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
6/8/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
8/30/2016									<0.00102
8/31/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
10/18/2016									<0.00102
10/19/2016	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
1/31/2017	<0.00102						<0.00102		<0.00102
2/1/2017		<0.00102		<0.00102	<0.00102				
5/2/2017	<0.00102								<0.00102
5/3/2017		<0.00102		<0.00102	<0.00102		<0.00102		
6/6/2017	<0.00102								<0.00102
6/7/2017		<0.00102		<0.00102	<0.00102		<0.00102		
1/22/2018							<0.00102		
1/23/2018		<0.00102		<0.00102	<0.00102				<0.00102
1/24/2018	<0.00102								
5/1/2018	<0.00102								
5/2/2018		<0.00102		<0.00102	<0.00102		<0.00102		<0.00102
11/27/2018									<0.00102
11/28/2018	<0.00102	<0.00102		<0.00102	<0.00102		<0.00102		
1/8/2019			<0.00102			<0.00102			
5/29/2019	<0.00102			<0.00102	<0.00102		<0.00102		<0.00102
5/30/2019		<0.00102							
9/30/2019		<0.00102		<0.00102					
10/1/2019	<0.00102		<0.00102		<0.00102		<0.00102		<0.00102
10/2/2019						<0.00102			
3/30/2020	<0.00102								
3/31/2020		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102
4/1/2020									
9/1/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102		
9/2/2020								<0.00102	<0.00102
5/11/2021		<0.00102							
5/18/2021	<0.00102		<0.00102		<0.00102	<0.00102			
5/19/2021				<0.00102			<0.00102	<0.00102	
5/25/2021									<0.00102
10/26/2021							<0.00102	<0.00102	
10/27/2021		<0.00102	<0.00102						<0.00102
11/1/2021	<0.00102				<0.00102	<0.00102			
11/2/2021				<0.00102					
5/23/2022				<0.00102	<0.00102	<0.00102			
5/24/2022	<0.00102	<0.00102	<0.00102				0.00056 (J)		
5/25/2022								<0.00102	<0.00102

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.00102
4/19/2016		<0.00102
4/20/2016		
6/8/2016		<0.00102
8/30/2016		
8/31/2016		<0.00102
10/18/2016		
10/19/2016		<0.00102
1/31/2017		<0.00102
2/1/2017		
5/2/2017		<0.00102
5/3/2017		
6/6/2017		<0.00102
6/7/2017		
1/22/2018		<0.00102
1/23/2018		
1/24/2018		
5/1/2018		<0.00102
5/2/2018		
11/27/2018		<0.00102
11/28/2018		
1/8/2019		
5/29/2019		<0.00102
5/30/2019		
9/30/2019		
10/1/2019		<0.00102
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.00102
9/1/2020		
9/2/2020	<0.00102	<0.00102
5/11/2021		<0.00102
5/18/2021		
5/19/2021		
5/25/2021	<0.00102	
10/26/2021	<0.00102	<0.00102
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.00102	
5/25/2022		<0.00102

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.00102							<0.00102
4/19/2016		<0.00102							<0.00102
6/8/2016		<0.00102							<0.00102
8/31/2016		<0.00102							<0.00102
10/19/2016		<0.00102							<0.00102
1/31/2017		<0.00102							<0.00102
5/2/2017		<0.00102							<0.00102
6/6/2017		<0.00102							<0.00102
1/23/2018		<0.00102							<0.00102
1/24/2018									<0.00102
5/1/2018		<0.00102							<0.00102
11/27/2018		<0.00102							<0.00102
1/8/2019								<0.00102	
3/20/2019						<0.00102			
5/29/2019		<0.00102							<0.00102
7/31/2019	<0.00102			<0.00102			<0.00102		
10/1/2019	<0.00102	<0.00102				<0.00102	<0.00102		<0.00102
10/2/2019				<0.00102				<0.00102	
3/30/2020								<0.00102	
3/31/2020		<0.00102							<0.00102
4/1/2020				<0.00102		<0.00102			
8/31/2020									<0.00102
9/1/2020	<0.00102			<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
9/2/2020		<0.00102	<0.00102						
5/17/2021				<0.00102					
5/18/2021					<0.00102			<0.00102	<0.00102
5/19/2021		<0.00102	<0.00102			<0.00102			
5/25/2021	<0.00102						<0.00102		
10/25/2021				<0.00102	<0.00102	<0.00102	<0.00102		
10/26/2021	<0.00102		<0.00102						
11/1/2021		<0.00102						<0.00102	<0.00102
5/23/2022						<0.00102			
5/24/2022	<0.00102						<0.00102	<0.00102	<0.00102
5/25/2022		<0.00102	<0.00102	<0.00102	<0.00102				

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.00102	
10/1/2019	<0.00102	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.00102	
8/31/2020		
9/1/2020	<0.00102	<0.00102
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	<0.00102	<0.00102
5/25/2021		
10/25/2021		
10/26/2021	<0.00102	
11/1/2021		<0.00102
5/23/2022	0.00054 (J)	
5/24/2022		<0.00102
5/25/2022		

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.00102	<0.00102
3/2/2016							<0.00102		
4/19/2016							<0.00102	<0.00102	
4/20/2016									<0.00102
6/7/2016							<0.00102	<0.00102	<0.00102
8/30/2016								<0.00102	<0.00102
8/31/2016							<0.00102		
10/18/2016									<0.00102
10/19/2016							<0.00102	<0.00102	
1/31/2017							<0.00102	<0.00102	<0.00102
5/2/2017							<0.00102	<0.00102	
5/3/2017									<0.00102
6/6/2017							<0.00102	<0.00102	
6/7/2017									<0.00102
1/24/2018							<0.00102	<0.00102	<0.00102
5/1/2018							<0.00102	<0.00102	
5/2/2018									<0.00102
11/27/2018							<0.00102	<0.00102	<0.00102
11/28/2018									
1/8/2019				<0.00102					
5/29/2019							<0.00102	<0.00102	<0.00102
7/31/2019	<0.00102	<0.00102							
10/1/2019	<0.00102	<0.00102					<0.00102	<0.00102	<0.00102
10/2/2019				<0.00102					
3/31/2020				<0.00102			<0.00102	<0.00102	<0.00102
4/1/2020		<0.00102							
9/1/2020	<0.00102	<0.00102	<0.00102				<0.00102	<0.00102	<0.00102
9/2/2020				<0.00102	<0.00102	<0.00102			
5/17/2021			<0.00102						
5/18/2021							<0.00102	<0.00102	
5/24/2021		<0.00102			<0.00102	<0.00102			
5/25/2021	<0.00102			<0.00102					
10/26/2021	<0.00102	<0.00102	<0.00102	<0.00102					
11/1/2021							<0.00102	<0.00102	
11/2/2021					<0.00102	<0.00102			<0.00102
5/24/2022	<0.00102			<0.00102					
5/25/2022		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102	<0.00102

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.00102
3/2/2016		
4/19/2016		<0.00102
4/20/2016		
6/7/2016		<0.00102
8/30/2016		<0.00102
8/31/2016		
10/18/2016		
10/19/2016		<0.00102
1/31/2017		<0.00102
5/2/2017		
5/3/2017		<0.00102
6/6/2017		
6/7/2017		<0.00102
1/24/2018		<0.00102
5/1/2018		
5/2/2018		<0.00102
11/27/2018		
11/28/2018		<0.00102
1/8/2019	<0.00102	
5/29/2019		<0.00102
7/31/2019		
10/1/2019		<0.00102
10/2/2019	<0.00102	
3/31/2020	<0.00102	<0.00102
4/1/2020		
9/1/2020	<0.00102	
9/2/2020		<0.00102
5/17/2021		<0.00102
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.00102	<0.00102
5/24/2022		
5/25/2022	<0.00102	<0.00102

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.00102	<0.00102	<0.00102	<0.00102
3/1/2016	<0.00102		<0.00102		<0.00102				
4/19/2016						<0.00102	<0.00102	<0.00102	<0.00102
4/20/2016	<0.00102		<0.00102		<0.00102				
6/6/2016						<0.00102			<0.00102
6/7/2016	<0.00102		<0.00102				<0.00102	<0.00102	
6/8/2016					<0.00102				
8/30/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
8/31/2016	<0.00102				<0.00102				
10/18/2016			<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
10/19/2016	<0.00102				<0.00102				
1/31/2017	<0.00102		<0.00102			<0.00102	<0.00102	<0.00102	<0.00102
2/1/2017					<0.00102				
5/2/2017						<0.00102	<0.00102	<0.00102	<0.00102
5/3/2017	<0.00102		<0.00102		<0.00102				
6/6/2017						<0.00102	<0.00102	<0.00102	<0.00102
6/7/2017	<0.00102		<0.00102		<0.00102				
1/23/2018					<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
1/24/2018	<0.00102		<0.00102						
5/1/2018							<0.00102	<0.00102	<0.00102
5/2/2018	<0.00102		<0.00102		<0.00102	<0.00102			
11/26/2018									<0.00102
11/27/2018			<0.00102			<0.00102	<0.00102	<0.00102	
11/28/2018	<0.00102				<0.00102				
1/9/2019		<0.00102		<0.00102					
5/28/2019									<0.00102
5/29/2019	<0.00102		<0.00102			<0.00102	<0.00102	<0.00102	
5/30/2019					<0.00102				
9/30/2019	<0.00102		<0.00102		<0.00102				
10/1/2019		<0.00102		<0.00102					
10/2/2019						<0.00102	<0.00102	<0.00102	<0.00102
3/30/2020	<0.00102	<0.00102	<0.00102	<0.00102					
3/31/2020					<0.00102	<0.00102	<0.00102	<0.00102	<0.00102
9/2/2020	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102				
9/8/2020									<0.00102
9/9/2020						<0.00102	<0.00102	<0.00102	
5/11/2021			<0.00102				0.000602 (J)	<0.00102	<0.00102
5/12/2021						<0.00102			
5/18/2021	<0.00102	<0.00102		<0.00102	<0.00102				
10/18/2021								<0.00102	<0.00102
10/19/2021						<0.00102	<0.00102		
10/26/2021			<0.00102	<0.00102					
10/27/2021	<0.00102	<0.00102			<0.00102				
5/23/2022				<0.00102					
5/24/2022	<0.00102	<0.00102	<0.00102		<0.00102				
5/31/2022						<0.00102	0.00063 (J)	<0.00102	<0.00102

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		0.34 (J)		1.02					
3/2/2016	0.31 (J)				<1		<1		<1
4/19/2016	0.335 (J)								
4/20/2016		<1		1.1	<1		<1		<1
6/8/2016	0.556 (J)	0.538 (J)		0.701 (J)	0.511 (J)		0.496 (J)		0.514 (J)
8/30/2016									<1
8/31/2016	<1	<1		<1	<1		<1		
10/18/2016									<1
10/19/2016	<1	<1		<1	<1		<1		
3/21/2017	<1								
3/22/2017		<1		2.1 (J)	<1		6.9		<1
5/2/2017	6								1.8 (J)
5/3/2017		4.1 (J)		3.6 (J)	2.1 (J)		6.6		
6/6/2017	<1								<1
6/7/2017		<1		<1	<1		6		
9/13/2017	4.7 (J)			<1	<1		2.2 (J)		<1
9/14/2017		<1							
5/1/2018	<1								
5/2/2018		<1		<1	<1		4.1 (J)		1.6 (J)
8/28/2018	<1	<1							
8/29/2018				2.3 (J)	<1		<1		<1
11/27/2018									<1
11/28/2018	4.1 (J)	<1		<1	<50 (O)		4.9 (J)		
1/8/2019			93.7			10.3			
5/29/2019	5.75			24.1	7.04		49.5 (o)		67.6 (o)
5/30/2019		3.76							
9/30/2019		2.77		37.4					
10/1/2019	7.82		5.19		35.3		47.7		61.6
10/2/2019						7.18			
3/30/2020	28.4								
3/31/2020		20.1	20.3	57.5	35.8	61.1	23.2		34.7
4/1/2020									
9/1/2020	23.1	15.6	30.1	42.8	32.1	47.5	14.2		
9/2/2020								30.6	18.5
5/11/2021		13.2							
5/18/2021	16.5		24.9		25.1	32.8			
5/19/2021				16.5			50.4	39.7	
5/25/2021									59.2
10/26/2021							21	47.3	
10/27/2021		5.72	6.04						98.5
11/1/2021	10.9				27	10.9			
11/2/2021				133					
5/23/2022				29.3	13	6.64			
5/24/2022	21	14.7	5.73				38.3		
5/25/2022								122	105

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<1
4/19/2016		<1
4/20/2016		
6/8/2016		0.489 (J)
8/30/2016		
8/31/2016		<1
10/18/2016		
10/19/2016		<1
3/21/2017		<1
3/22/2017		
5/2/2017		<1
5/3/2017		
6/6/2017		<1
6/7/2017		
9/13/2017		<1
9/14/2017		
5/1/2018		<1
5/2/2018		
8/28/2018		
8/29/2018		6.2
11/27/2018		<1
11/28/2018		
1/8/2019		
5/29/2019		3.27
5/30/2019		
9/30/2019		
10/1/2019		1.72
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		7.5
9/1/2020		
9/2/2020	63.6	7.61
5/11/2021		7.54
5/18/2021		
5/19/2021		
5/25/2021	39.5	
10/26/2021	75.1	26.4
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	13.6	
5/25/2022		1.8 (J)

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<1							3.3
4/19/2016		<1							2.68
6/8/2016		0.514 (J)							1.1
8/31/2016		<1							<1
10/19/2016		<1							<1
3/21/2017		<1							<1
5/2/2017		<1							<1
6/6/2017		<1							<1
9/12/2017									<1
9/13/2017		2.6 (J)							
5/1/2018		<1							<1
8/28/2018									<1
8/29/2018		3.9 (J)							
11/27/2018		<1							<1
1/8/2019							20.9		
3/20/2019						12.8			
5/29/2019		6.72							0.885 (J)
7/31/2019	2.65			23			11.4		
10/1/2019	0.854 (J)	3.4				8.49	5.9		<1
10/2/2019				10.6				10.5	
3/30/2020								11.1	
3/31/2020		17.5 (o)							1.69
4/1/2020				19.4		24.2			
8/31/2020									0.576 (J)
9/1/2020	2.21			7.61	26.6	30.6	16.9	13	
9/2/2020		13.3 (o)	40						
5/17/2021				10.2					
5/18/2021					17.4			16	<1
5/19/2021		3.11	40.9			7.48			
5/25/2021	1.19						26.6		
10/25/2021				24.5	11	55	28.7		
10/26/2021	0.966 (J)		38.1						
11/1/2021		11.9						20.2	1.56
5/23/2022						9.46			
5/24/2022	2.35						34.7	21.1	0.615 (J)
5/25/2022		6.29	35.1	3.58	49.1				

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
3/21/2017		
5/2/2017		
6/6/2017		
9/12/2017		
9/13/2017		
5/1/2018		
8/28/2018		
8/29/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	83.2	
10/1/2019	28.9	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	18.7	
8/31/2020		
9/1/2020	43.5	38.3
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	59.5	1.93
5/25/2021		
10/25/2021		
10/26/2021	73.2	
11/1/2021		5.66
5/23/2022	95.1	
5/24/2022		3.79
5/25/2022		

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								2.58	<1
3/2/2016							0.79 (J)		
4/19/2016							0.674 (J)	2.3	
4/20/2016									<1
6/7/2016							1	2.58	0.583 (J)
8/30/2016								2.81	<1
8/31/2016							0.702 (J)		
10/18/2016									<1
10/19/2016							0.739 (J)	5.06	
3/21/2017							<1	3.4 (J)	
3/22/2017									<1
5/2/2017							<1	2.7 (J)	
5/3/2017									<1
6/6/2017							<1	1.5 (J)	
6/7/2017									<1
9/12/2017							<1	1.9 (J)	
9/14/2017									<1
5/1/2018							<1	1.4 (J)	
5/2/2018									<1
8/28/2018							<1	<1	
8/29/2018									1.6 (J)
11/27/2018							<1	2.3 (J)	2.7 (J)
11/28/2018									
1/8/2019				31.2					
5/29/2019							0.747 (J)	2.92	5.51
7/31/2019	171	18.4							
10/1/2019	17.2	4.89					0.61 (J)	2.09	7.4
10/2/2019				92.3					
3/31/2020				84.5			1.02	4.12	23.7 (o)
4/1/2020		18.1							
9/1/2020	93.2	24.5	9.25				0.705 (J)	1.83	11
9/2/2020				59.7	4.39	2.26			
5/17/2021			6.92						
5/18/2021							0.883 (J)	4.43	
5/24/2021		3.99			4.94	2.59			
5/25/2021	72.3			17					
10/26/2021	140	29.5	4.23	122					
11/1/2021							1.01	3.34	
11/2/2021					4.28	2.08			15
5/24/2022	103			92.3					
5/25/2022		4.01	4.25		4.24	2.13	1.41 (J)	1.97 (J)	5.53

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		0.36 (J)
3/2/2016		
4/19/2016		0.435 (J)
4/20/2016		
6/7/2016		1.22
8/30/2016		1.08
8/31/2016		
10/18/2016		
10/19/2016		1.01
3/21/2017		
3/22/2017		<1
5/2/2017		
5/3/2017		1.4 (J)
6/6/2017		
6/7/2017		1.5 (J)
9/12/2017		
9/14/2017		1.8 (J)
5/1/2018		
5/2/2018		<1
8/28/2018		
8/29/2018		<1
11/27/2018		
11/28/2018		<1
1/8/2019	1.75	
5/29/2019		1.17
7/31/2019		
10/1/2019		1.04
10/2/2019	5.8	
3/31/2020	0.98 (J)	1.21
4/1/2020		
9/1/2020	1.47	
9/2/2020		1.02
5/17/2021		0.981 (J)
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	1.34	1.37
5/24/2022		
5/25/2022	2.91	1.27 (J)

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						8.59	7.2	7.44	7.04
3/1/2016	0.3 (J)		<1		<1				
4/19/2016						8.27	7.22	7.66	6.74
4/20/2016	0.514 (J)		<1		<1				
6/6/2016						8.66			7.04
6/7/2016	0.971 (J)		0.504 (J)				7.92	8.16	
6/8/2016					0.51 (J)				
8/30/2016			<1			9.74	8.17	8.43	7.57
8/31/2016	0.445 (J)				<1				
10/18/2016			<1			10.2	7.99	8.47	6.62
10/19/2016	0.366 (J)				<1				
3/20/2017						8.3	6.1	7.4	7
3/22/2017	<1		<1		<1				
5/2/2017						6.6	5	6.3	5.6
5/3/2017	<1		2.7 (J)		2.7 (J)				
6/6/2017						7.6	5.3	7.1	6.6
6/7/2017	<1		<1		<1				
9/12/2017									7.2
9/13/2017						8.4	4.9 (J)	7.3	
9/14/2017	<1		<1		<1				
5/1/2018							4.2 (J)	6.9	5.9
5/2/2018	<1		<1		<1	5.9			
8/28/2018					<1				
8/29/2018			<1						
11/26/2018									5.1
11/27/2018			<1			22		6.5	
11/28/2018	<1				1.4 (J)				
1/9/2019		3.69		1.74					
5/28/2019									7.1
5/29/2019	2.77		6.01			23.3	5.94	7.81	
5/30/2019					5.91				
9/30/2019	2.51		5.29		3.77				
10/1/2019		2		7					
10/2/2019						17.5	6.04	7.62	6.88
3/30/2020	4.78	9.65	33.1	75.8					
3/31/2020					43.5	24.3	6.83	7.98	10.8
9/2/2020	3.59	6.7	15.8	24	21.9				
9/8/2020									6.52
9/9/2020						16.5	6.08	7.13	
5/11/2021			35.4				7.92	7.73	6.8
5/12/2021						16.3			
5/18/2021	4.6	5.53		19.6	27.7				
10/18/2021								7.36	6.58
10/19/2021						15.5	7.48		
10/26/2021			25.7	58.2					
10/27/2021	5.17	5.31			6.33				
5/23/2022				8.35					
5/24/2022	7.14	6.06	81.3		5.76				
5/31/2022						12.8	8.09	7.02	7.94

Time Series

Constituent: TDS (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		326		395					
3/2/2016	426				351		319		266
4/19/2016	442								
4/20/2016		366		376	353		305		311
6/8/2016	461	314		324	330		287		353
8/30/2016									328
8/31/2016	456	368		367	354		295		
10/18/2016									310
10/19/2016	444	381		367	354		305		
1/31/2017	422						325		312
2/1/2017		342		391	360				
5/2/2017	442								300
5/3/2017		369		373	341		306		
6/6/2017	433								335
6/7/2017		340		367	337		320		
9/13/2017	456			378	359		332		339
9/14/2017		391							
5/1/2018	416								
5/2/2018		343		330	310		320		301
8/28/2018	420	375							
8/29/2018				352	307		312		318
11/27/2018									295
11/28/2018	408	378		357	336		304		
1/8/2019			462			348			
5/29/2019	403			367	321		307		318
5/30/2019		377							
9/30/2019		361		399					
10/1/2019	430		393		344		290		317
10/2/2019						321			
3/30/2020	419								
3/31/2020		387	413	393	331	328	290		317
4/1/2020									
9/1/2020	454	392	403	399	356	338	285		
9/2/2020								361	327
5/11/2021		391							
5/18/2021	450		401		332	329			
5/19/2021				422			300	362	
5/25/2021									318
10/26/2021							280	355	
10/27/2021		373	400						327
11/1/2021	480				349	352			
11/2/2021				390					
5/23/2022				404	345	352			
5/24/2022	464	398	403				257		
5/25/2022								343	328

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Constituent: TDS (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		182
4/19/2016		151
4/20/2016		
6/8/2016		168
8/30/2016		
8/31/2016		188
10/18/2016		
10/19/2016		180
1/31/2017		166
2/1/2017		
5/2/2017		183
5/3/2017		
6/6/2017		187
6/7/2017		
9/13/2017		202
9/14/2017		
5/1/2018		197
5/2/2018		
8/28/2018		
8/29/2018		192
11/27/2018		190
11/28/2018		
1/8/2019		
5/29/2019		198
5/30/2019		
9/30/2019		
10/1/2019		236
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		231
9/1/2020		
9/2/2020	498	208
5/11/2021		279
5/18/2021		
5/19/2021		
5/25/2021	520	
10/26/2021	474	269
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	508	
5/25/2022		255

Time Series

Constituent: TDS (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		263							42
4/19/2016		259							51.3
6/8/2016		285							46.7
8/31/2016		279							32.7
10/19/2016		264							37.3
1/31/2017		270							47.3
5/2/2017		259							44
6/6/2017		278							48
9/12/2017									40.7
9/13/2017		333							
5/1/2018		274							42.7
8/28/2018									28
8/29/2018		283							
11/27/2018		250							48
1/8/2019								192	
3/20/2019						293			
5/29/2019		264							47.3
7/31/2019	337			212			318		
10/1/2019	321	295				283	316		44.7
10/2/2019				203				154	
3/30/2020								160	
3/31/2020		276							42
4/1/2020				243		210			
8/31/2020									45.3
9/1/2020	318			236	576	281	294	175	
9/2/2020		279	219						
5/17/2021				201					
5/18/2021					438			189	48.7
5/19/2021		274	213			293			
5/25/2021	335						162		
10/25/2021				225	280	302	123		
10/26/2021	358		195						
11/1/2021		324						190	52
5/23/2022						292			
5/24/2022	348						133	176	40.7
5/25/2022		299	188	194	1270				

Time Series

Constituent: TDS (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
9/12/2017		
9/13/2017		
5/1/2018		
8/28/2018		
8/29/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	481	
10/1/2019	470	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	319	
8/31/2020		
9/1/2020	479	308
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	479	271
5/25/2021		
10/25/2021		
10/26/2021	493	
11/1/2021		282
5/23/2022	462	
5/24/2022		296
5/25/2022		

Time Series

Constituent: TDS (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								27.3	273
3/2/2016							27.3		
4/19/2016							33.3	38	
4/20/2016									269
6/7/2016							44	48.7	272
8/30/2016								32.7	244
8/31/2016							29.3		
10/18/2016									238
10/19/2016							29.3	36	
1/31/2017							36.7	40.7	266
5/2/2017							28	30.7	
5/3/2017									259
6/6/2017							36.7	41.3	
6/7/2017									255
9/12/2017							35.3	34.7	
9/14/2017									276
5/1/2018							34.7	39.3	
5/2/2018									247
8/28/2018							34	26	
8/29/2018									263
11/27/2018							41.3	32	248
11/28/2018									
1/8/2019				504					
5/29/2019							40	39.3	259
7/31/2019	345	241							
10/1/2019	346	261					36.7	32	243
10/2/2019				430					
3/31/2020				418			37.3	42.7	243
4/1/2020		105							
9/1/2020	362	271	391				39.3	36	253
9/2/2020				471	36	34			
5/17/2021			386						
5/18/2021							38	47.3	
5/24/2021		244			39.3	26.7			
5/25/2021	378			420					
10/26/2021	362	252	362	448					
11/1/2021							35.3	32	
11/2/2021					34.7	36			297
5/24/2022	372			486					
5/25/2022		236	359		37.3	29.3	50.7	48.7	252

Time Series

Constituent: TDS (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		45.3
3/2/2016		
4/19/2016		46
4/20/2016		
6/7/2016		46
8/30/2016		30
8/31/2016		
10/18/2016		
10/19/2016		37.3
1/31/2017		43.3
5/2/2017		
5/3/2017		44.7
6/6/2017		
6/7/2017		45.3
9/12/2017		
9/14/2017		48.7
5/1/2018		
5/2/2018		44
8/28/2018		
8/29/2018		50
11/27/2018		
11/28/2018		50.7
1/8/2019	76.7	
5/29/2019		48.7
7/31/2019		
10/1/2019		38
10/2/2019	98	
3/31/2020	81.3	42
4/1/2020		
9/1/2020	94	
9/2/2020		37.3
5/17/2021		46.7
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	77.3	38
5/24/2022		
5/25/2022	75.3	40.7

Time Series

Constituent: TDS (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						26.7	30.7	40	<25
3/1/2016	129		309		314				
4/19/2016						<25	<25	32	<25
4/20/2016	128		324		338				
6/6/2016						32.7			28.7
6/7/2016	140		314				35.3	38.7	
6/8/2016					288				
8/30/2016			308			33.3	27.3	31.3	25.3
8/31/2016	112				334				
10/18/2016			295			27.3	<25	26.7	<25
10/19/2016	134				333				
1/31/2017	134		303			32	32.7	30	26
2/1/2017					330				
5/2/2017						31.3	30.7	30.7	<25
5/3/2017	127		300		338				
6/6/2017						35.3	34.7	32.7	42.7
6/7/2017	134		284		300				
9/12/2017									26.7
9/13/2017						36.7	39.3	38	
9/14/2017	141		325		350				
5/1/2018							42	35.3	34.7
5/2/2018	133		306		333	34			
8/28/2018					324				
8/29/2018			287						
11/26/2018									32.7
11/27/2018			303			50.7	31.3	36	
11/28/2018	138				330				
1/9/2019		240		276					
5/28/2019									31.3
5/29/2019	132		291			58	40	37.3	
5/30/2019					315				
9/30/2019	137		293		319				
10/1/2019		182		324					
10/2/2019						46	41.3	36.7	36
3/30/2020	135	204	310	328					
3/31/2020					330	53.3	40	39.3	36.7
9/2/2020	129	168	298	318	301				
9/8/2020									39.3
9/9/2020						42	40.7	42.7	
5/11/2021			318				35.3	44	46.7
5/12/2021						40.7			
5/18/2021	175	192		331	314				
10/18/2021								36	36
10/19/2021						40	36		
10/26/2021			332	350					
10/27/2021	123	169			302				
5/23/2022				331					
5/24/2022	148	228	303		268				
5/31/2022						32	30.7	35.3	36.7

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-10V	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-12V	BY-AP-MW-13	BY-AP-MW-13V	BY-AP-MW-14
3/1/2016		<0.0002		<0.0002					
3/2/2016	<0.0002				<0.0002		<0.0002		<0.0002
4/19/2016	<0.0002								
4/20/2016		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
6/8/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
8/30/2016									<0.0002
8/31/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
10/18/2016									<0.0002
10/19/2016	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/31/2017	<0.0002						<0.0002		<0.0002
2/1/2017		<0.0002		<0.0002	<0.0002				
5/2/2017	<0.0002								<0.0002
5/3/2017		<0.0002		<0.0002	<0.0002		<0.0002		
6/6/2017	<0.0002								<0.0002
6/7/2017		<0.0002		<0.0002	<0.0002		0.000878 (J)		
1/22/2018							<0.0002		
1/23/2018		<0.0002		<0.0002	<0.0002				<0.0002
1/24/2018	<0.0002								
5/1/2018	<0.0002								
5/2/2018		<0.0002		<0.0002	<0.0002		<0.0002		<0.0002
11/27/2018									<0.0002
11/28/2018	<0.0002	<0.0002		<0.0002	<0.0002		<0.0002		
1/8/2019			<0.0002			<0.0002			
5/29/2019	<0.0002			<0.0002	<0.0002		<0.0002		<0.0002
5/30/2019		<0.0002							
9/30/2019		<0.0002		<0.0002					
10/1/2019	<0.0002		<0.0002		<0.0002		<0.0002		<0.0002
10/2/2019						<0.0002			
3/30/2020	<0.0002								
3/31/2020		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
4/1/2020									
9/1/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
9/2/2020								<0.0002	<0.0002
5/11/2021		<0.0002							
5/18/2021	<0.0002		<0.0002		<0.0002	<0.0002			
5/19/2021				<0.0002			<0.0002	<0.0002	
5/25/2021									<0.0002
10/26/2021							<0.0002	<0.0002	
10/27/2021		<0.0002	<0.0002						<0.0002
11/1/2021	<0.0002				<0.0002	<0.0002			
11/2/2021				<0.0002					
5/23/2022				<0.0002	<0.0002	<0.0002			
5/24/2022	<0.0002	<0.0002	<0.0002				<0.0002		
5/25/2022								<0.0002	<0.0002

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14V	BY-AP-MW-15
3/1/2016		
3/2/2016		<0.0002
4/19/2016		<0.0002
4/20/2016		
6/8/2016		<0.0002
8/30/2016		
8/31/2016		<0.0002
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
2/1/2017		
5/2/2017		<0.0002
5/3/2017		
6/6/2017		<0.0002
6/7/2017		
1/22/2018		<0.0002
1/23/2018		
1/24/2018		
5/1/2018		<0.0002
5/2/2018		
11/27/2018		<0.0002
11/28/2018		
1/8/2019		
5/29/2019		<0.0002
5/30/2019		
9/30/2019		
10/1/2019		<0.0002
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020		<0.0002
9/1/2020		
9/2/2020	<0.0002	<0.0002
5/11/2021		<0.0002
5/18/2021		
5/19/2021		
5/25/2021	<0.0002	
10/26/2021	<0.0002	<0.0002
10/27/2021		
11/1/2021		
11/2/2021		
5/23/2022		
5/24/2022	<0.0002	
5/25/2022		<0.0002

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15V	BY-AP-MW-16	BY-AP-MW-16V	BY-AP-MW-17H	BY-AP-MW-17V	BY-AP-MW-18H	BY-AP-MW-19H	BY-AP-MW-1V	BY-AP-MW-2
3/2/2016		<0.0002							<0.0002
4/19/2016		<0.0002							<0.0002
6/8/2016		<0.0002							<0.0002
8/31/2016		<0.0002							<0.0002
10/19/2016		<0.0002							<0.0002
1/31/2017		<0.0002							<0.0002
5/2/2017		<0.0002							<0.0002
6/6/2017		<0.0002							<0.0002
1/23/2018		<0.0002							<0.0002
1/24/2018									<0.0002
5/1/2018		<0.0002							<0.0002
11/27/2018		<0.0002							<0.0002
1/8/2019								<0.0002	
3/20/2019						<0.0002			
5/29/2019		<0.0002							<0.0002
7/31/2019	<0.0002			<0.0002			<0.0002		
10/1/2019	<0.0002	<0.0002				<0.0002	<0.0002		<0.0002
10/2/2019				<0.0002				<0.0002	
3/30/2020								<0.0002	
3/31/2020		<0.0002							<0.0002
4/1/2020				<0.0002		<0.0002			
8/31/2020									<0.0002
9/1/2020	<0.0002			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/2/2020		<0.0002	<0.0002						
5/17/2021				<0.0002					
5/18/2021					<0.0002			<0.0002	<0.0002
5/19/2021		<0.0002	9.13E-05 (J)			<0.0002			
5/25/2021	8.49E-05 (J)						<0.0002		
10/25/2021				<0.0002	<0.0002	<0.0002	<0.0002		
10/26/2021	7E-05 (J)		0.0001 (J)						
11/1/2021		<0.0002						<0.0002	<0.0002
5/23/2022						<0.0002			
5/24/2022	0.00014 (J)						<0.0002	<0.0002	<0.0002
5/25/2022		<0.0002	9E-05 (J)	<0.0002	0.0001 (J)				

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-20H	BY-AP-MW-20V
3/2/2016		
4/19/2016		
6/8/2016		
8/31/2016		
10/19/2016		
1/31/2017		
5/2/2017		
6/6/2017		
1/23/2018		
1/24/2018		
5/1/2018		
11/27/2018		
1/8/2019		
3/20/2019		
5/29/2019		
7/31/2019	<0.0002	
10/1/2019	<0.0002	
10/2/2019		
3/30/2020		
3/31/2020		
4/1/2020	<0.0002	
8/31/2020		
9/1/2020	<0.0002	<0.0002
9/2/2020		
5/17/2021		
5/18/2021		
5/19/2021	<0.0002	<0.0002
5/25/2021		
10/25/2021		
10/26/2021	<0.0002	
11/1/2021		<0.0002
5/23/2022	<0.0002	
5/24/2022		<0.0002
5/25/2022		

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-22H	BY-AP-MW-23H	BY-AP-MW-23V	BY-AP-MW-24H	BY-AP-MW-25H	BY-AP-MW-25VM	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
3/1/2016								<0.0002	<0.0002
3/2/2016							<0.0002		
4/19/2016							<0.0002	<0.0002	
4/20/2016									<0.0002
6/7/2016							<0.0002	<0.0002	<0.0002
8/30/2016								<0.0002	<0.0002
8/31/2016							<0.0002		
10/18/2016									<0.0002
10/19/2016							<0.0002	<0.0002	
1/31/2017							<0.0002	<0.0002	<0.0002
5/2/2017							<0.0002	<0.0002	
5/3/2017									<0.0002
6/6/2017							<0.0002	<0.0002	
6/7/2017									<0.0002
1/24/2018							<0.0002	<0.0002	<0.0002
5/1/2018							<0.0002	<0.0002	
5/2/2018									<0.0002
11/27/2018							<0.0002	<0.0002	<0.0002
11/28/2018									
1/8/2019				<0.0002					
5/29/2019							<0.0002	<0.0002	<0.0002
7/31/2019	<0.0002	<0.0002							
10/1/2019	<0.0002	<0.0002					<0.0002	<0.0002	<0.0002
10/2/2019				<0.0002					
3/31/2020				<0.0002			<0.0002	<0.0002	<0.0002
4/1/2020		<0.0002							
9/1/2020	<0.0002	<0.0002	<0.0002				<0.0002	<0.0002	<0.0002
9/2/2020				<0.0002	<0.0002	<0.0002			
5/17/2021			<0.0002						
5/18/2021							<0.0002	<0.0002	
5/24/2021		<0.0002			<0.0002	<0.0002			
5/25/2021	<0.0002			<0.0002					
10/26/2021	<0.0002	<0.0002	<0.0002	<0.0002					
11/1/2021							<0.0002	<0.0002	
11/2/2021					<0.0002	<0.0002			<0.0002
5/24/2022	<0.0002			<0.0002					
5/25/2022		<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5V	BY-AP-MW-6
3/1/2016		<0.0002
3/2/2016		
4/19/2016		<0.0002
4/20/2016		
6/7/2016		<0.0002
8/30/2016		<0.0002
8/31/2016		
10/18/2016		
10/19/2016		<0.0002
1/31/2017		<0.0002
5/2/2017		
5/3/2017		<0.0002
6/6/2017		
6/7/2017		<0.0002
1/24/2018		<0.0002
5/1/2018		
5/2/2018		<0.0002
11/27/2018		
11/28/2018		<0.0002
1/8/2019	<0.0002	
5/29/2019		<0.0002
7/31/2019		
10/1/2019		<0.0002
10/2/2019	<0.0002	
3/31/2020	<0.0002	<0.0002
4/1/2020		
9/1/2020	<0.0002	
9/2/2020		<0.0002
5/17/2021		<0.0002
5/18/2021		
5/24/2021		
5/25/2021		
10/26/2021		
11/1/2021		
11/2/2021	<0.0002	<0.0002
5/24/2022		
5/25/2022	<0.0002	<0.0002

Time Series

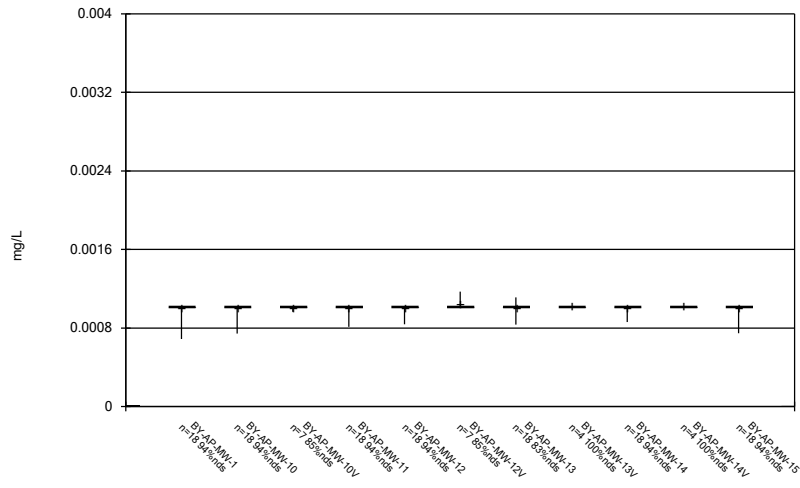
Constituent: Thallium (mg/L) Analysis Run 7/21/2022 3:46 PM View: Descriptive

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7V	BY-AP-MW-8	BY-AP-MW-8V	BY-AP-MW-9	BY-UP-MW-1 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)
2/23/2016						<0.0002	<0.0002	<0.0002	<0.0002
3/1/2016	<0.0002		<0.0002		<0.0002				
4/19/2016						<0.0002	<0.0002	<0.0002	<0.0002
4/20/2016	<0.0002		<0.0002		<0.0002				
6/6/2016						<0.0002			<0.0002
6/7/2016	<0.0002		<0.0002				<0.0002	<0.0002	
6/8/2016					<0.0002				
8/30/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
8/31/2016	<0.0002				<0.0002				
10/18/2016			<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
10/19/2016	<0.0002				<0.0002				
1/31/2017	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	<0.0002
2/1/2017					<0.0002				
5/2/2017						<0.0002	<0.0002	<0.0002	<0.0002
5/3/2017	<0.0002		<0.0002		<0.0002				
6/6/2017						<0.0002	<0.0002	<0.0002	<0.0002
6/7/2017	<0.0002		<0.0002		<0.0002				
1/23/2018					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
1/24/2018	<0.0002		<0.0002						
5/1/2018							<0.0002	<0.0002	<0.0002
5/2/2018	<0.0002		<0.0002		<0.0002	<0.0002			
11/26/2018									<0.0002
11/27/2018			<0.0002			<0.0002	<0.0002	<0.0002	
11/28/2018	<0.0002				<0.0002				
1/9/2019		<0.0002		<0.0002					
5/28/2019									<0.0002
5/29/2019	<0.0002		<0.0002			<0.0002	<0.0002	<0.0002	
5/30/2019					<0.0002				
9/30/2019	<0.0002		<0.0002		<0.0002				
10/1/2019		<0.0002		<0.0002					
10/2/2019						<0.0002	<0.0002	<0.0002	<0.0002
3/30/2020	<0.0002	<0.0002	<0.0002	<0.0002					
3/31/2020					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/2/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				
9/8/2020									<0.0002
9/9/2020						<0.0002	<0.0002	<0.0002	
5/11/2021			<0.0002				<0.0002	<0.0002	<0.0002
5/12/2021						<0.0002			
5/18/2021	<0.0002	<0.0002		<0.0002	<0.0002				
10/18/2021								<0.0002	<0.0002
10/19/2021						<0.0002	<0.0002		
10/26/2021			<0.0002	<0.0002					
10/27/2021	<0.0002	<0.0002			<0.0002				
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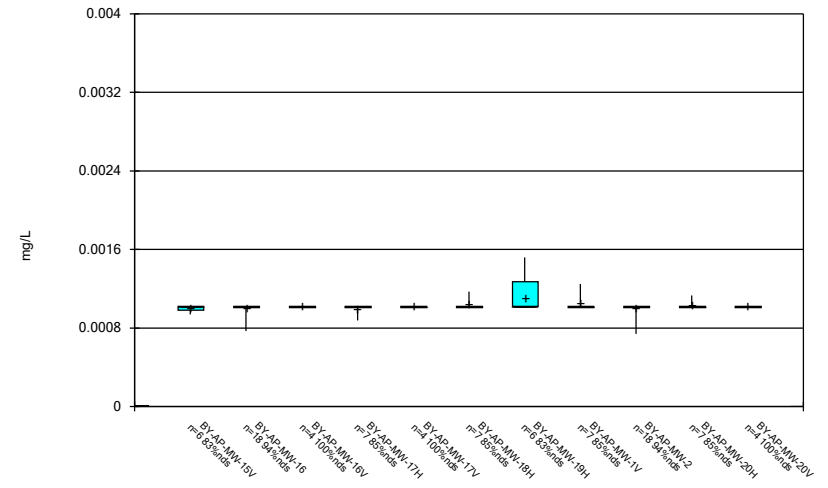
FIGURE B.

Box & Whiskers Plot



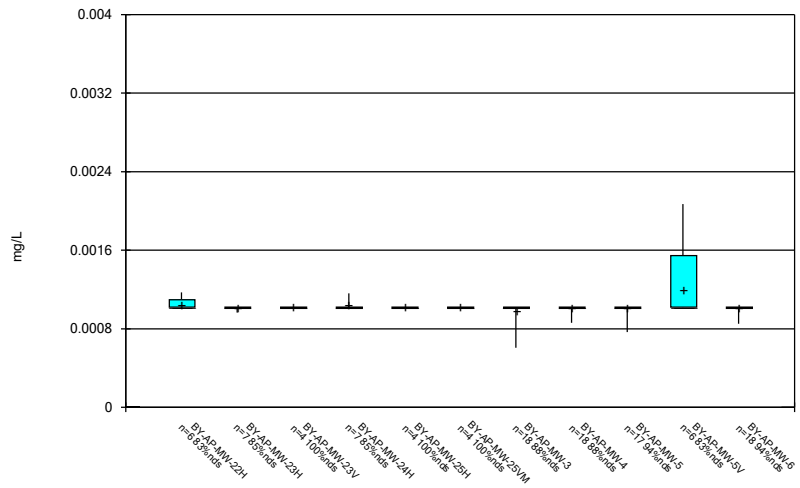
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



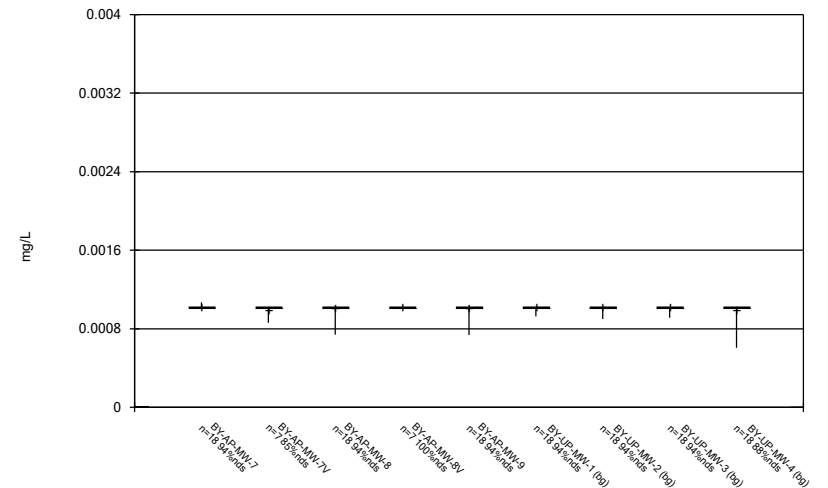
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Box & Whiskers Plot



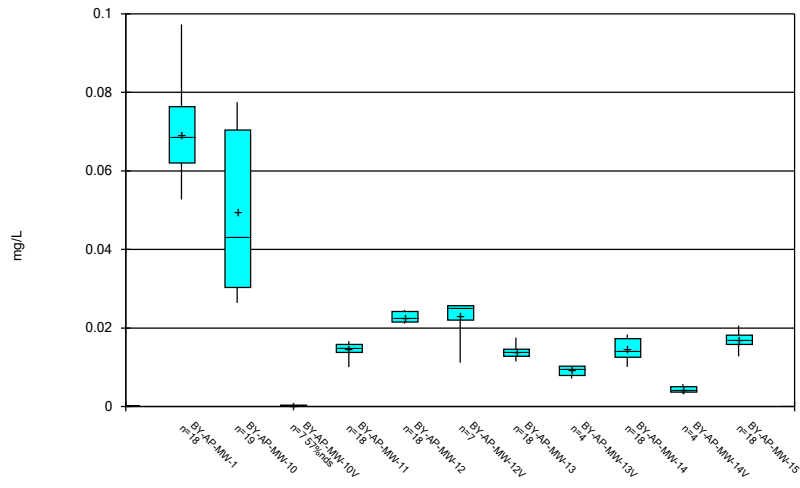
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Box & Whiskers Plot



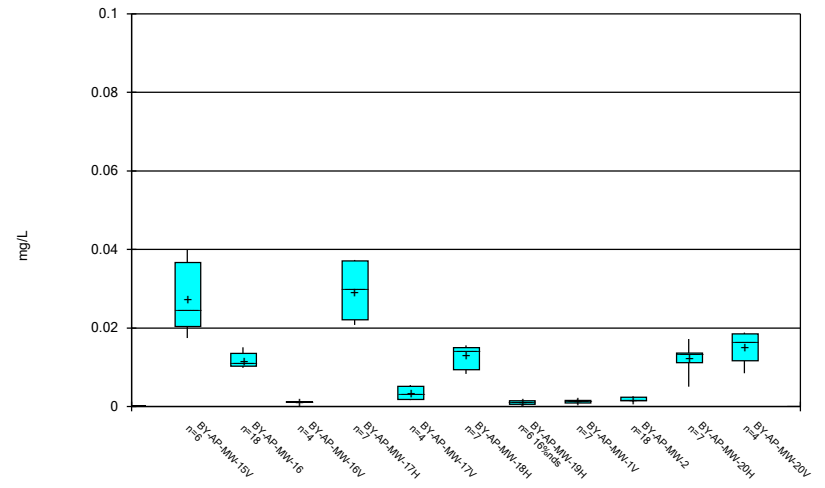
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Box & Whiskers Plot



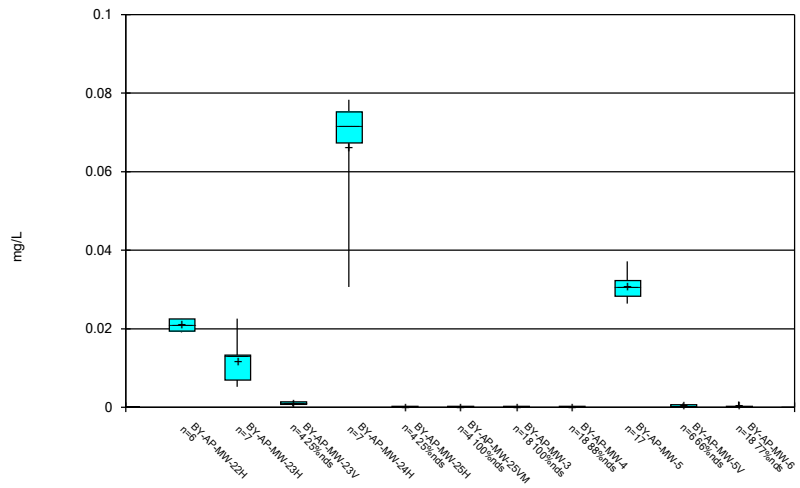
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Box & Whiskers Plot



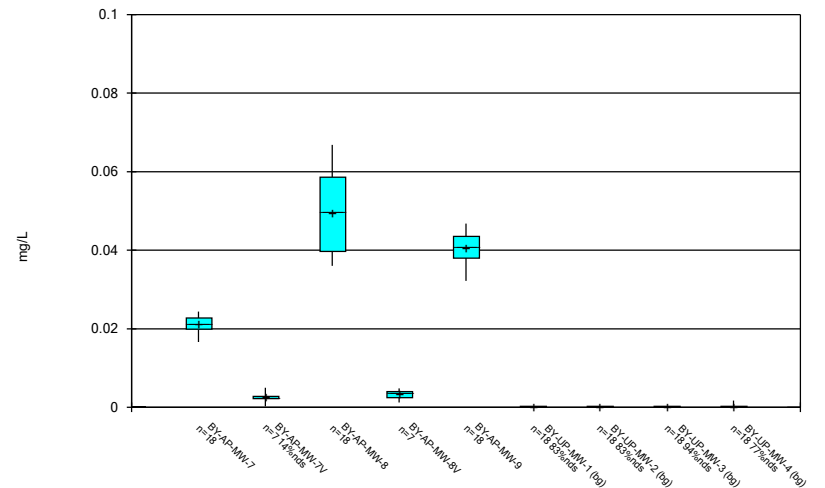
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Box & Whiskers Plot



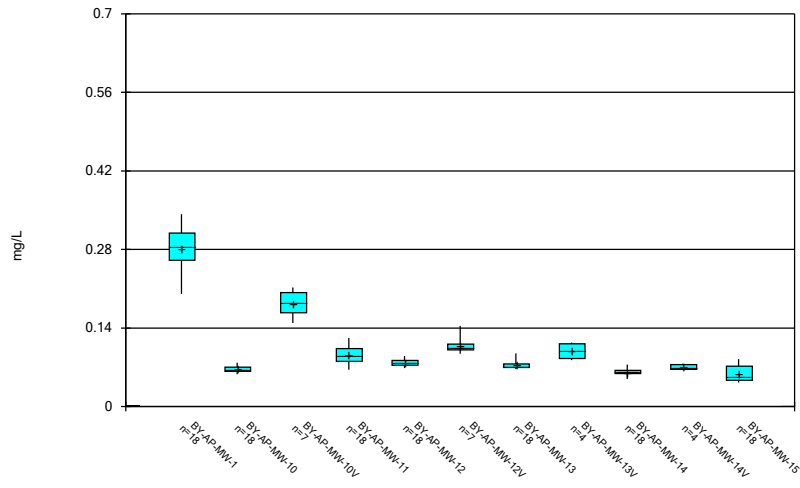
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Box & Whiskers Plot



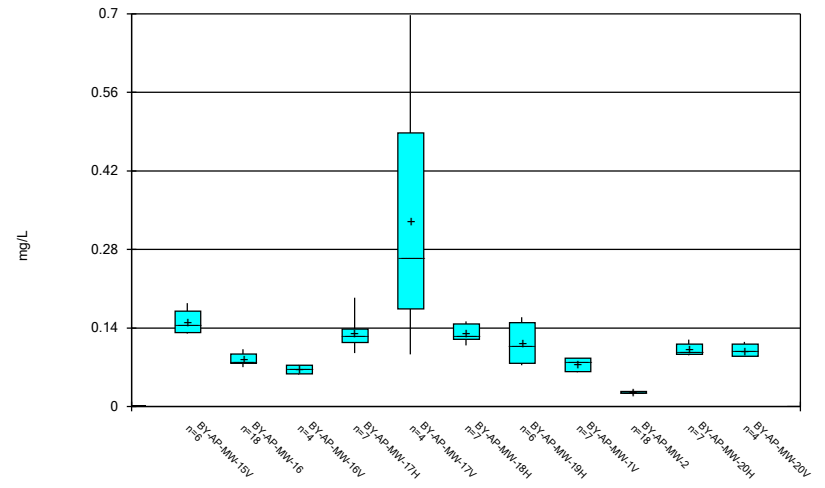
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Box & Whiskers Plot



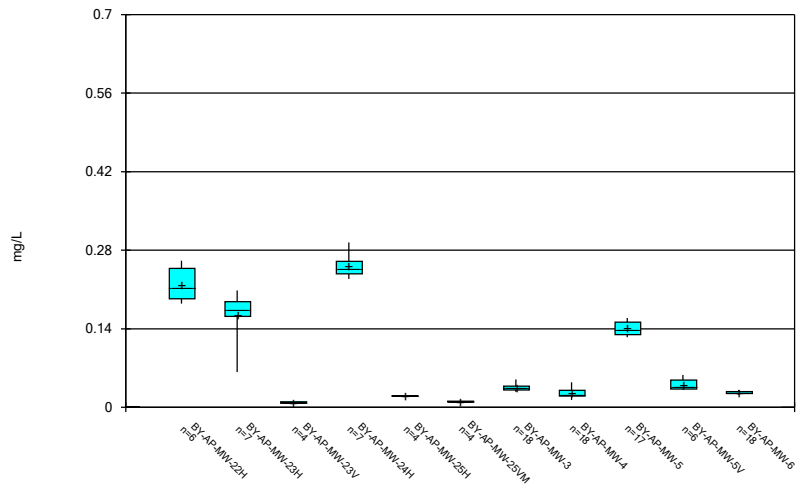
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Box & Whiskers Plot



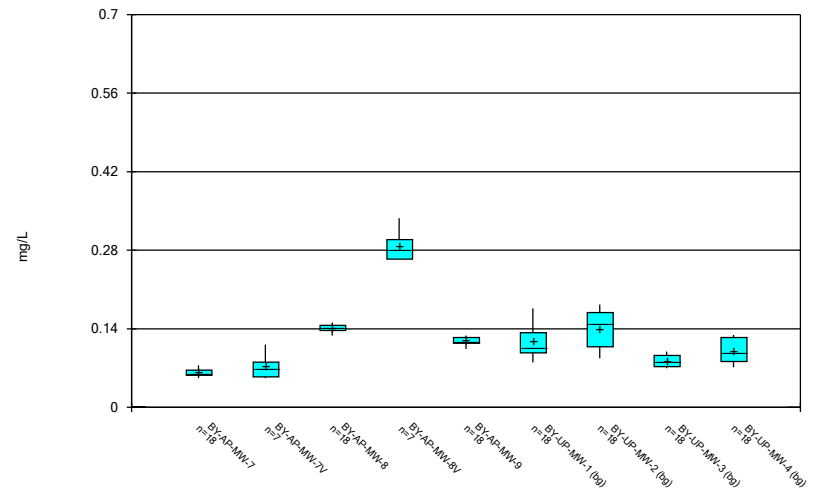
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Box & Whiskers Plot



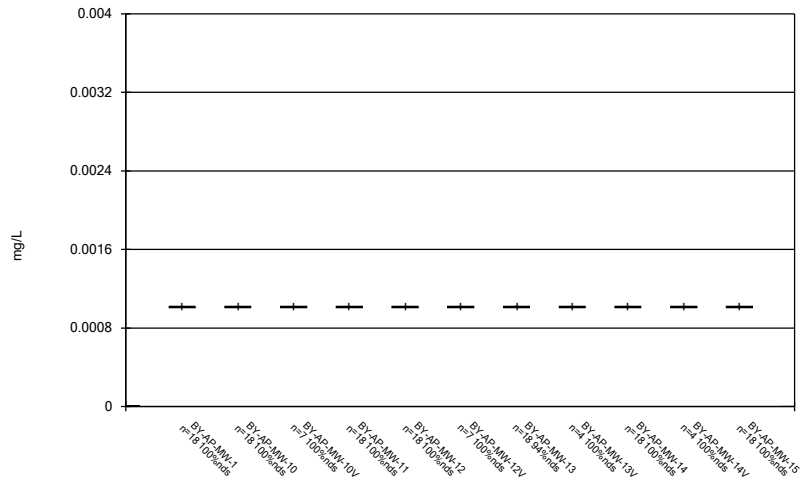
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



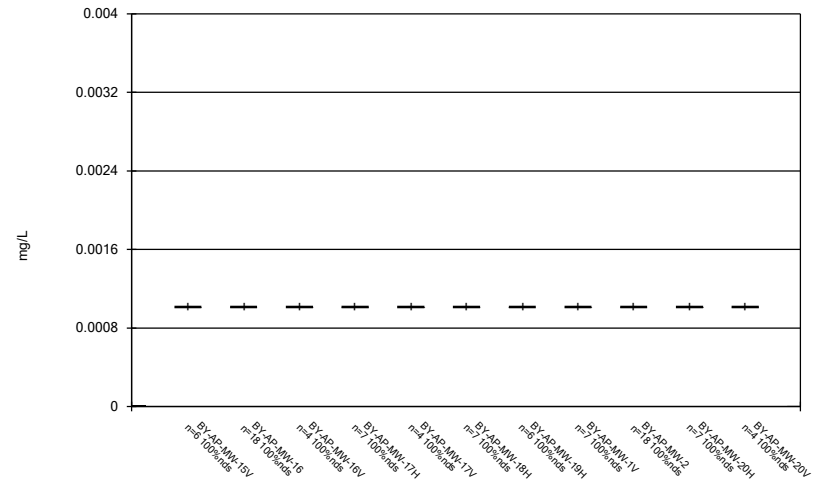
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Box & Whiskers Plot



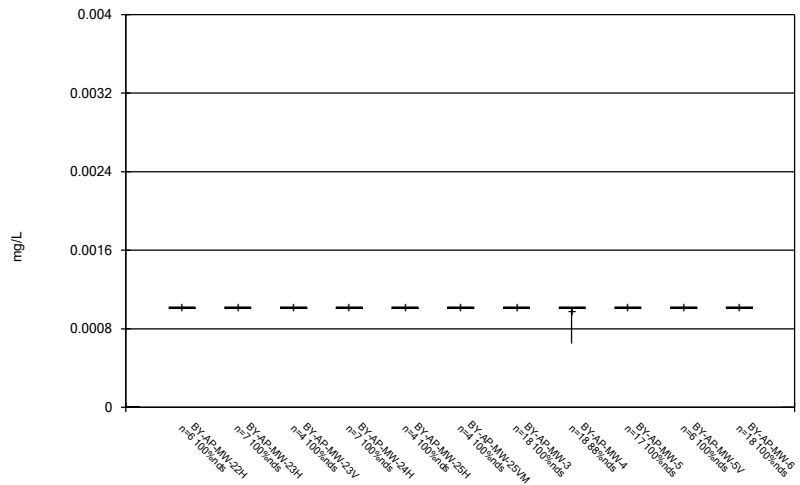
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Box & Whiskers Plot



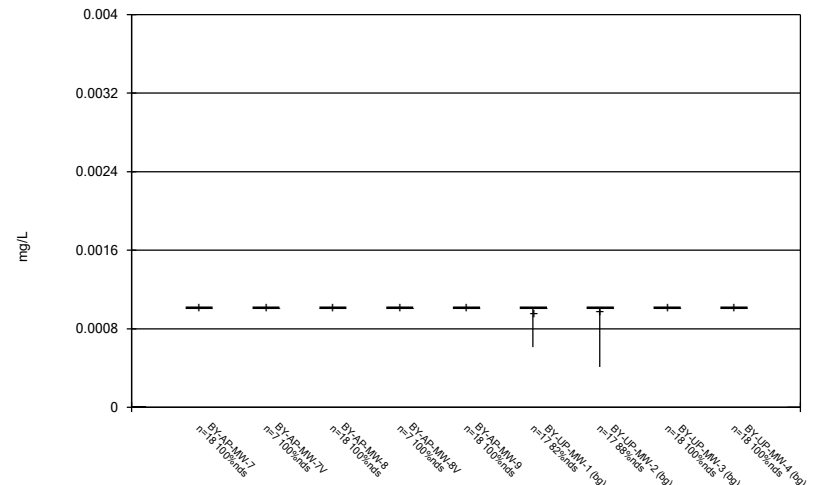
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Box & Whiskers Plot



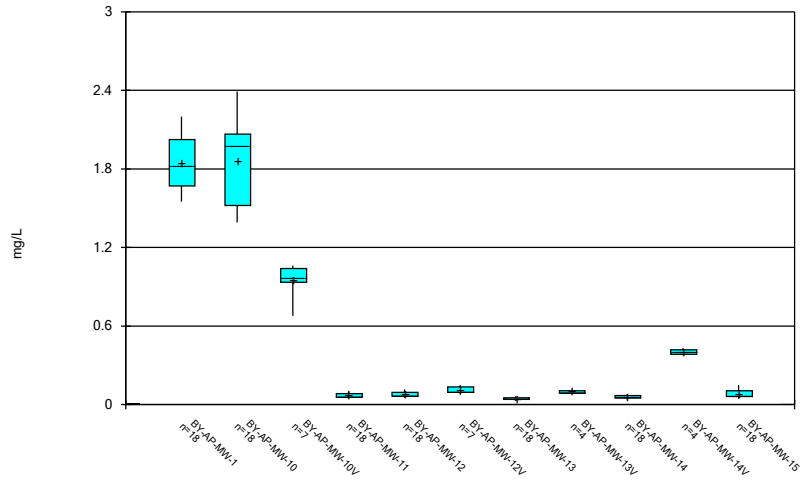
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Box & Whiskers Plot



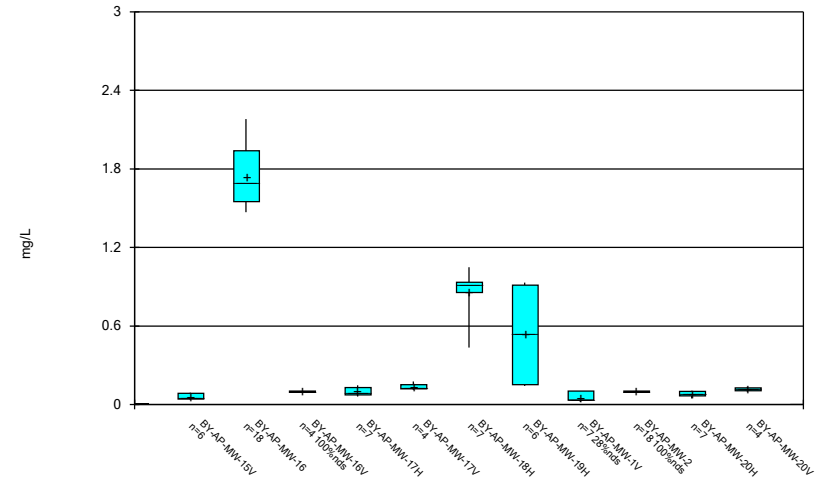
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Box & Whiskers Plot



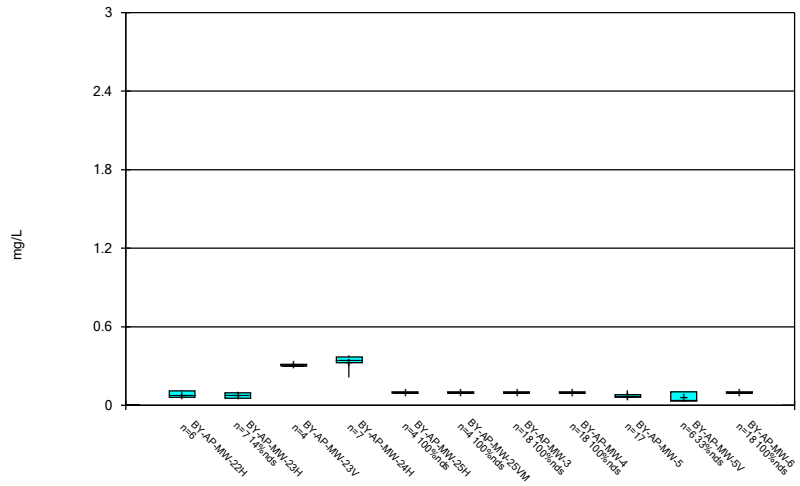
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Box & Whiskers Plot



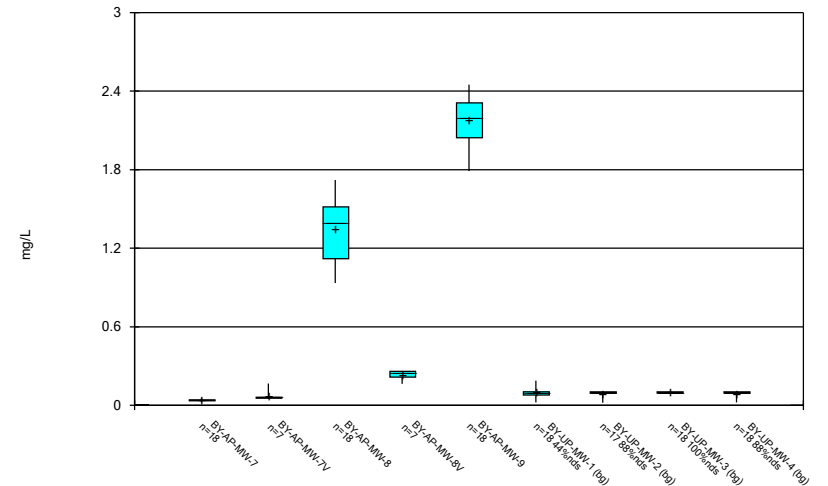
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Box & Whiskers Plot



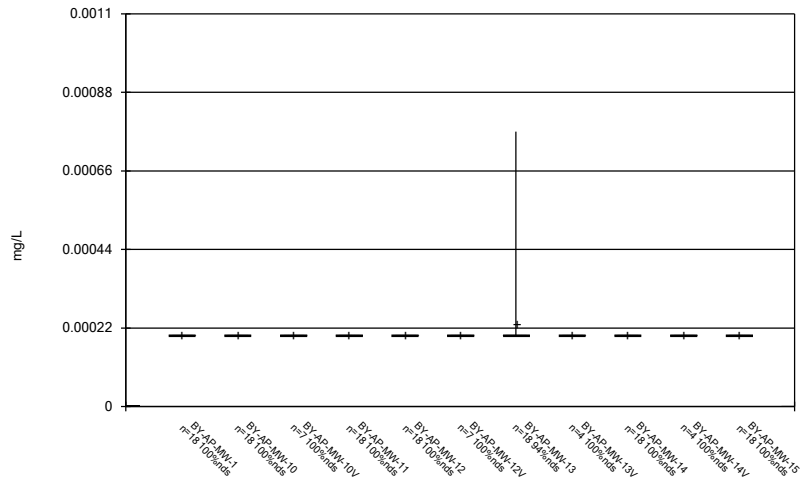
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Box & Whiskers Plot



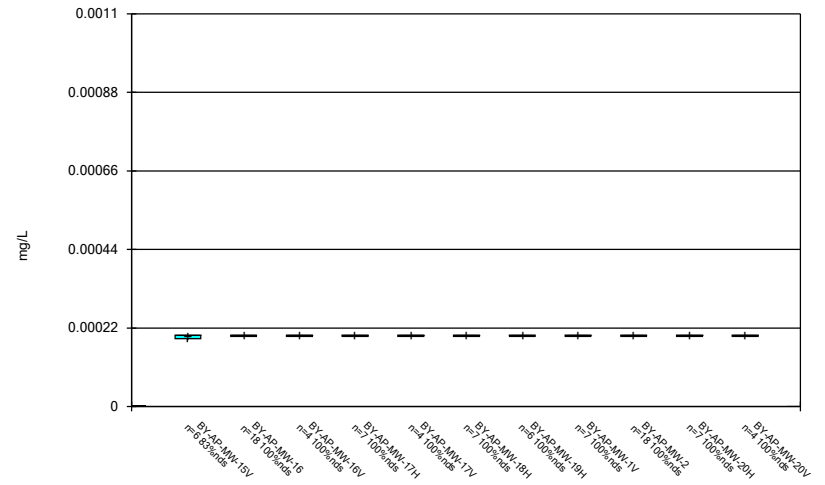
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Box & Whiskers Plot



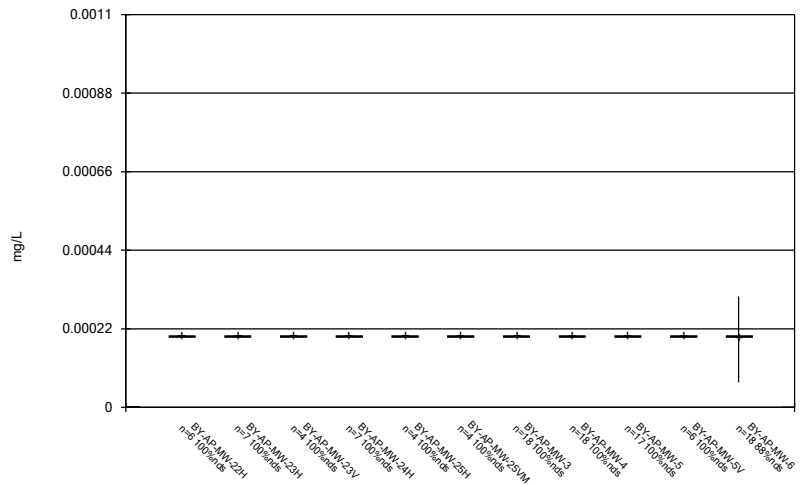
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Box & Whiskers Plot



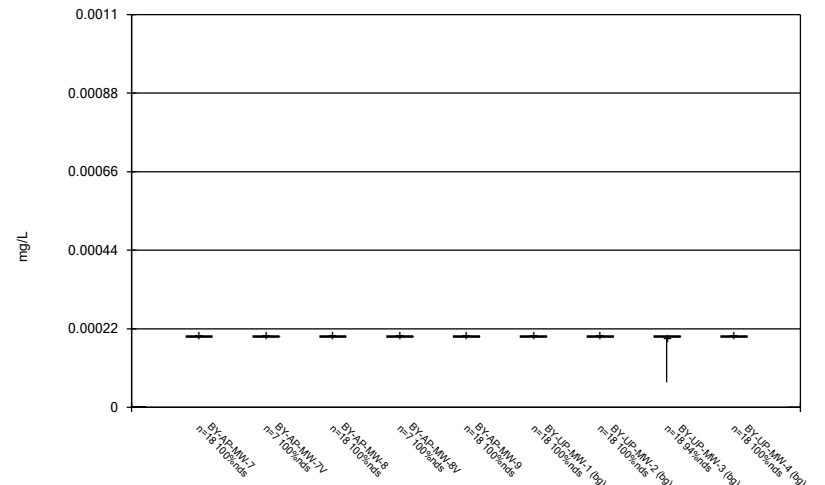
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Box & Whiskers Plot



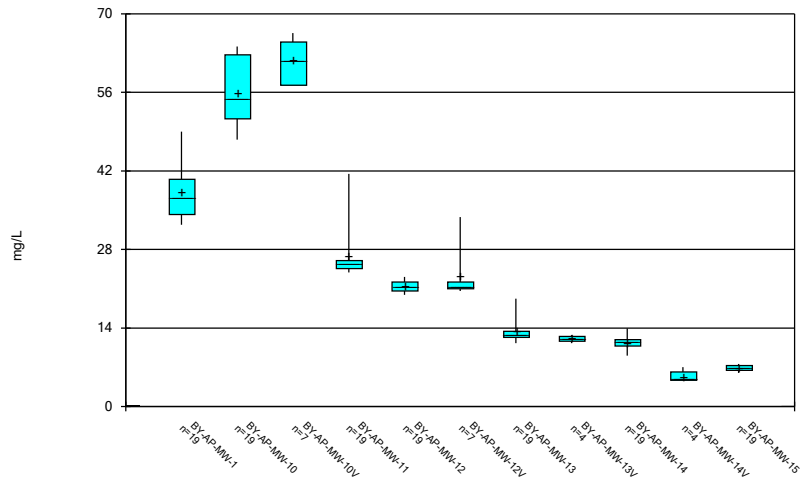
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Box & Whiskers Plot



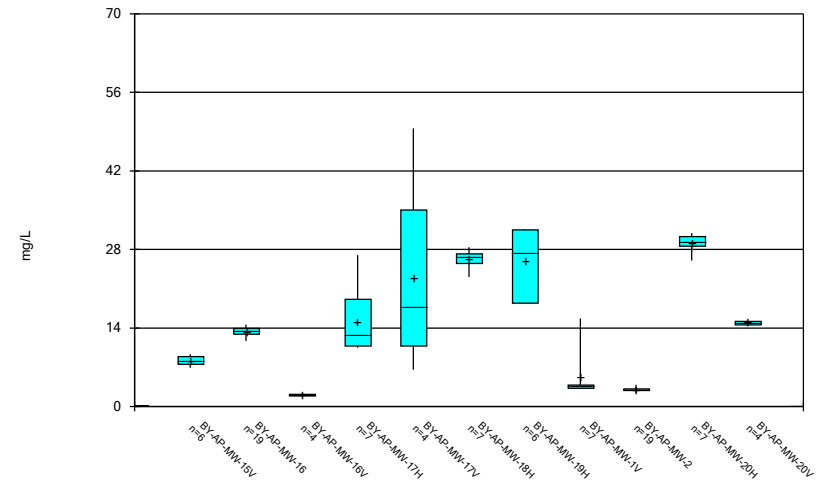
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Box & Whiskers Plot



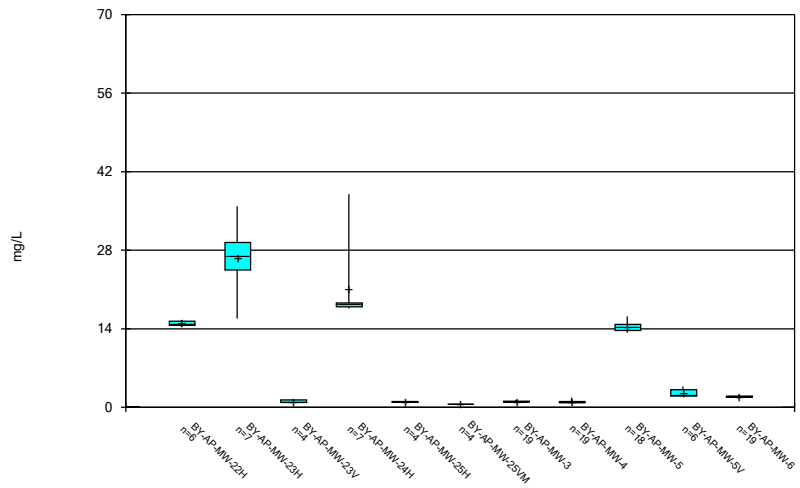
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Box & Whiskers Plot



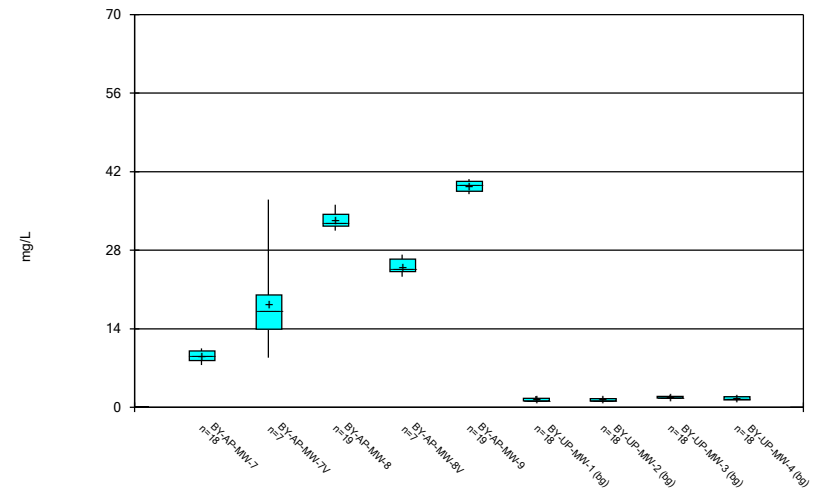
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Box & Whiskers Plot



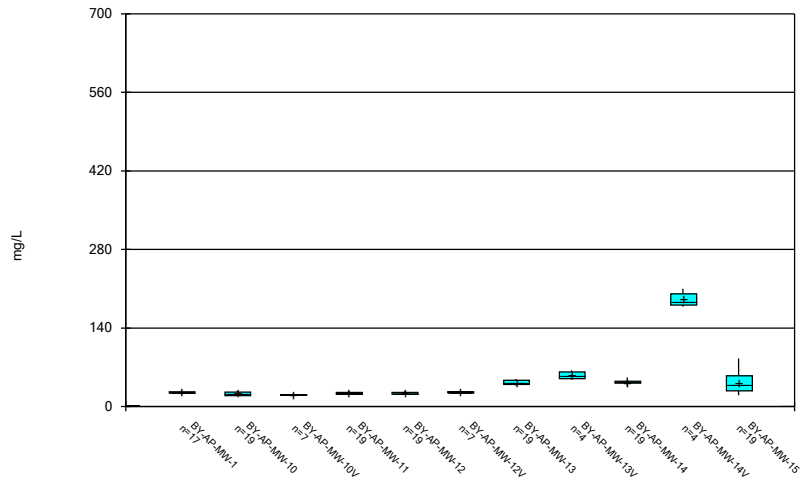
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Box & Whiskers Plot



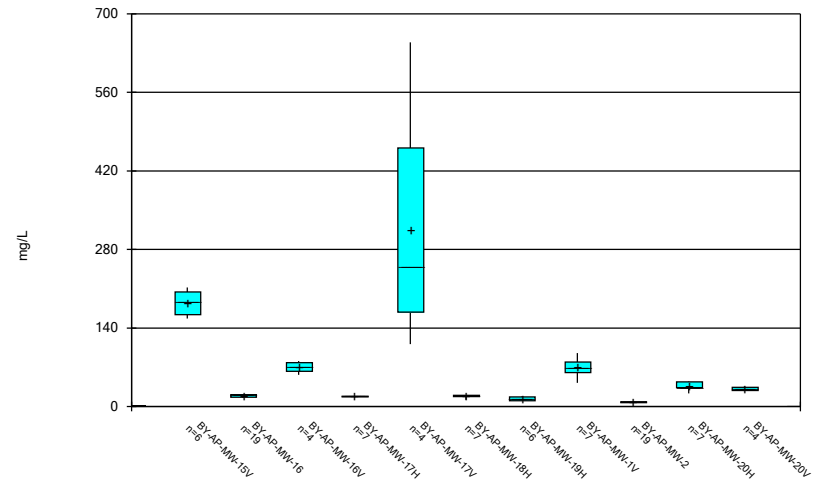
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Box & Whiskers Plot



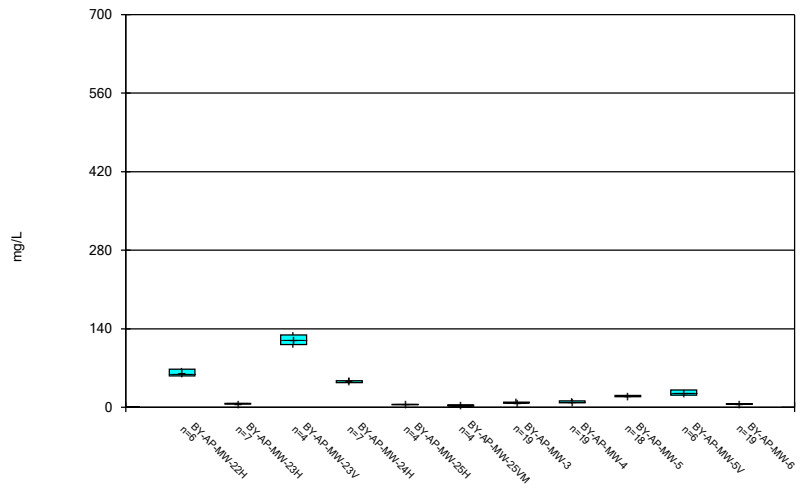
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Box & Whiskers Plot



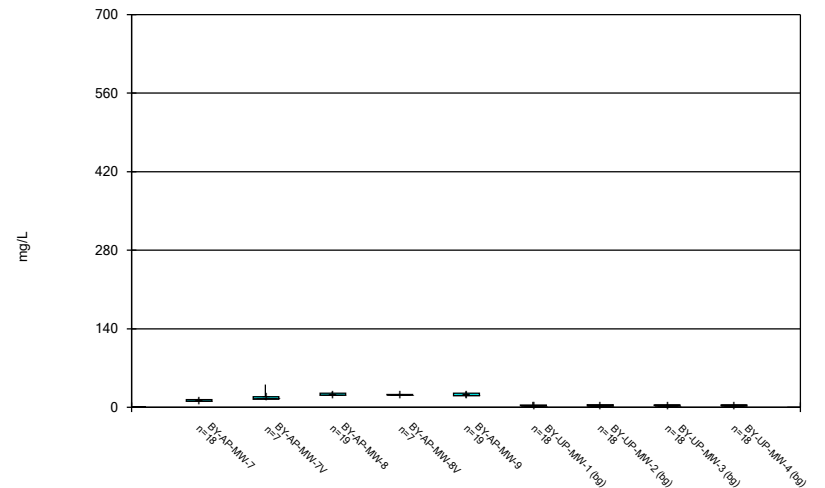
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Box & Whiskers Plot



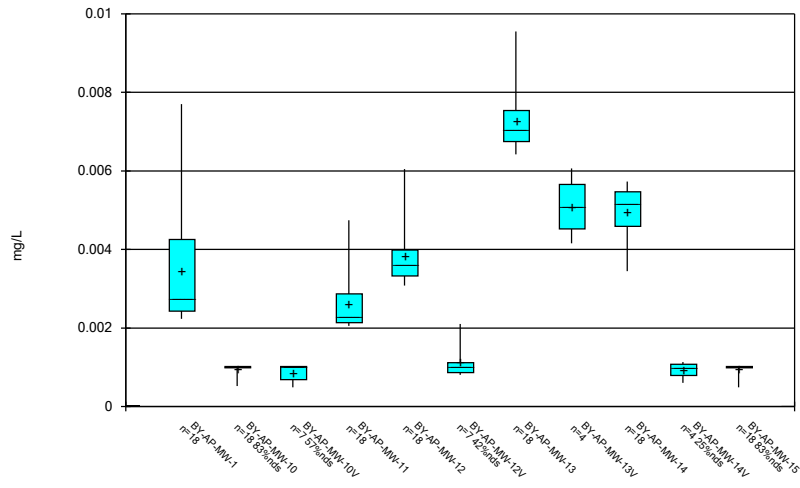
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Box & Whiskers Plot



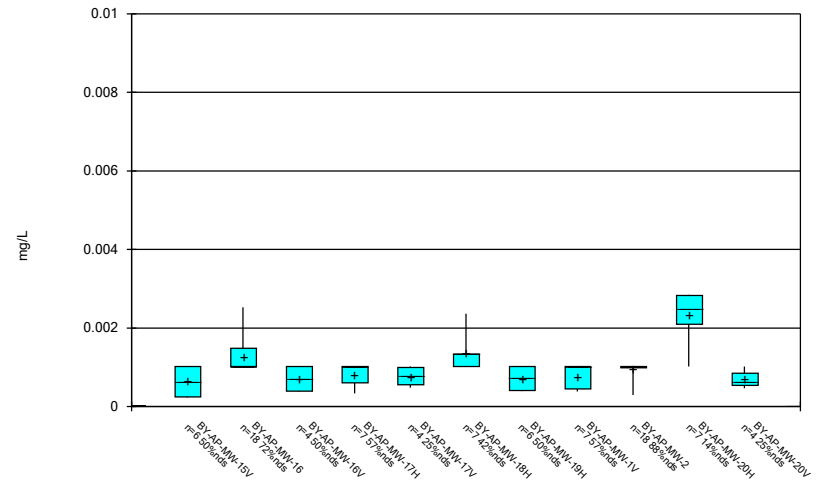
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Box & Whiskers Plot



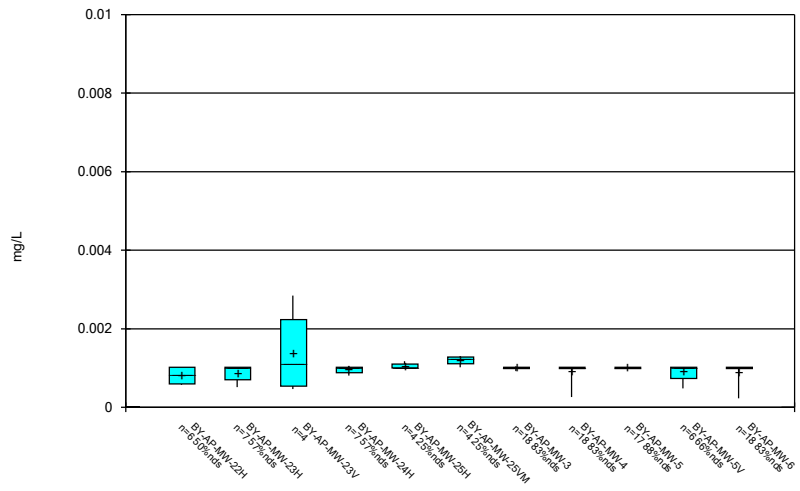
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Box & Whiskers Plot



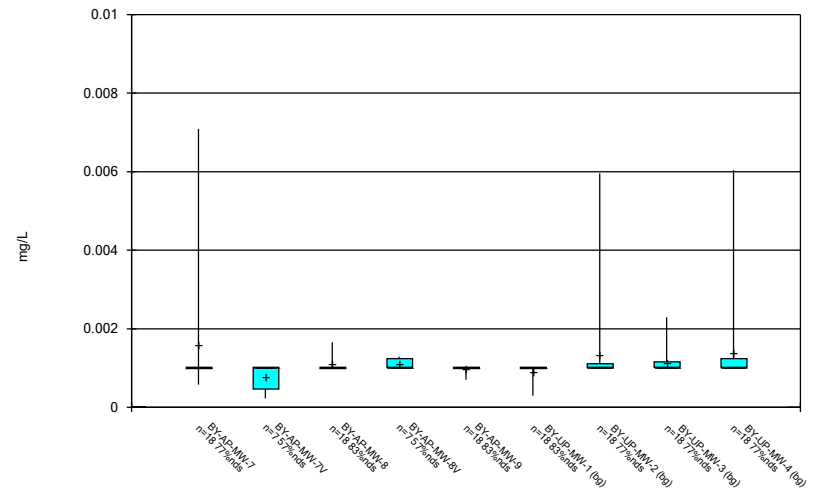
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Box & Whiskers Plot



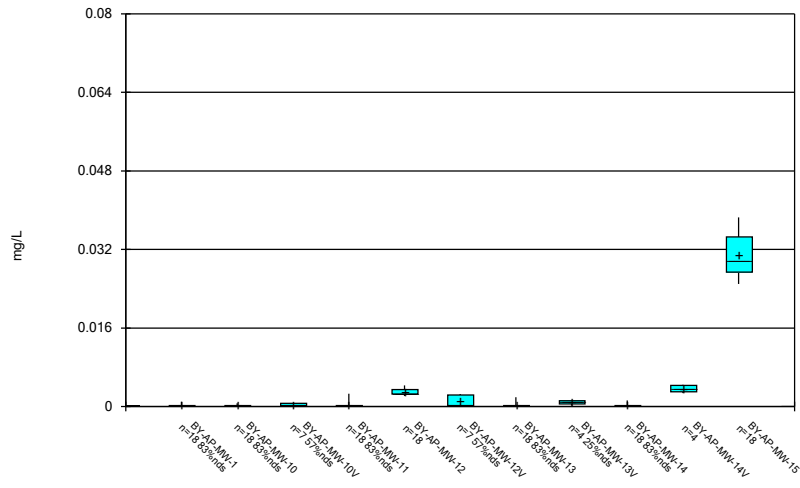
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Box & Whiskers Plot



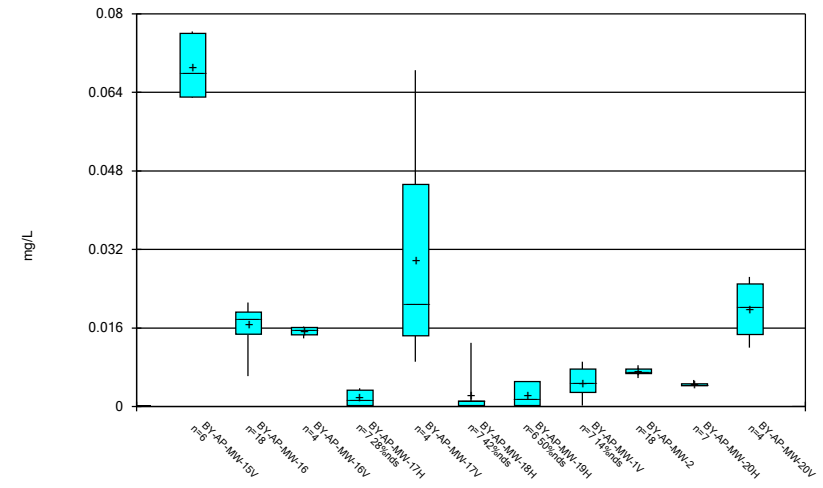
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Box & Whiskers Plot



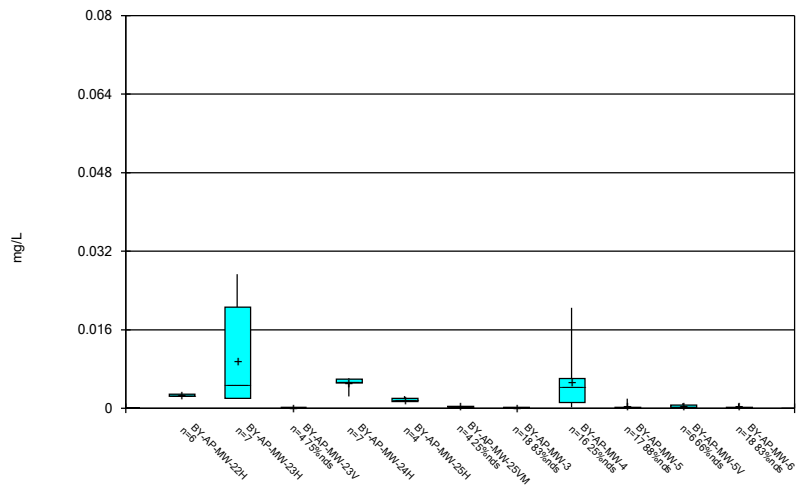
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Box & Whiskers Plot



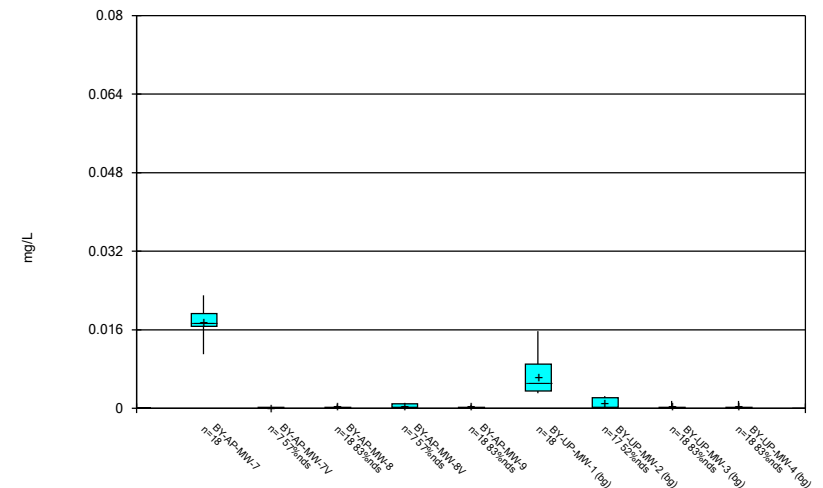
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Box & Whiskers Plot



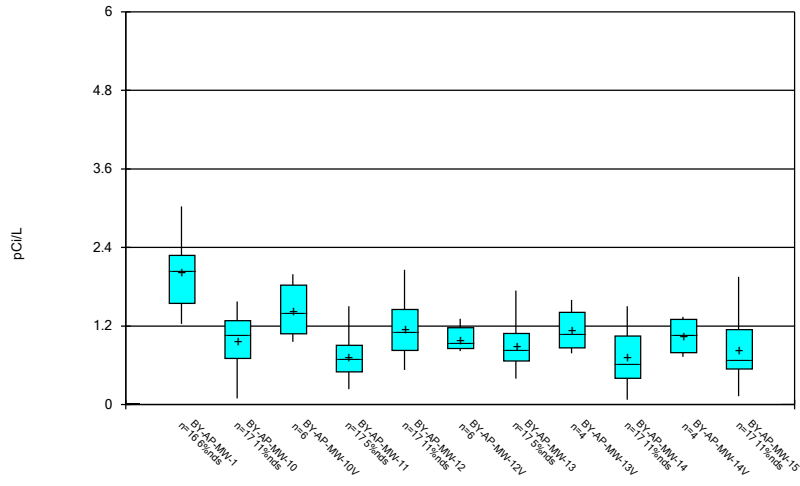
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Box & Whiskers Plot



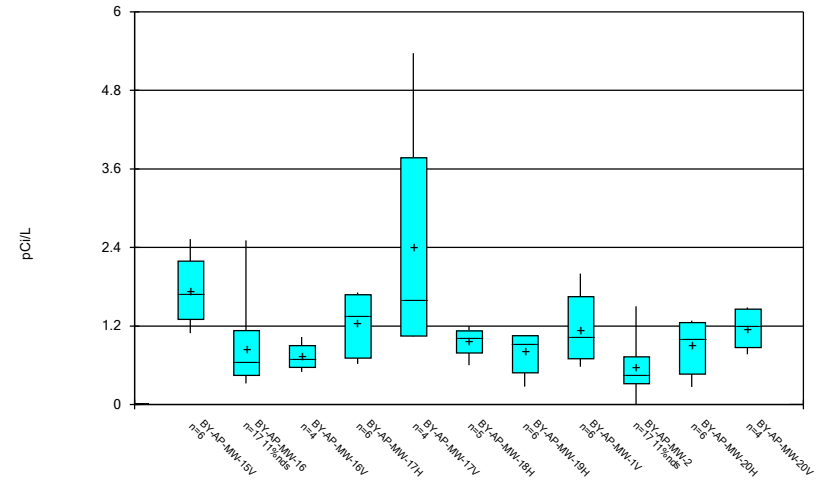
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Box & Whiskers Plot



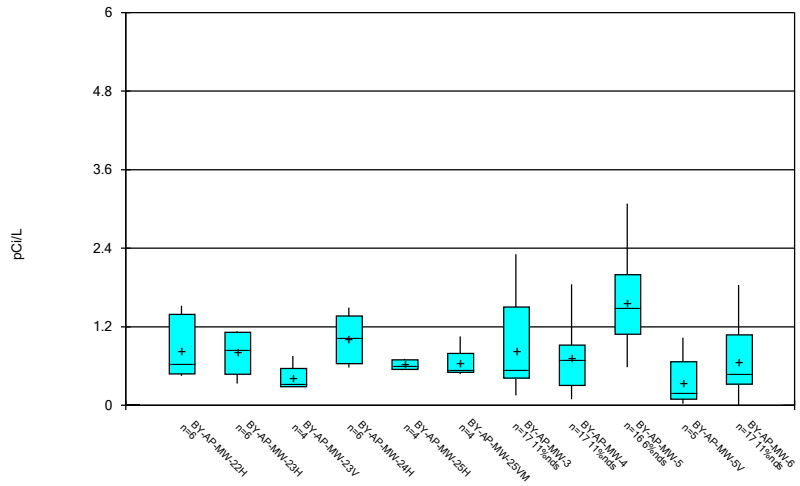
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



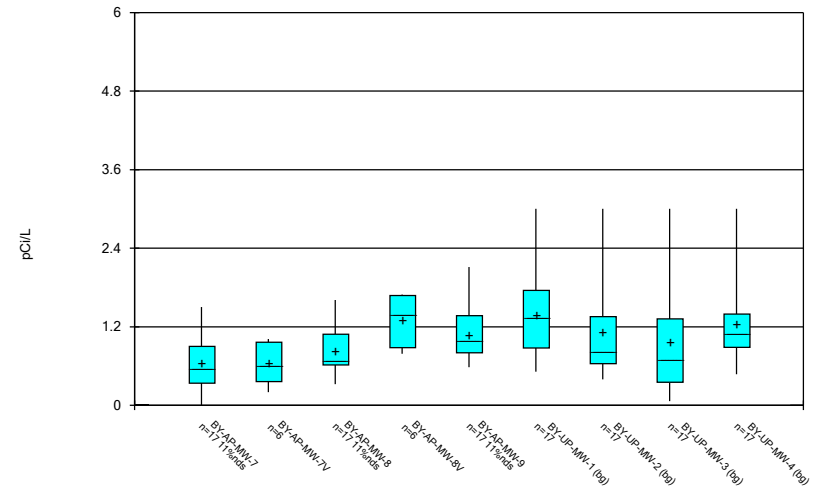
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



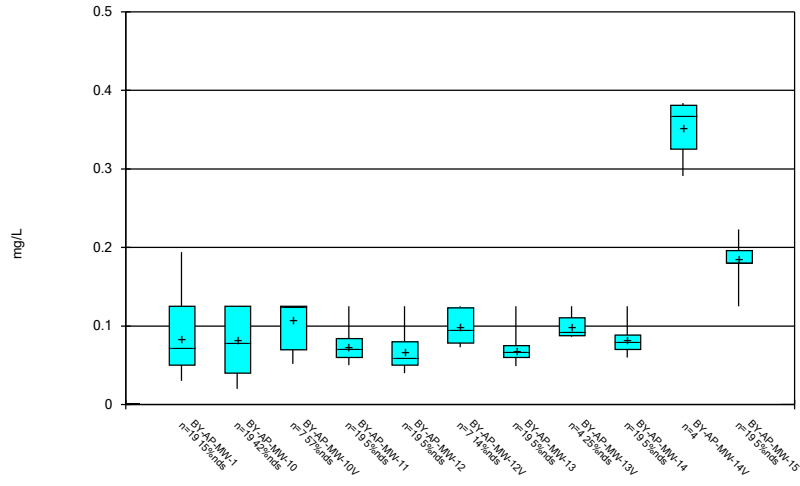
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



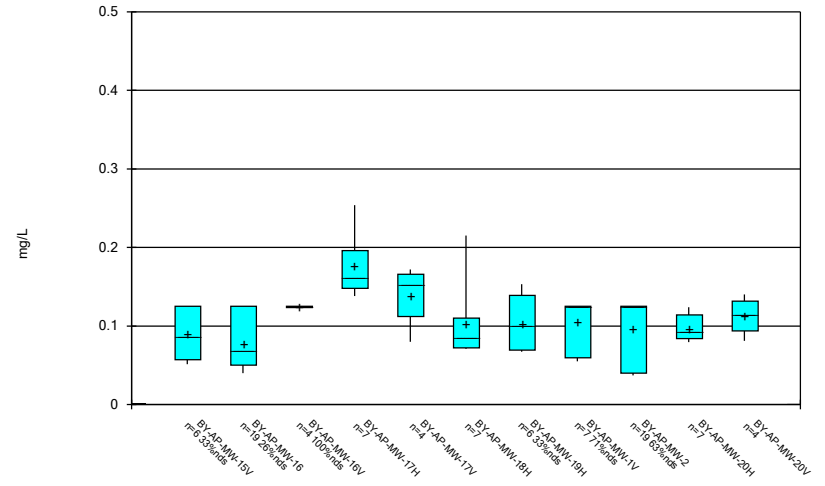
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



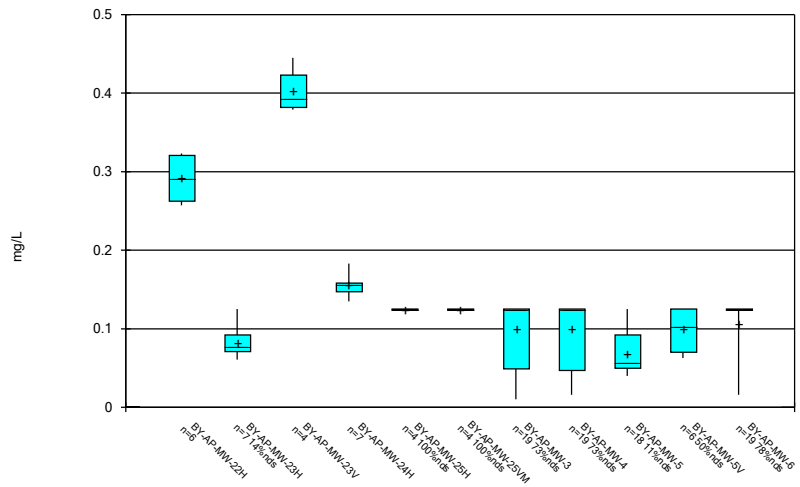
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Box & Whiskers Plot



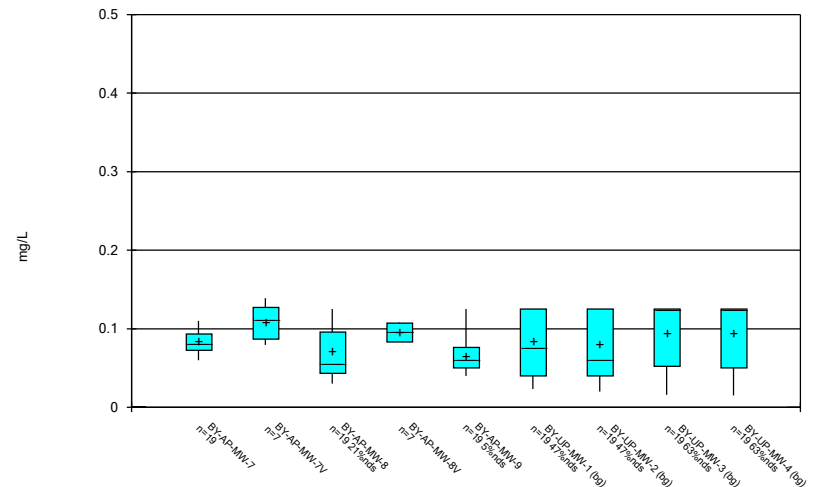
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Box & Whiskers Plot



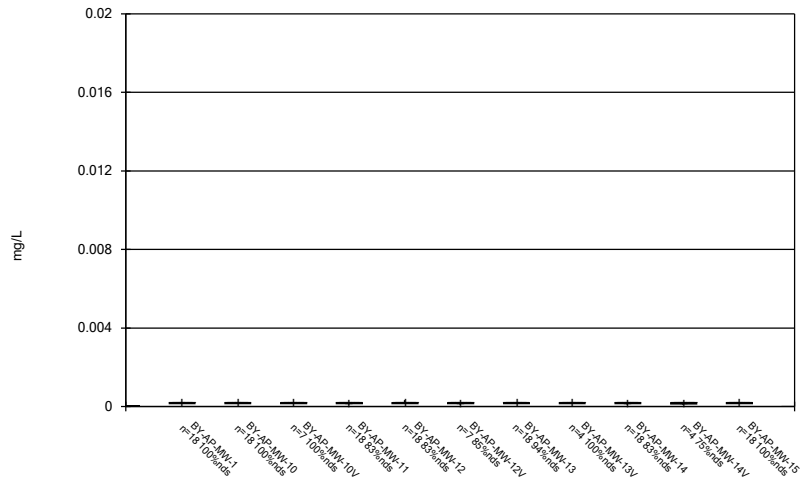
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Box & Whiskers Plot



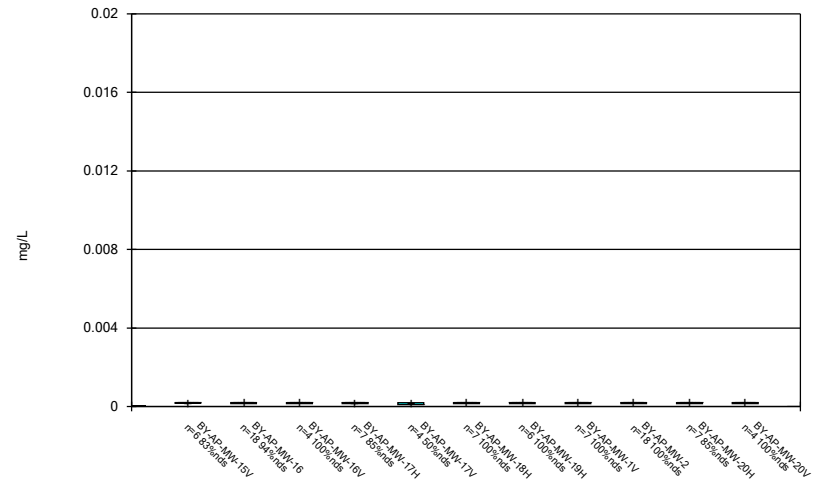
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Box & Whiskers Plot



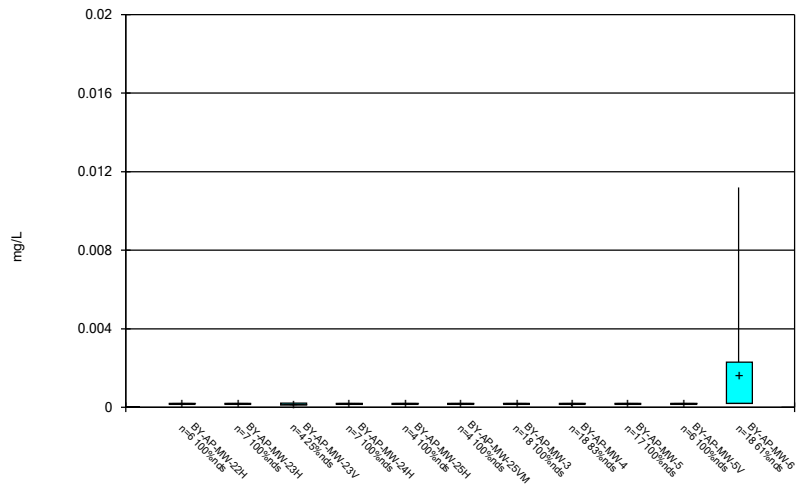
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Box & Whiskers Plot



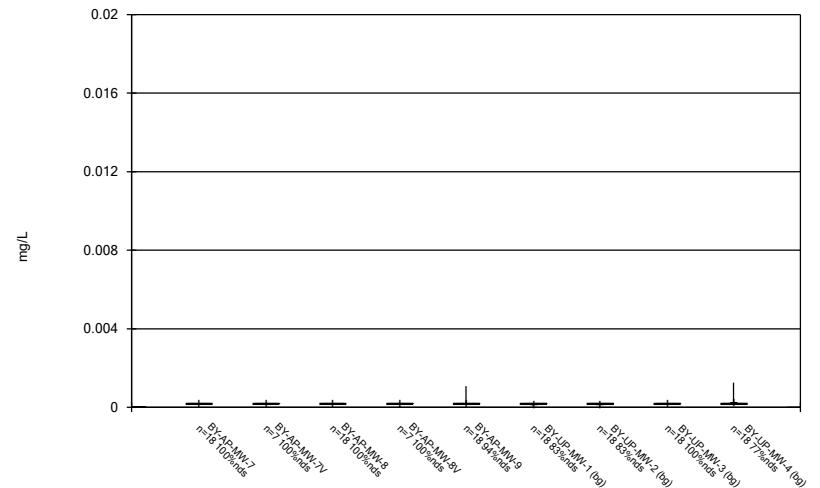
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Box & Whiskers Plot



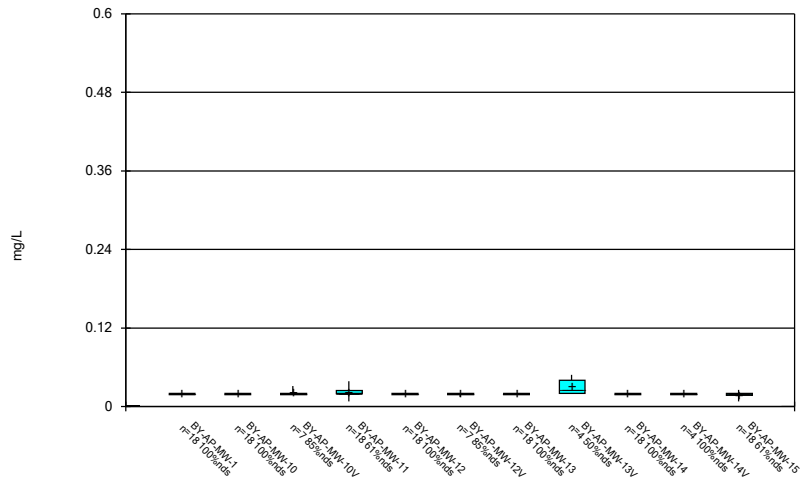
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Box & Whiskers Plot



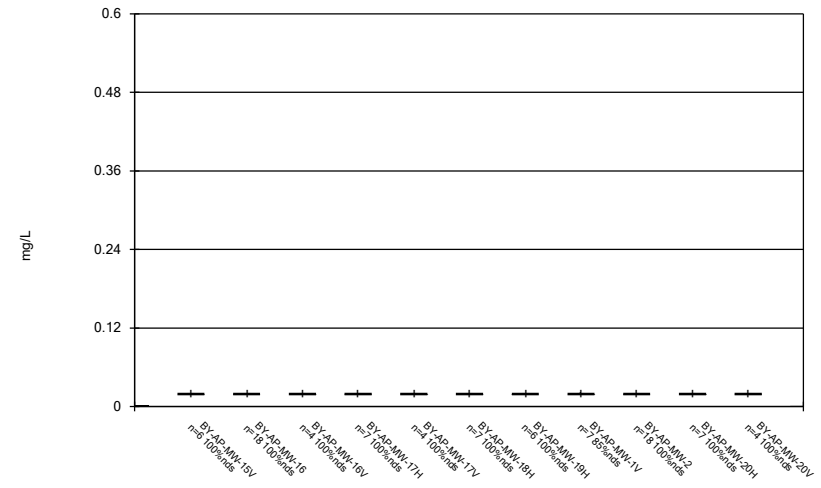
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Box & Whiskers Plot



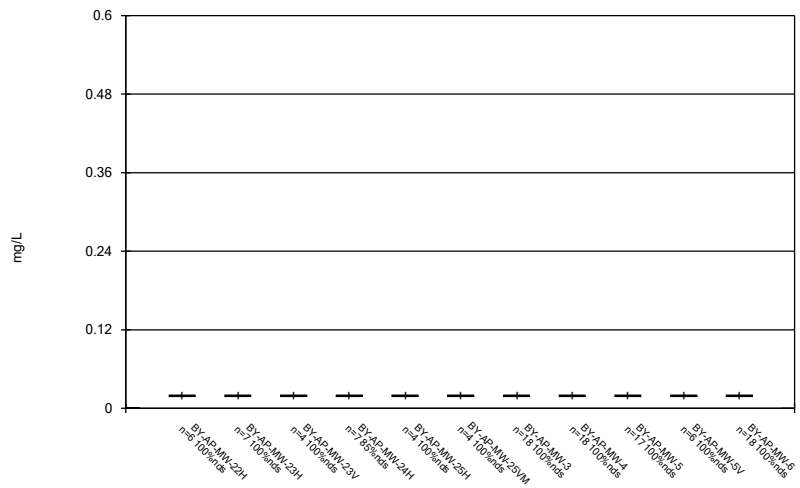
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Box & Whiskers Plot



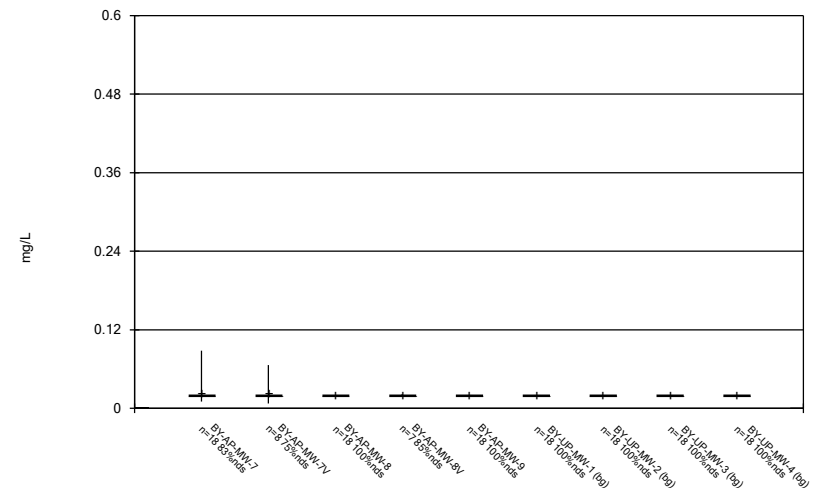
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Box & Whiskers Plot



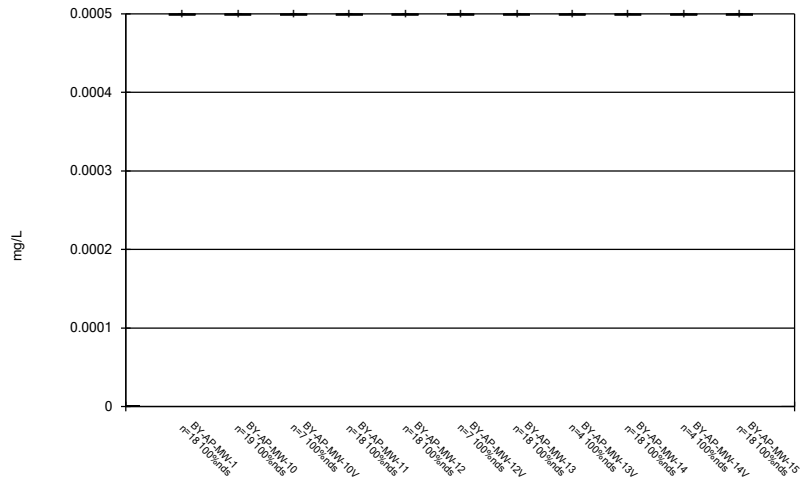
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Box & Whiskers Plot



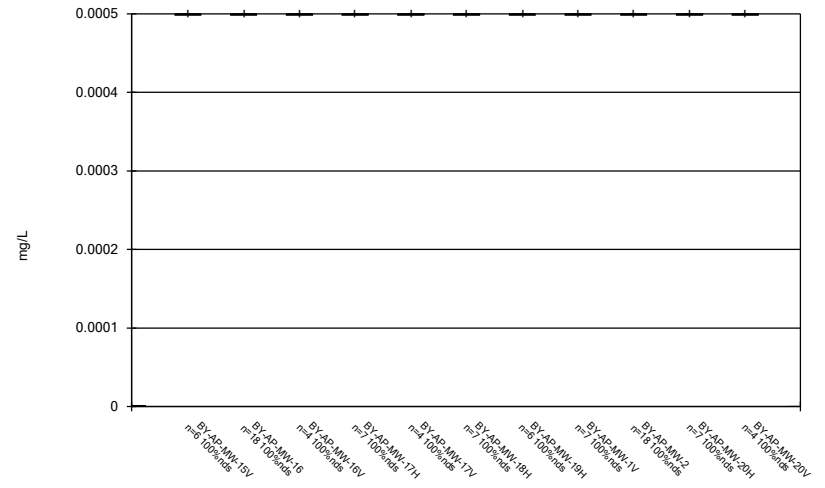
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Box & Whiskers Plot



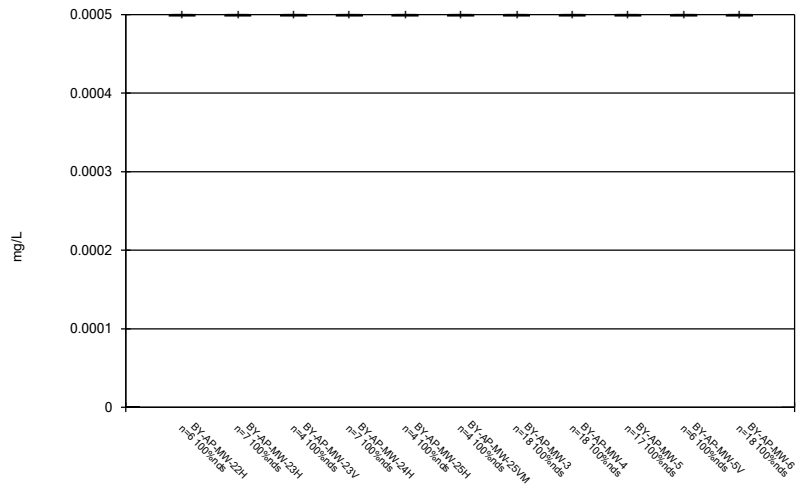
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Box & Whiskers Plot



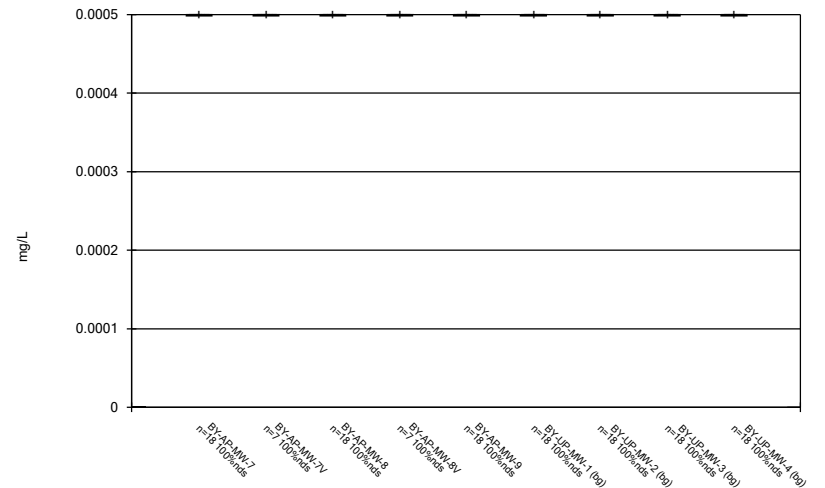
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Box & Whiskers Plot



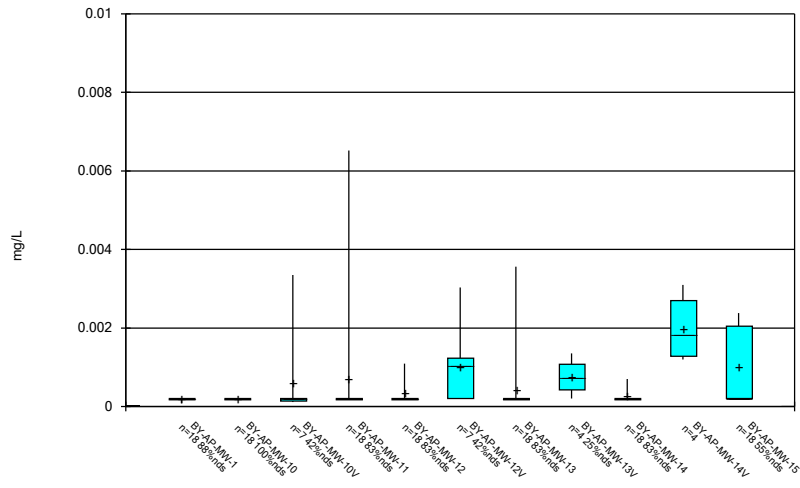
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Box & Whiskers Plot



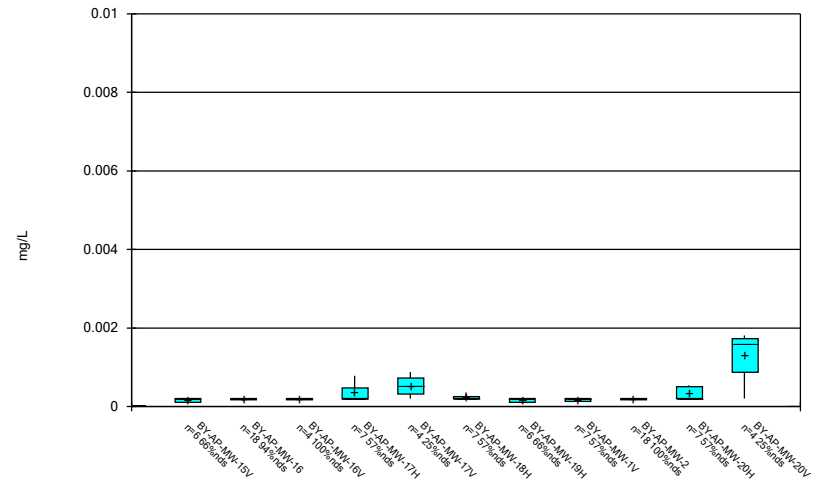
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



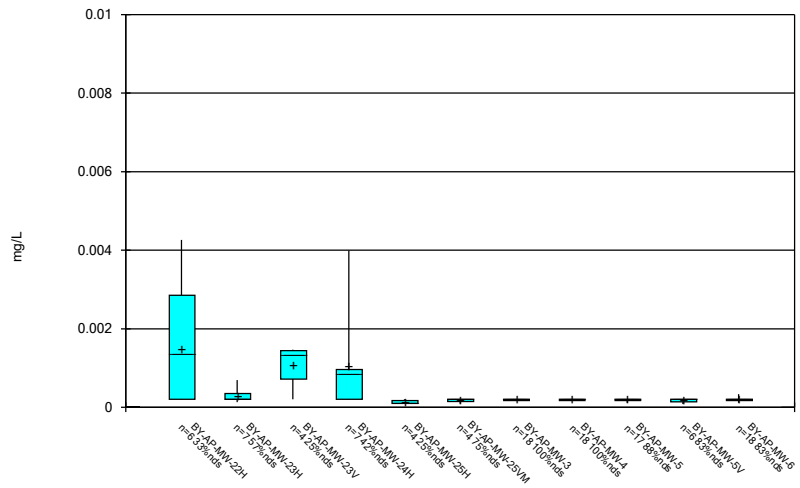
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



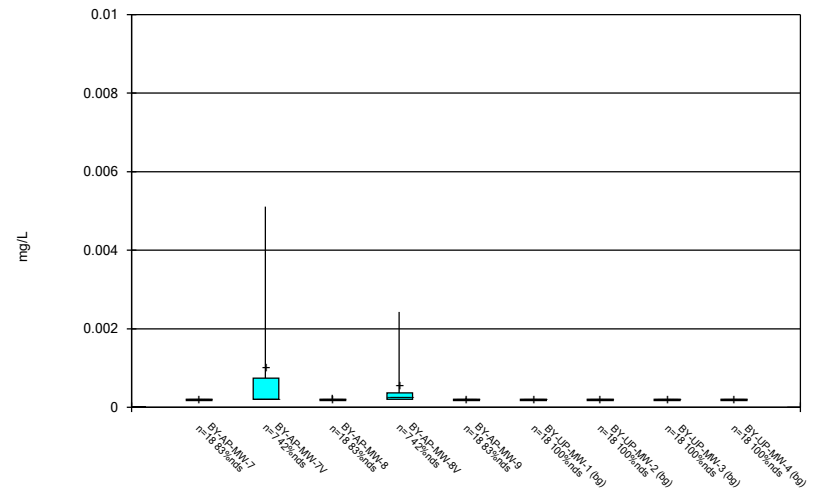
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Box & Whiskers Plot



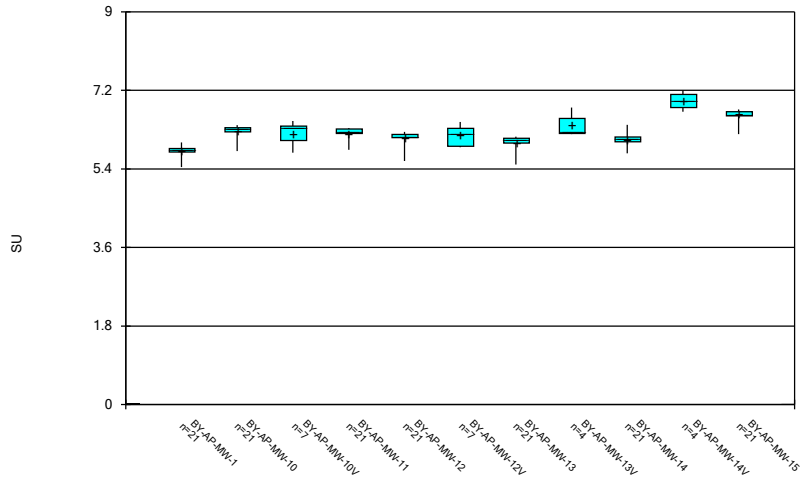
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



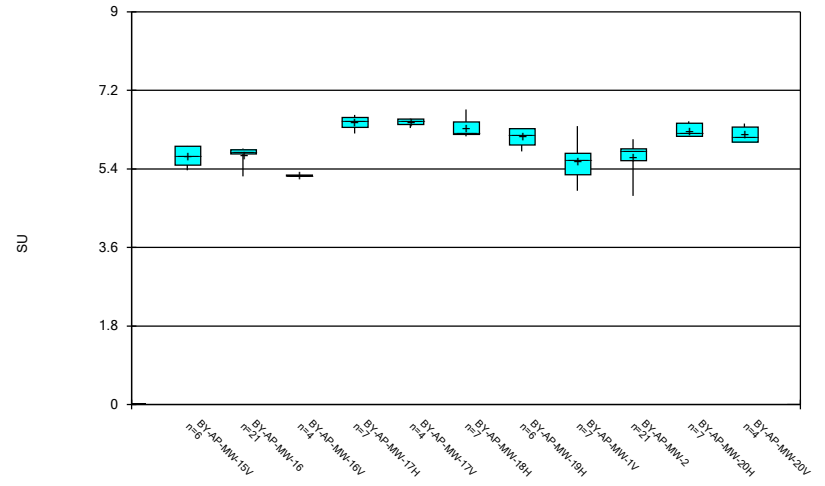
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



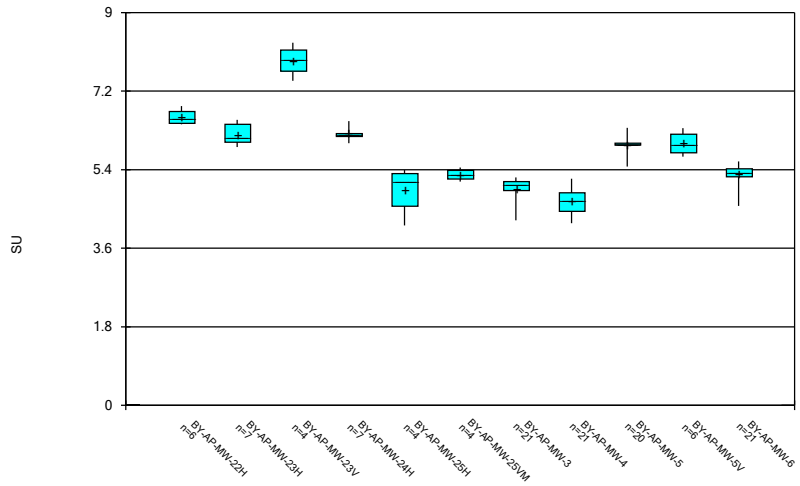
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



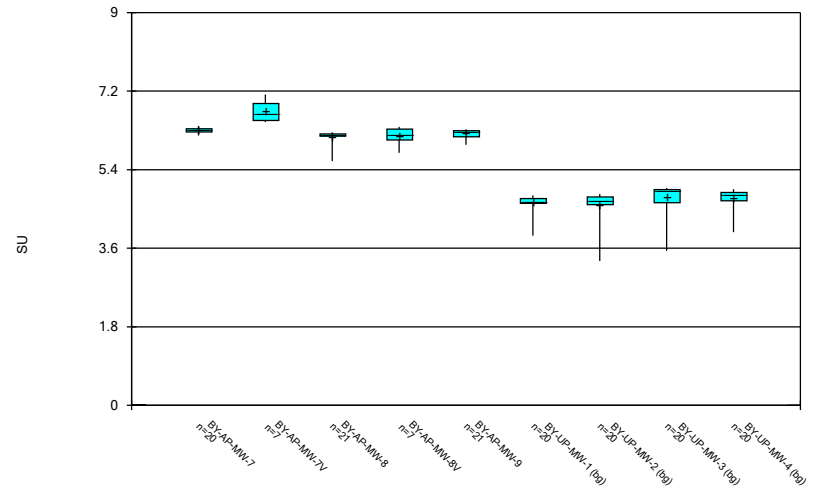
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



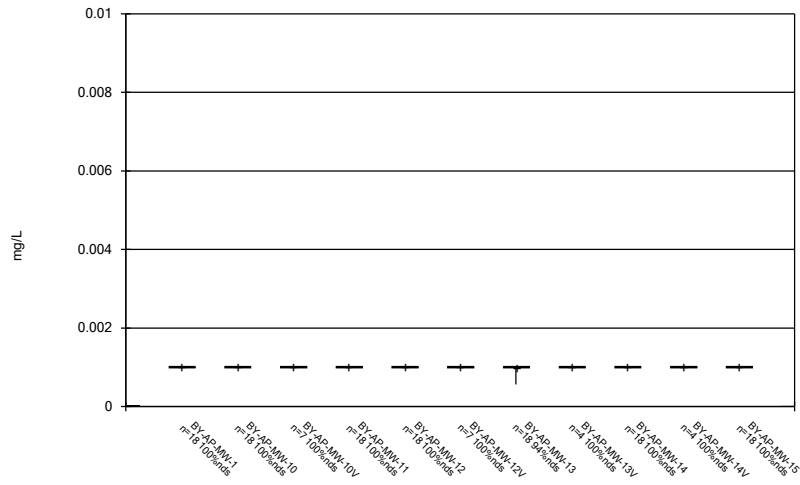
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



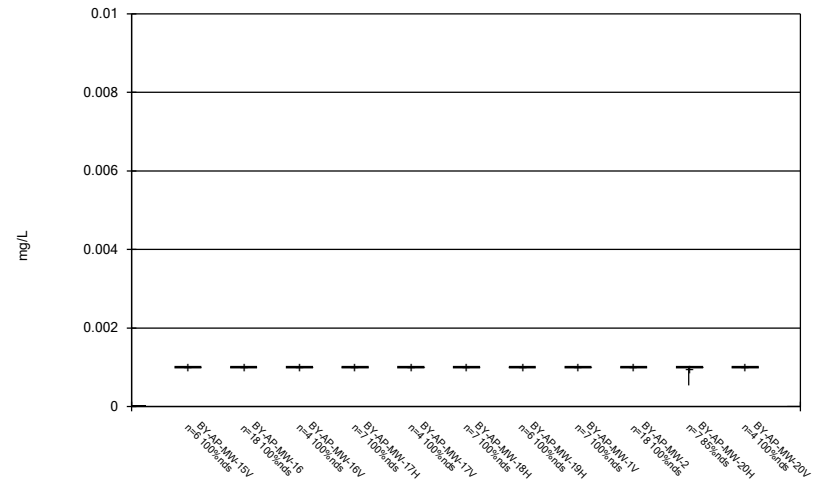
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



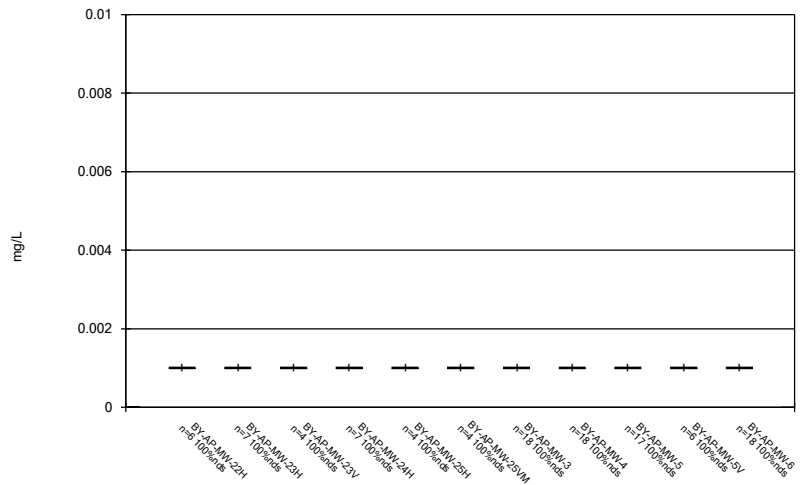
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Box & Whiskers Plot



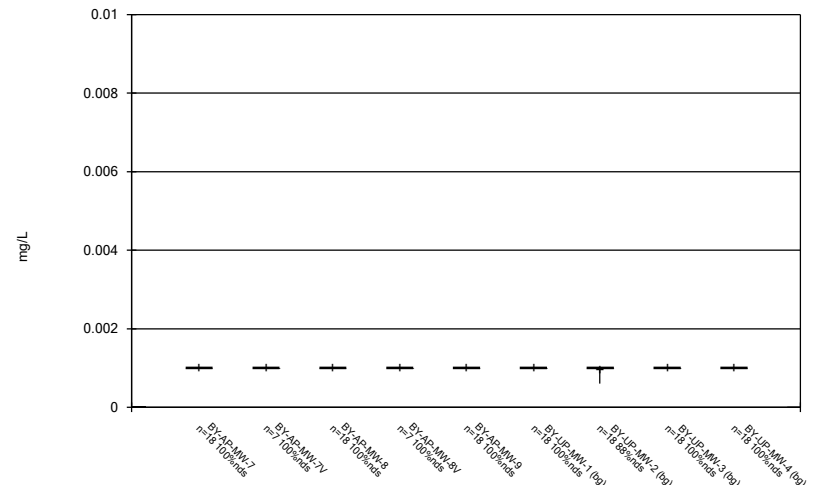
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



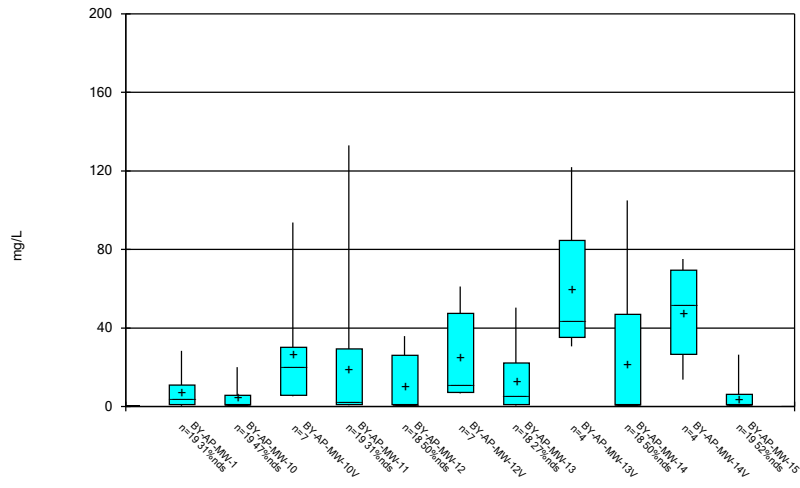
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Box & Whiskers Plot



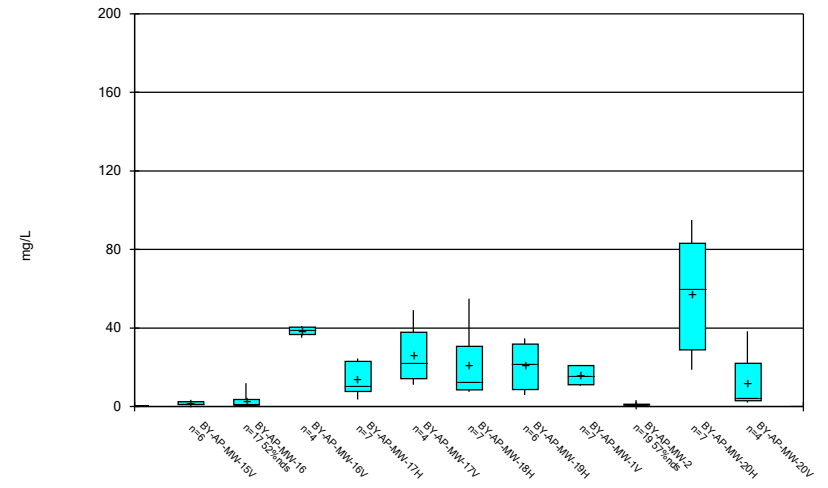
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



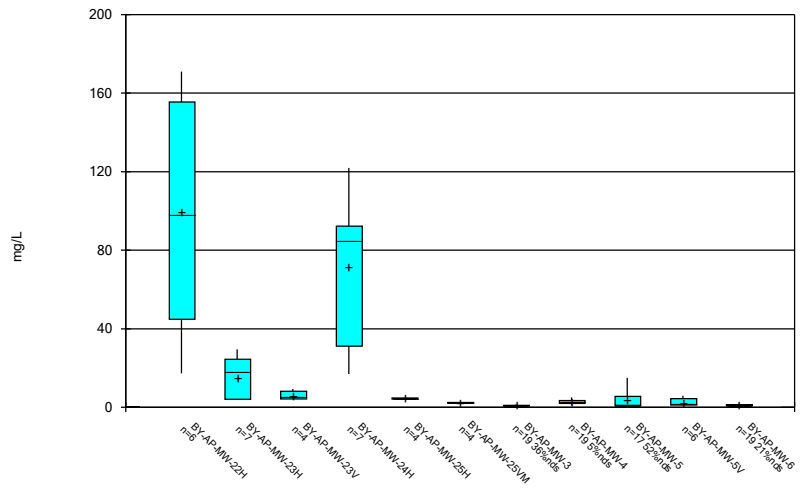
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



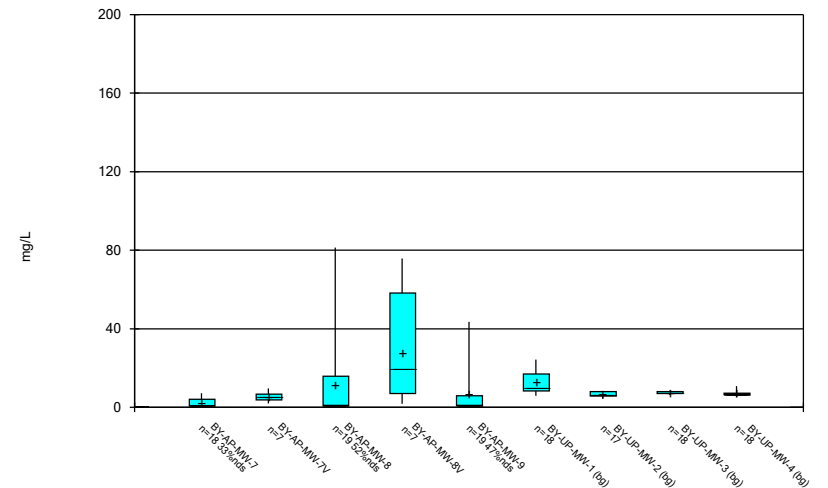
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



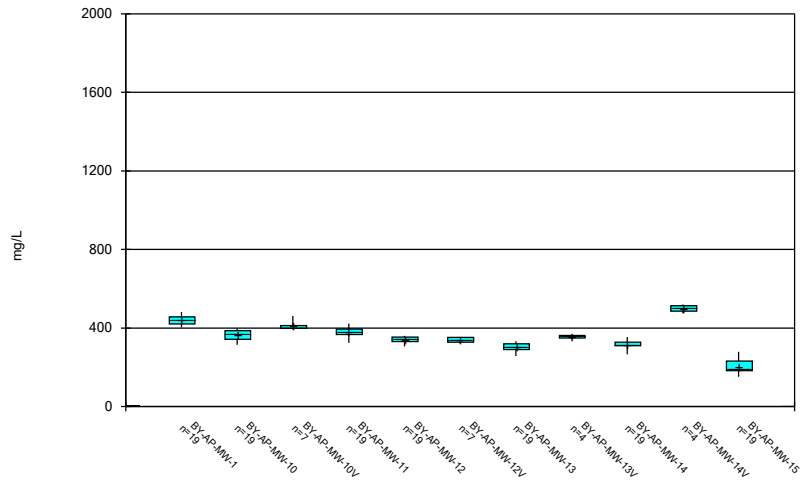
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



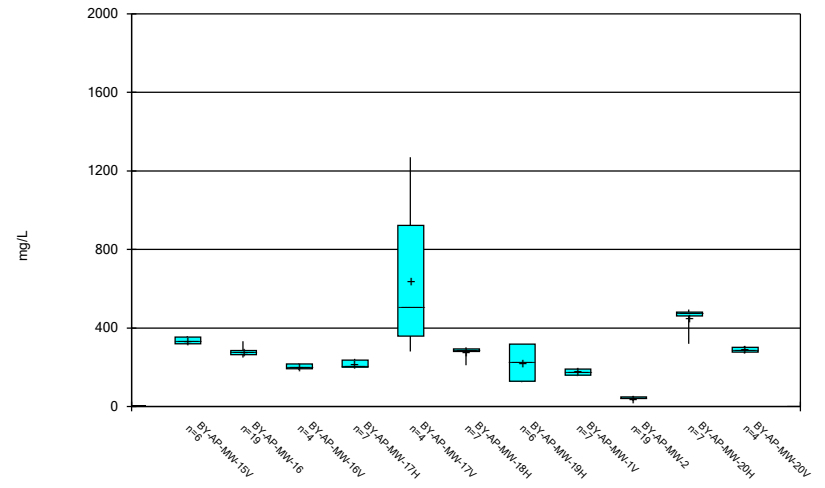
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



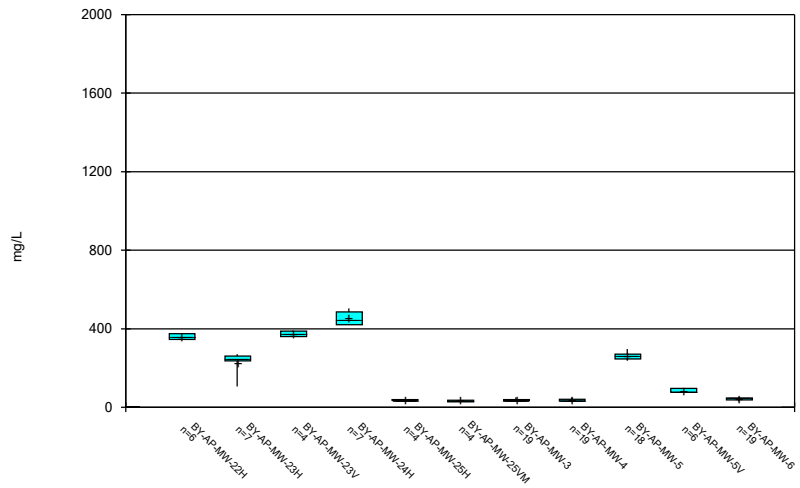
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



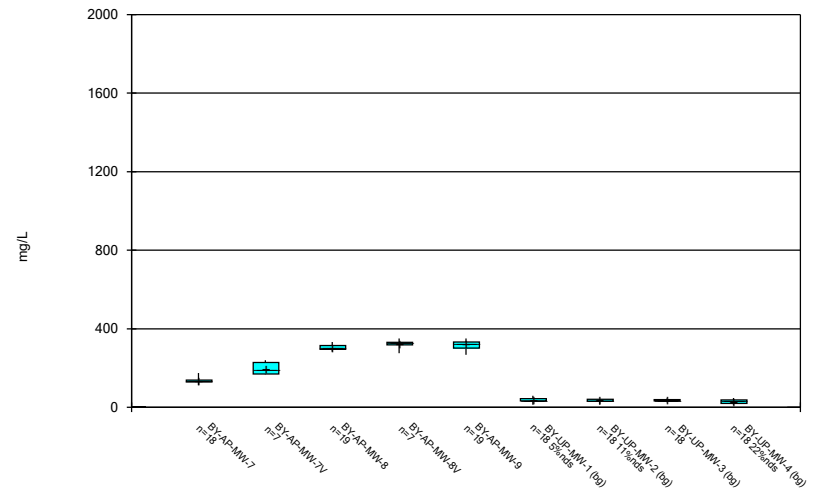
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



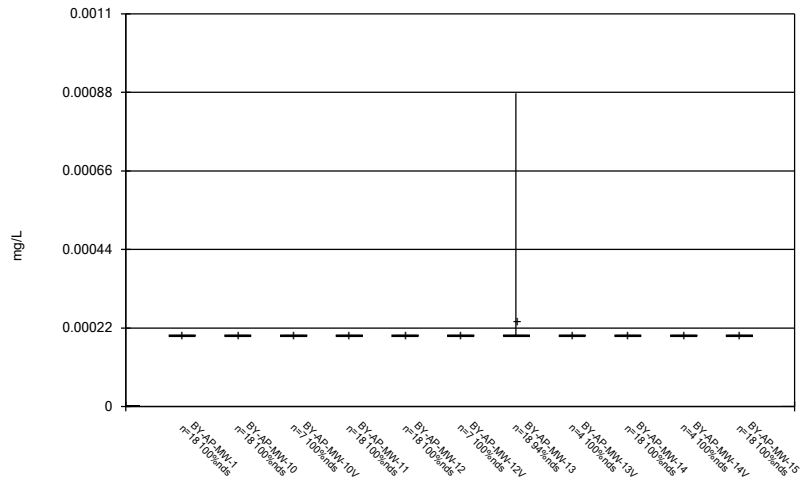
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



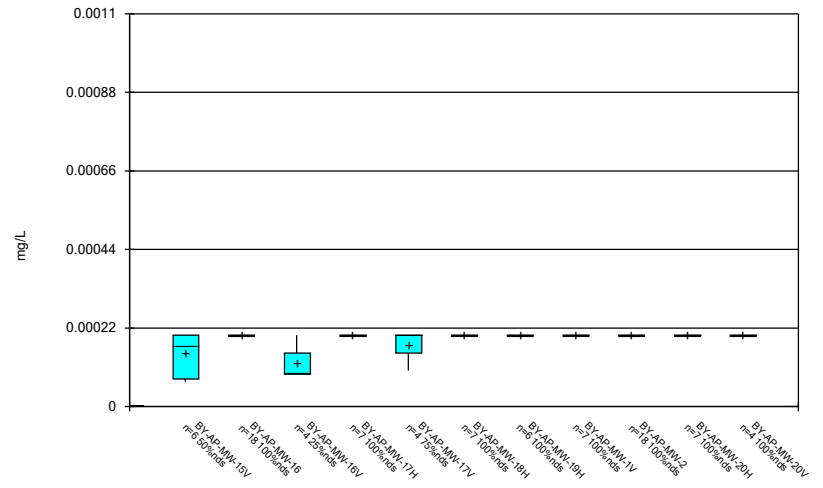
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



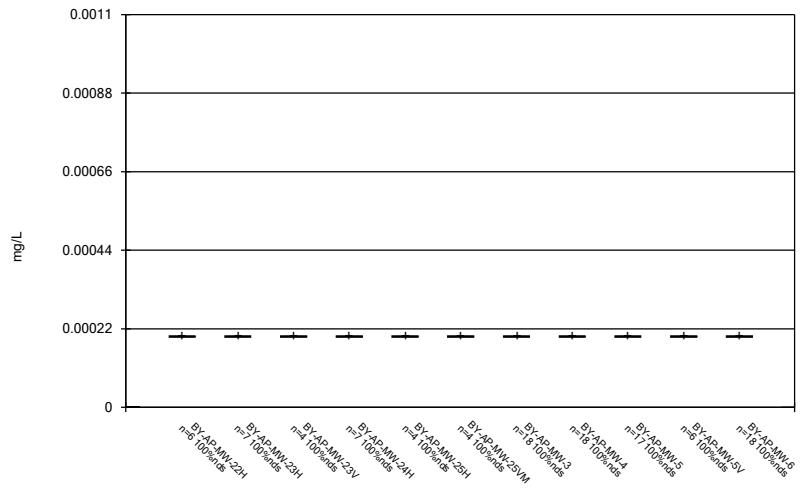
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Box & Whiskers Plot



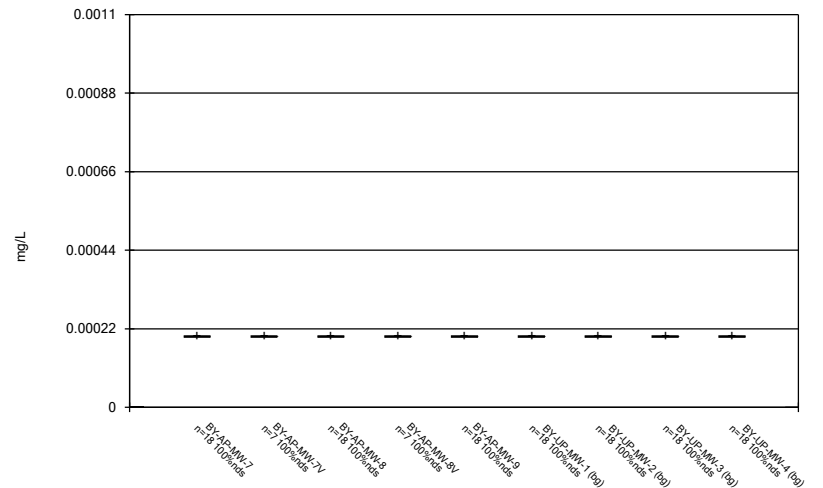
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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



Constituent: Thallium Analysis Run 7/21/2022 3:47 PM View: Descriptive
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Box & Whiskers Plot



Constituent: Thallium Analysis Run 7/21/2022 3:47 PM View: Descriptive
 Plant Barry Client: Southern Company Data: Barry Ash Pond

FIGURE C.

Outlier Summary

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:09 PM

	BY-AP-MW-1 Chloride, Total (mg/L)	BY-AP-MW-4 Cobalt (mg/L)	BY-AP-MW-12 Sulfate as SO4 (mg/L)	BY-AP-MW-13 Sulfate as SO4 (mg/L)	BY-AP-MW-14 Sulfate as SO4 (mg/L)	BY-AP-MW-16 Sulfate as SO4 (mg/L)	BY-AP-MW-5 Sulfate as SO4 (mg/L)
3/2/2016	2.18 (O)						
4/19/2016	9.01 (O)						
1/31/2017	0.0127 (O)						
5/1/2018	0.0126 (O)						
11/28/2018	<50 (O)						
5/29/2019			49.5 (o)	67.6 (o)			
3/31/2020					17.5 (o)	23.7 (o)	
9/2/2020					13.3 (o)		

FIGURE D.

Intrawell Prediction Limits - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH, field (SU)	BY-AP-MW-1	5.91	5.47	5/24/2022	5.44	Yes 19	n/a	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-10	6.463	6.143	5/24/2022	5.81	Yes 19	6.303	0.06515	0	None	No	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-AP-MW-13	6.14	5.79	5/24/2022	5.5	Yes 19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2	
pH, field (SU)	BY-AP-MW-2	6.2	5.161	5/24/2022	4.78	Yes 19	1094	156.3	0	None	x^4	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-AP-MW-6	5.694	4.846	5/25/2022	4.57	Yes 19	801.5	101.6	0	None	x^4	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-AP-MW-8	6.26	5.89	5/24/2022	5.6	Yes 19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2	
pH, field (SU)	BY-UP-MW-1	4.882	4.49	5/31/2022	3.89	Yes 18	4.686	0.0786	0	None	No	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-UP-MW-2	5.032	4.318	5/31/2022	3.31	Yes 18	4.675	0.1431	0	None	No	0.0002351	Param Intra 1 of 2	
pH, field (SU)	BY-UP-MW-3	4.98	4.4	5/31/2022	3.54	Yes 18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2	
pH, field (SU)	BY-UP-MW-4	5.082	4.517	5/31/2022	3.97	Yes 18	4.799	0.1134	0	None	No	0.0002351	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-1	6.348	n/a	5/24/2022	21	Yes 13	52.17	74.33	46.15	Kaplan-Meier	*3	0.0004702	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-10	5	n/a	5/24/2022	14.7	Yes 13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-11	19.37	n/a	5/23/2022	29.3	Yes 13	1.308	0.5028	46.15	Kaplan-Meier	^(1/3)	0.0004702	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-12	7.04	n/a	5/23/2022	13	Yes 12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-13	9.841	n/a	5/24/2022	38.3	Yes 12	3.818	2.151	41.67	Kaplan-Meier	No	0.0004702	Param Intra 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-14	61.6	n/a	5/25/2022	105	Yes 16	n/a	n/a	56.25	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-7	5	n/a	5/24/2022	7.14	Yes 16	n/a	n/a	37.5	n/a	n/a	0.006456	NP Intra (normality) 1 of 2	
Sulfate as SO4 (mg/L)	BY-AP-MW-8	6.01	n/a	5/24/2022	81.3	Yes 13	n/a	n/a	76.92	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2	

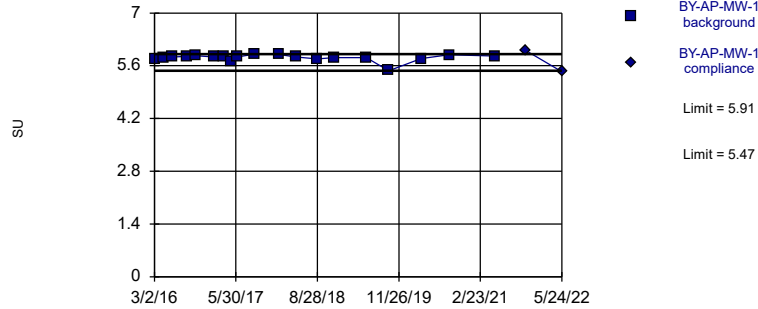
Intrawell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH, field (SU)	BY-AP-MW-1	5.91	5.47	5/24/2022	5.44	Yes	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-10	6.463	6.143	5/24/2022	5.81	Yes	19	6.303	0.06515	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-11	6.34	5.85	5/23/2022	6.32	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-12	6.25	5.58	5/23/2022	6.12	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-13	6.14	5.79	5/24/2022	5.5	Yes	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-14	6.14	5.76	5/25/2022	6.14	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-15	6.76	6.2	5/25/2022	6.68	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-16	5.87	5.23	5/25/2022	5.74	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-2	6.2	5.161	5/24/2022	4.78	Yes	19	1094	156.3	0	None	x^4	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-3	5.22	4.24	5/25/2022	4.64	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-4	5.355	3.955	5/25/2022	4.6	No	19	4.655	0.2846	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-5	6.03	5.47	5/25/2022	5.99	No	18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-6	5.694	4.846	5/25/2022	4.57	Yes	19	801.5	101.6	0	None	x^4	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-7	6.432	6.166	5/24/2022	6.32	No	18	6.299	0.05346	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-AP-MW-8	6.26	5.89	5/24/2022	5.6	Yes	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-AP-MW-9	6.32	5.97	5/24/2022	6.03	No	19	n/a	n/a	0	n/a	n/a	0.009664	NP Intra (normality) 1 of 2
pH, field (SU)	BY-UP-MW-1	4.882	4.49	5/31/2022	3.89	Yes	18	4.686	0.0786	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-UP-MW-2	5.032	4.318	5/31/2022	3.31	Yes	18	4.675	0.1431	0	None	No	0.0002351	Param Intra 1 of 2
pH, field (SU)	BY-UP-MW-3	4.98	4.4	5/31/2022	3.54	Yes	18	n/a	n/a	0	n/a	n/a	0.01075	NP Intra (normality) 1 of 2
pH, field (SU)	BY-UP-MW-4	5.082	4.517	5/31/2022	3.97	Yes	18	4.799	0.1134	0	None	No	0.0002351	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-1	6.348	n/a	5/24/2022	21	Yes	13	52.17	74.33	46.15	Kaplan-Meier	x^3	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-10	5	n/a	5/24/2022	14.7	Yes	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-11	19.37	n/a	5/23/2022	29.3	Yes	13	1.308	0.5028	46.15	Kaplan-Meier	x^(1/3)	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-12	7.04	n/a	5/23/2022	13	Yes	12	n/a	n/a	75	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-13	9.841	n/a	5/24/2022	38.3	Yes	12	3.818	2.151	41.67	Kaplan-Meier	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-14	61.6	n/a	5/25/2022	105	Yes	16	n/a	n/a	56.25	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-15	7.61	n/a	5/25/2022	1.8J	No	17	n/a	n/a	58.82	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-16	6.72	n/a	5/25/2022	6.29	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-2	3.3	n/a	5/24/2022	0.615J	No	17	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-3	5	n/a	5/25/2022	1.41J	No	17	n/a	n/a	41.18	n/a	n/a	0.005914	NP Intra (normality) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-4	5.778	n/a	5/25/2022	1.97J	No	17	2.878	1.149	5.882	None	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-5	11	n/a	5/25/2022	5.53	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-6	3.037	n/a	5/25/2022	1.27J	No	17	0.01145	0.4356	23.53	Kaplan-Meier	ln(x)	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-7	5	n/a	5/24/2022	7.14	Yes	16	n/a	n/a	37.5	n/a	n/a	0.006456	NP Intra (normality) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-8	6.01	n/a	5/24/2022	81.3	Yes	13	n/a	n/a	76.92	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-AP-MW-9	5.91	n/a	5/24/2022	5.76	No	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-1	31.7	n/a	5/31/2022	12.8	No	16	3.458	0.85	0	None	sqrt(x)	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-2	9.774	n/a	5/31/2022	8.09	No	15	6.454	1.269	0	None	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-3	9.087	n/a	5/31/2022	7.02	No	16	7.496	0.6224	0	None	No	0.0004702	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	BY-UP-MW-4	10.8	n/a	5/31/2022	7.94	No	16	n/a	n/a	0	n/a	n/a	0.006456	NP Intra (normality) 1 of 2

Exceeds Limits

Prediction Limit Intrawell Non-parametric

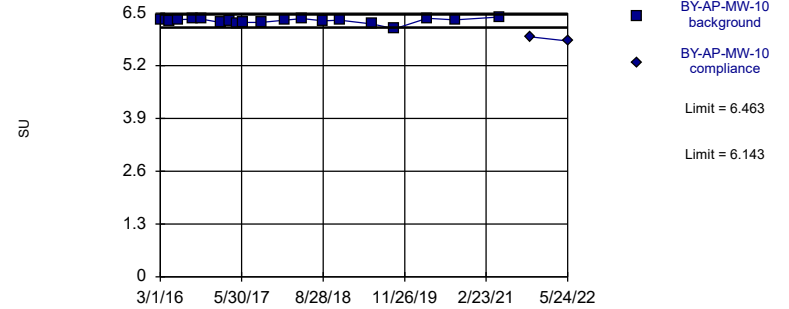


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Parametric

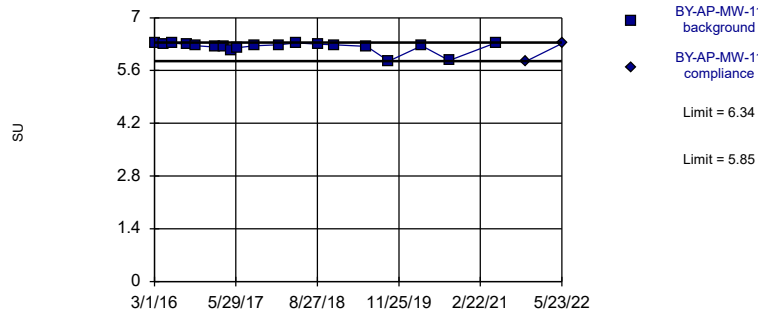


Background Data Summary: Mean=6.303, Std. Dev.=0.06515, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8965, critical = 0.863. Kappa = 2.46 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

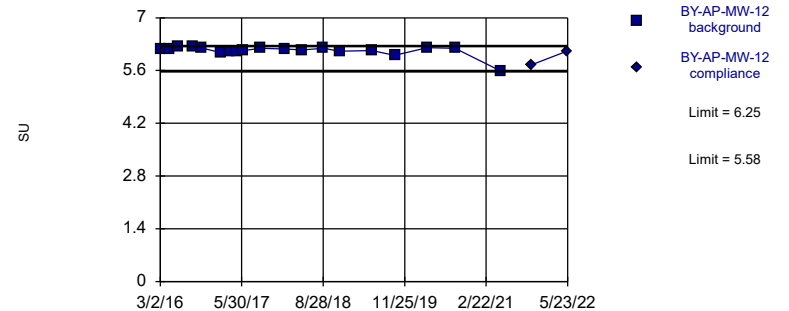


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

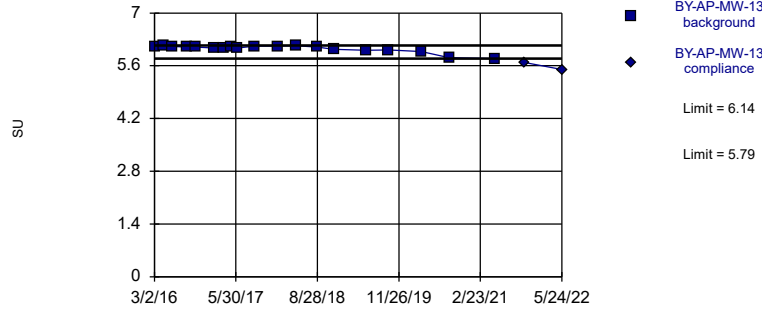


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Non-parametric

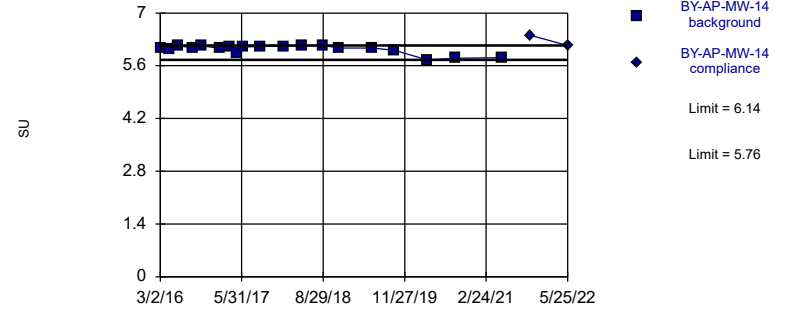


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

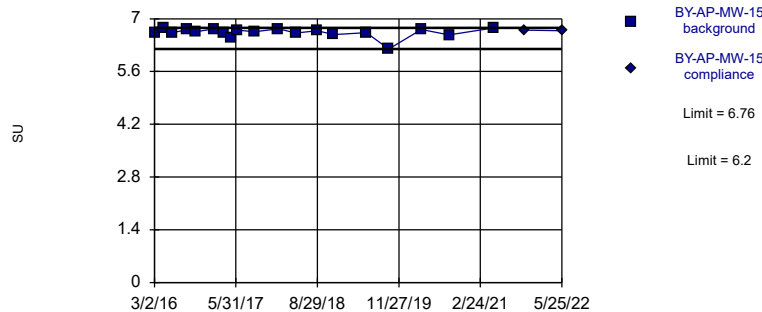


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

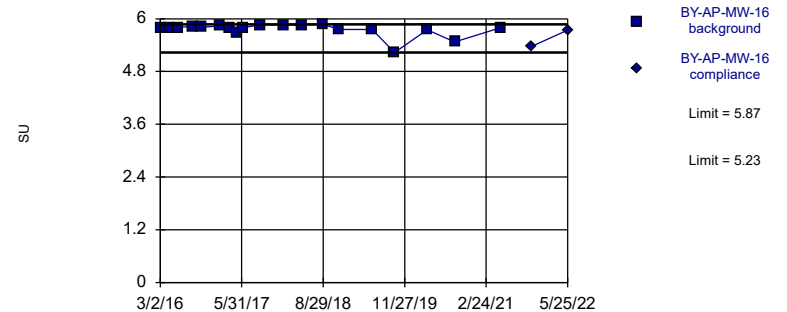


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

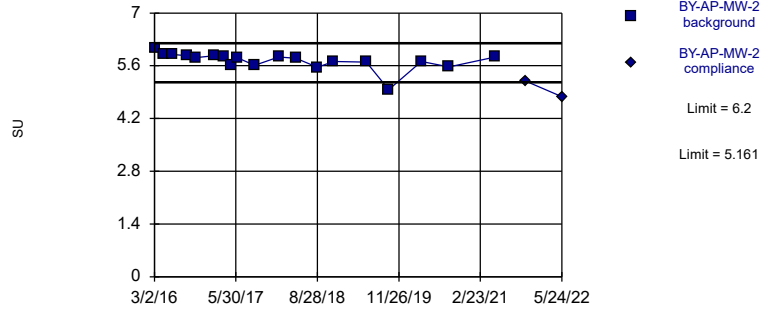


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Parametric

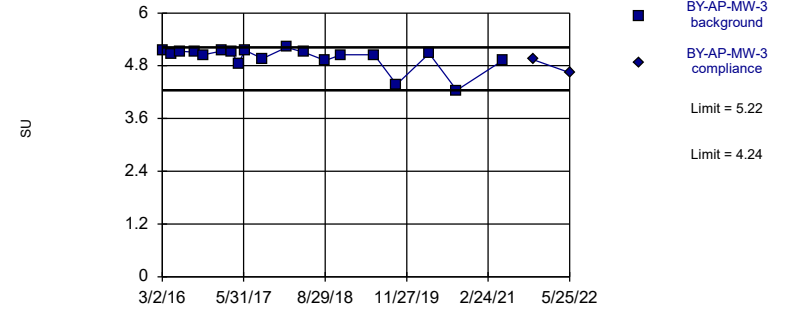


Background Data Summary (based on x^4 transformation): Mean=1094, Std. Dev.=156.3, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8685, critical = 0.863. Kappa = 2.46 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

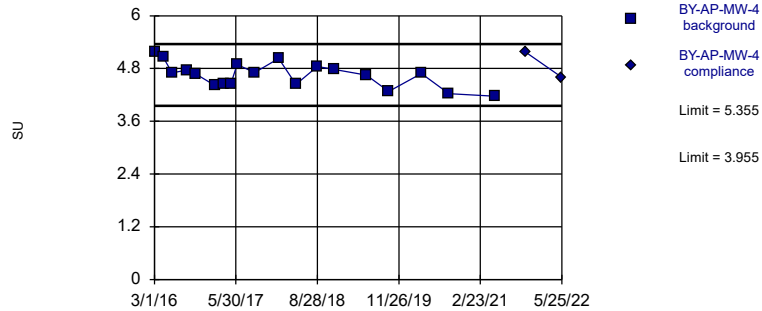


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

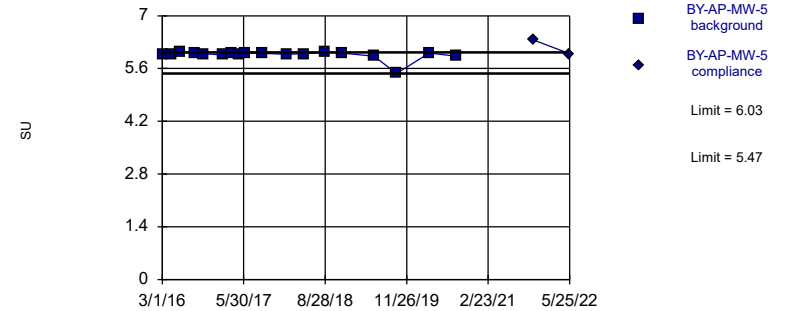


Background Data Summary: Mean=4.655, Std. Dev.=0.2846, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.972, critical = 0.863. Kappa = 2.46 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

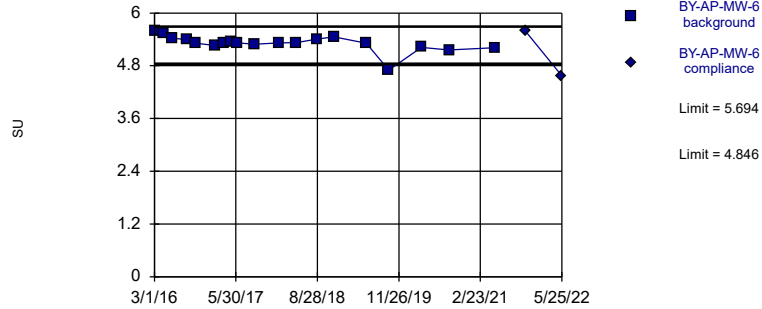


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 18 background values. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01075 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Parametric

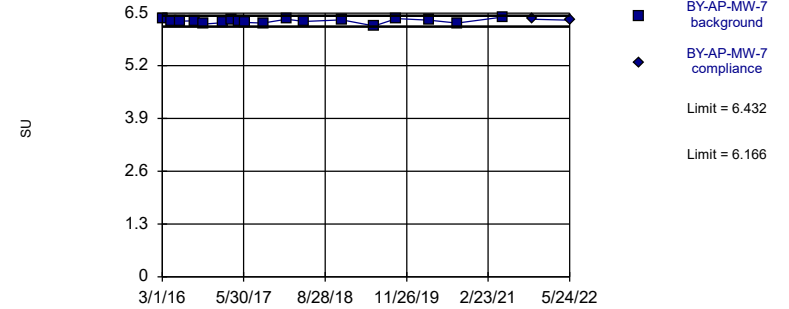


Background Data Summary (based on x^4 transformation): Mean=801.5, Std. Dev.=101.6, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8738, critical = 0.863. Kappa = 2.46 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

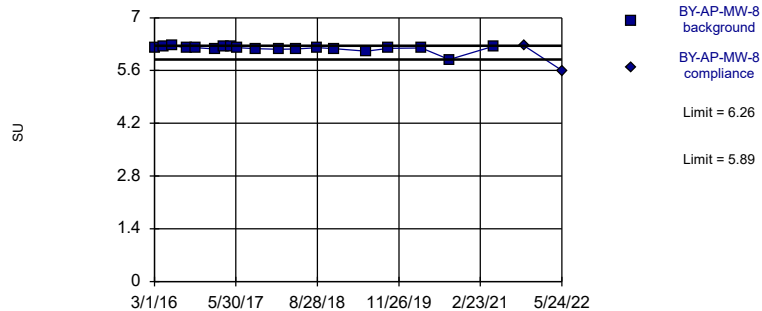


Background Data Summary: Mean=6.299, Std. Dev.=0.05346, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9863, critical = 0.858. Kappa = 2.492 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Non-parametric

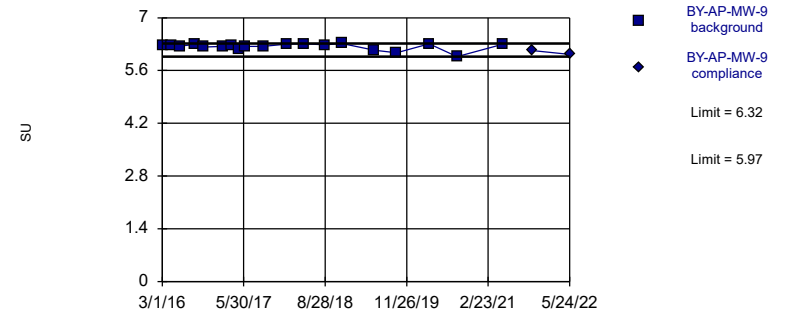


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Non-parametric

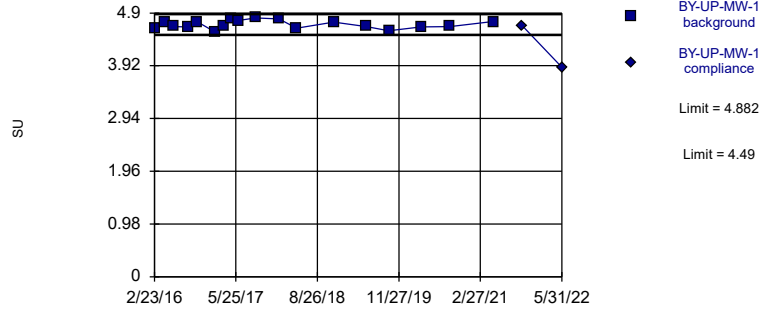


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 19 background values. Well-constituent pair annual alpha = 0.01928. Individual comparison alpha = 0.009664 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Parametric

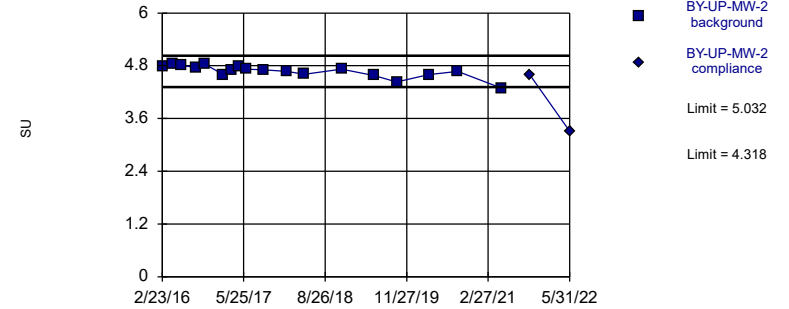


Background Data Summary: Mean=4.686, Std. Dev.=0.0786, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9444, critical = 0.858. Kappa = 2.492 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Parametric

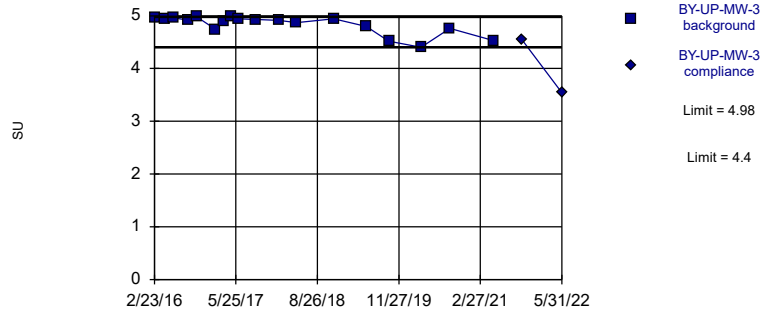


Background Data Summary: Mean=4.675, Std. Dev.=0.1431, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8886, critical = 0.858. Kappa = 2.492 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Non-parametric

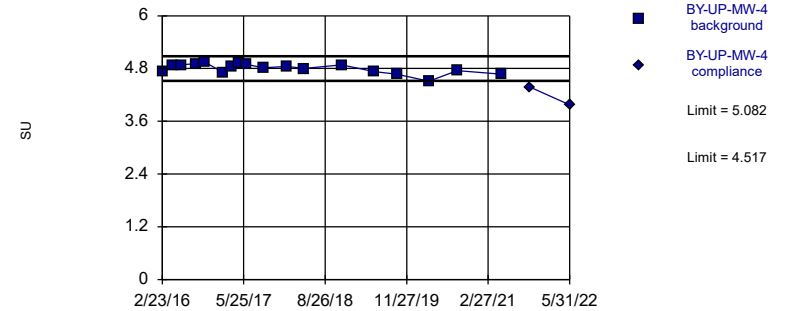


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 18 background values. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01075 (1 of 2).

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limits

Prediction Limit Intrawell Parametric

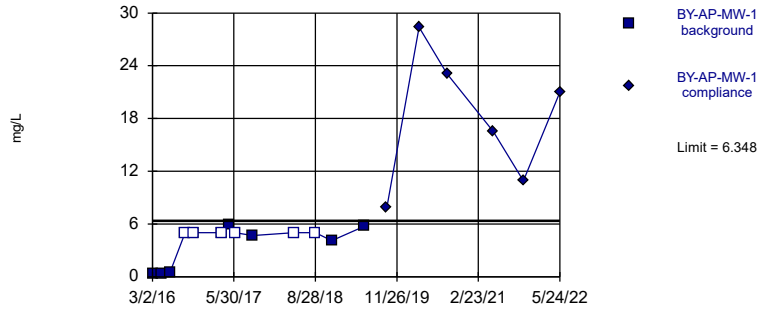


Background Data Summary: Mean=4.799, Std. Dev.=0.1134, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9332, critical = 0.858. Kappa = 2.492 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: pH, field Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Exceeds Limit

Prediction Limit
 Intrawell Parametric

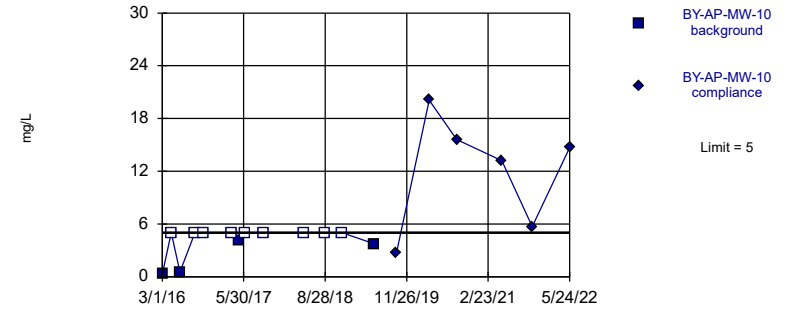


Background Data Summary (based on cube transformation) (after Kaplan-Meier Adjustment): Mean=52.17, Std. Dev.=74.33, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8687, critical = 0.814. Kappa = 2.739 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Exceeds Limit

Prediction Limit
 Intrawell Non-parametric

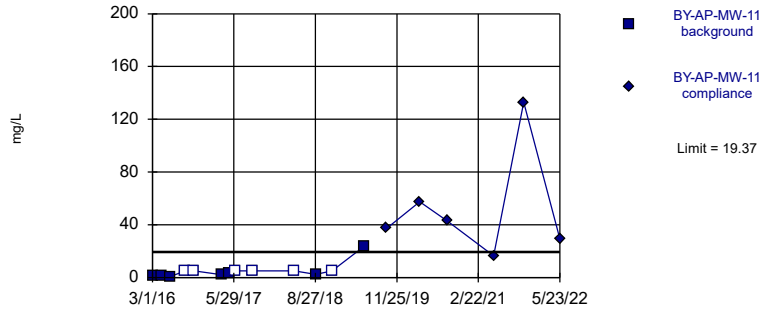


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Exceeds Limit

Prediction Limit
 Intrawell Parametric

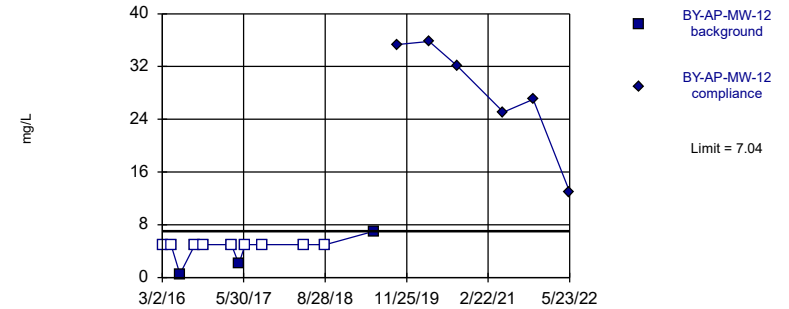


Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=1.308, Std. Dev.=0.5028, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8281, critical = 0.814. Kappa = 2.739 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Exceeds Limit

Prediction Limit
 Intrawell Non-parametric

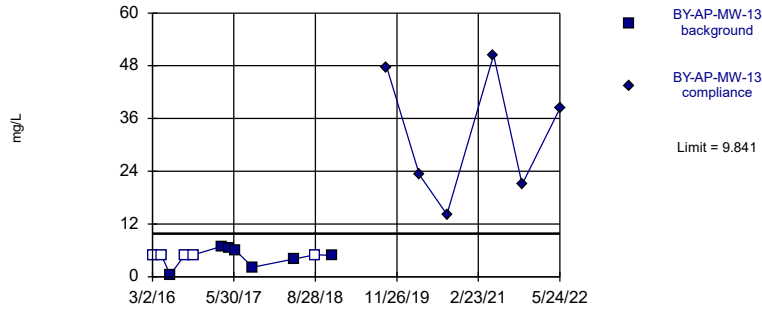


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Exceeds Limit

Prediction Limit
 Intrawell Parametric

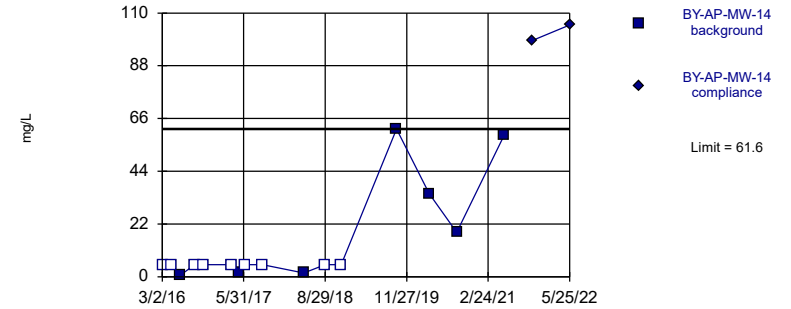


Background Data Summary (after Kaplan-Meier Adjustment): Mean=3.818, Std. Dev.=2.151, n=12, 41.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8449, critical = 0.805. Kappa = 2.8 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Exceeds Limit

Prediction Limit
 Intrawell Non-parametric

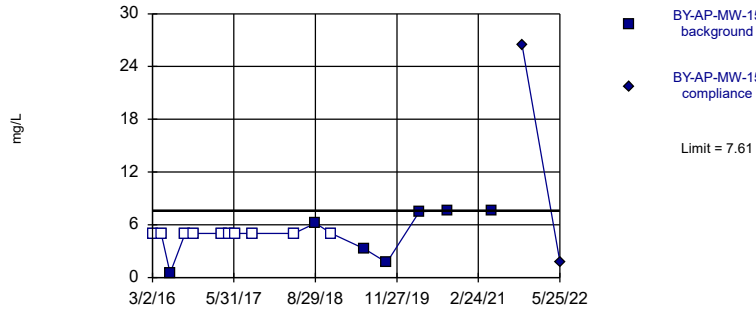


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 16 background values. 56.25% NDs. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Within Limit

Prediction Limit
 Intrawell Non-parametric

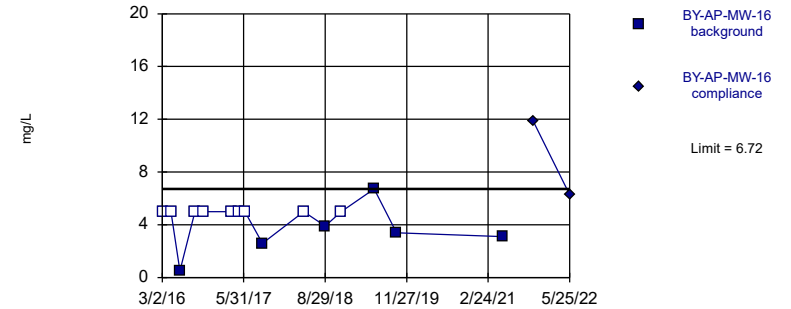


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Within Limit

Prediction Limit
 Intrawell Non-parametric

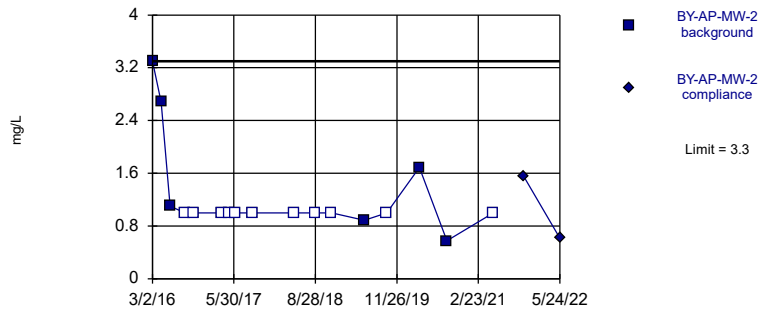


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Within Limit

Prediction Limit
 Intrawell Non-parametric

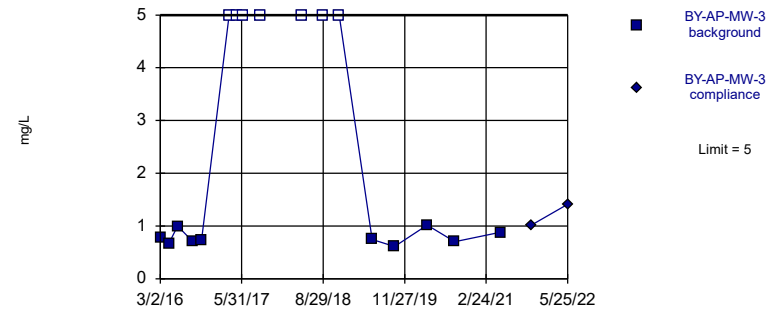


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Within Limit

Prediction Limit
 Intrawell Non-parametric

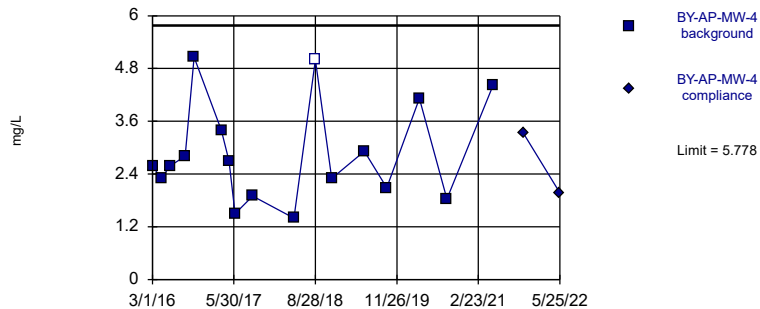


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 17 background values. 41.18% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Within Limit

Prediction Limit
 Intrawell Parametric

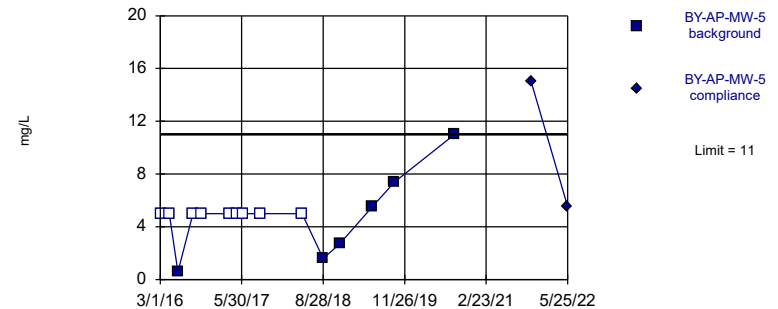


Background Data Summary: Mean=2.878, Std. Dev.=1.149, n=17, 5.882% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, critical = 0.851. Kappa = 2.524 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
 Hollow symbols indicate censored values.
 Within Limit

Prediction Limit
 Intrawell Non-parametric

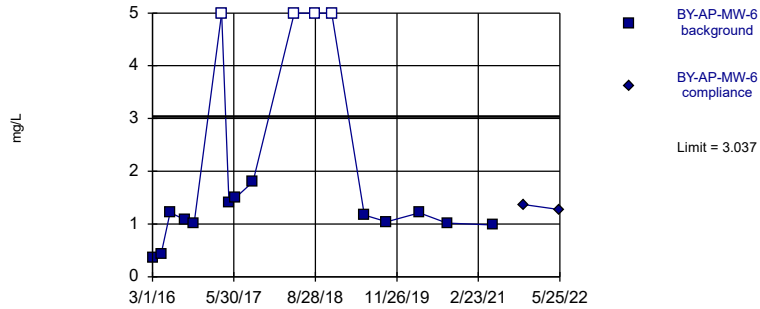


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit
Intrawell Parametric

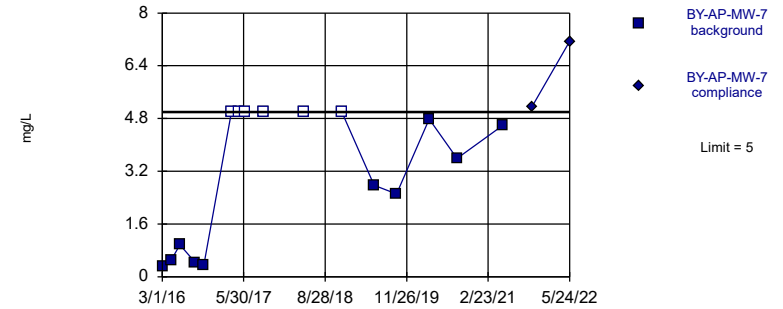


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=0.01145, Std. Dev.=0.4356, n=17, 23.53% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8672, critical = 0.851. Kappa = 2.524 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

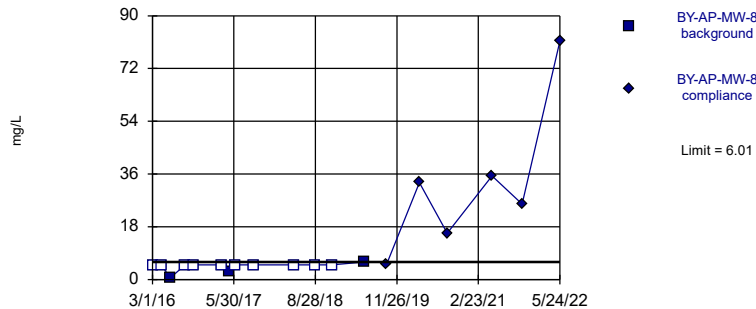


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 16 background values. 37.5% NDs. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

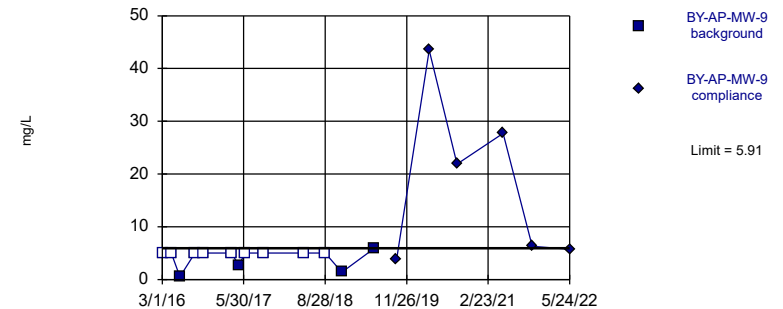


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 76.92% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit
Intrawell Non-parametric

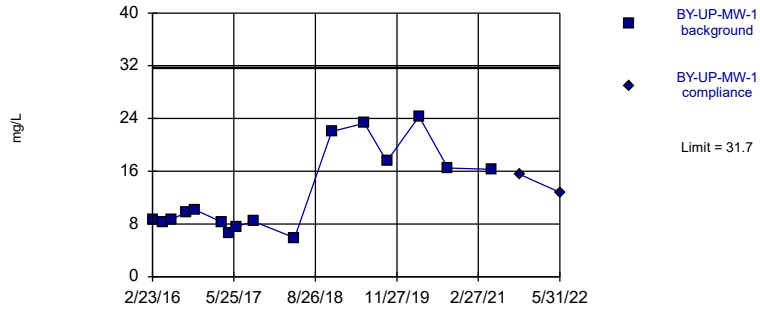


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit Intrawell Parametric

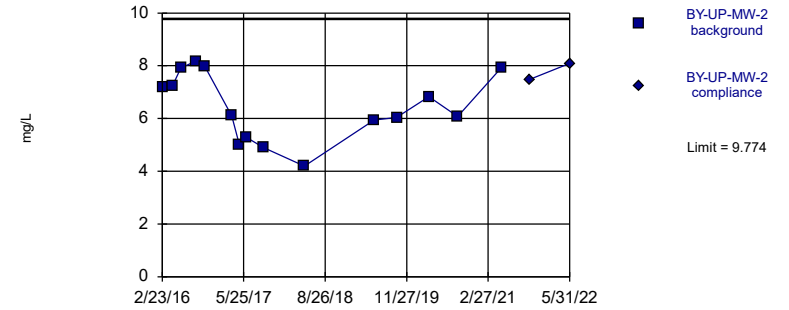


Background Data Summary (based on square root transformation): Mean=3.458, Std. Dev.=0.85, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8598, critical = 0.844. Kappa = 2.556 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit Intrawell Parametric

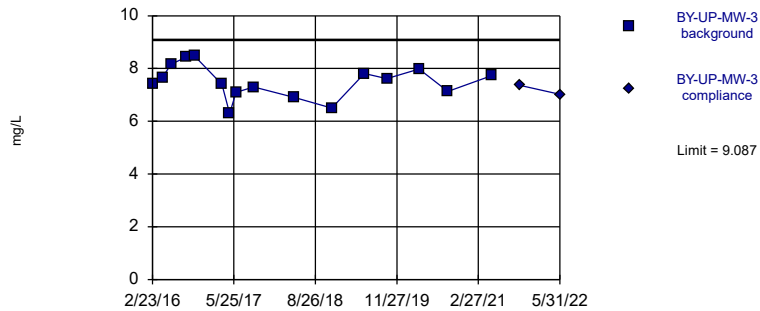


Background Data Summary: Mean=6.454, Std. Dev.=1.269, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.937, critical = 0.835. Kappa = 2.617 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit Intrawell Parametric

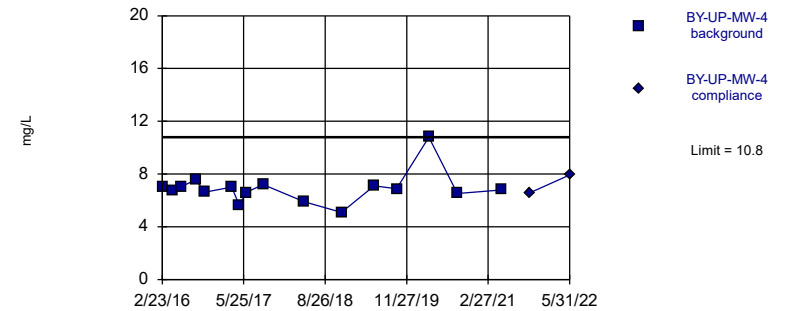


Background Data Summary: Mean=7.496, Std. Dev.=0.6224, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9756, critical = 0.844. Kappa = 2.556 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.0004702.

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 16 background values. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:20 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-1
3/2/2016	5.78	
4/19/2016	5.8	
6/8/2016	5.83	
8/31/2016	5.85	
10/19/2016	5.87	
1/31/2017	5.83	
3/21/2017	5.83	
5/2/2017	5.73	
6/6/2017	5.83	
9/13/2017	5.91	
1/24/2018	5.9	
5/1/2018	5.83	
8/28/2018	5.78	
11/28/2018	5.82	
5/29/2019	5.82	
10/1/2019	5.47	
3/30/2020	5.79	
9/1/2020	5.89	
5/18/2021	5.86	
11/1/2021		6.01
5/24/2022		5.44

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-10	BY-AP-MW-10
3/1/2016	6.33	
4/20/2016	6.31	
6/8/2016	6.34	
8/31/2016	6.35	
10/19/2016	6.35	
2/1/2017	6.27	
3/22/2017	6.29	
5/3/2017	6.23	
6/7/2017	6.27	
9/14/2017	6.27	
1/23/2018	6.32	
5/2/2018	6.36	
8/28/2018	6.31	
11/28/2018	6.32	
5/30/2019	6.23	
9/30/2019	6.11	
3/31/2020	6.37	
9/1/2020	6.33	
5/11/2021	6.4	
10/27/2021		5.91
5/24/2022		5.81

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-11	BY-AP-MW-11
3/1/2016	6.34	
4/20/2016	6.31	
6/8/2016	6.33	
8/31/2016	6.29	
10/19/2016	6.26	
2/1/2017	6.22	
3/22/2017	6.22	
5/3/2017	6.15	
6/7/2017	6.21	
9/13/2017	6.26	
1/23/2018	6.28	
5/2/2018	6.33	
8/29/2018	6.3	
11/28/2018	6.28	
5/29/2019	6.24	
9/30/2019	5.85	
3/31/2020	6.26	
9/1/2020	5.87	
5/19/2021	6.33	
11/2/2021		5.84
5/23/2022		6.32

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-12	BY-AP-MW-12
3/2/2016	6.16	
4/20/2016	6.17	
6/8/2016	6.25	
8/31/2016	6.23	
10/19/2016	6.2	
2/1/2017	6.08	
3/22/2017	6.12	
5/3/2017	6.12	
6/7/2017	6.13	
9/13/2017	6.19	
1/23/2018	6.17	
5/2/2018	6.15	
8/29/2018	6.19	
11/28/2018	6.11	
5/29/2019	6.13	
10/1/2019	6	
3/31/2020	6.21	
9/1/2020	6.19	
5/18/2021	5.58	
11/1/2021		5.75
5/23/2022		6.12

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-13
3/2/2016	6.1	
4/20/2016	6.14	
6/8/2016	6.11	
8/31/2016	6.1	
10/19/2016	6.1	
1/31/2017	6.07	
3/22/2017	6.07	
5/3/2017	6.1	
6/7/2017	6.07	
9/13/2017	6.12	
1/22/2018	6.12	
5/2/2018	6.13	
8/29/2018	6.1	
11/28/2018	6.04	
5/29/2019	6.01	
10/1/2019	6.02	
3/31/2020	5.98	
9/1/2020	5.82	
5/19/2021	5.79	
10/26/2021		5.69
5/24/2022		5.5

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14	BY-AP-MW-14
3/2/2016	6.08	
4/20/2016	6.04	
6/8/2016	6.13	
8/30/2016	6.08	
10/18/2016	6.13	
1/31/2017	6.06	
3/22/2017	6.09	
5/2/2017	5.94	
6/6/2017	6.1	
9/13/2017	6.11	
1/23/2018	6.12	
5/2/2018	6.13	
8/29/2018	6.14	
11/27/2018	6.07	
5/29/2019	6.07	
10/1/2019	6.01	
3/31/2020	5.76	
9/2/2020	5.8	
5/25/2021	5.82	
10/27/2021		6.41
5/25/2022		6.14

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15	BY-AP-MW-15
3/2/2016	6.61	
4/19/2016	6.75	
6/8/2016	6.63	
8/31/2016	6.71	
10/19/2016	6.66	
1/31/2017	6.73	
3/21/2017	6.62	
5/2/2017	6.49	
6/6/2017	6.7	
9/13/2017	6.66	
1/22/2018	6.73	
5/1/2018	6.62	
8/29/2018	6.68	
11/27/2018	6.58	
5/29/2019	6.63	
10/1/2019	6.2	
4/1/2020	6.72	
9/2/2020	6.57	
5/11/2021	6.76	
10/26/2021		6.7
5/25/2022		6.68

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-16	BY-AP-MW-16
3/2/2016	5.79	
4/19/2016	5.78	
6/8/2016	5.8	
8/31/2016	5.83	
10/19/2016	5.81	
1/31/2017	5.84	
3/21/2017	5.79	
5/2/2017	5.68	
6/6/2017	5.8	
9/13/2017	5.86	
1/23/2018	5.86	
5/1/2018	5.85	
8/29/2018	5.87	
11/27/2018	5.76	
5/29/2019	5.76	
10/1/2019	5.23	
3/31/2020	5.75	
9/2/2020	5.47	
5/19/2021	5.8	
11/1/2021		5.36
5/25/2022		5.74

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-2	BY-AP-MW-2
3/2/2016	6.08	
4/19/2016	5.92	
6/8/2016	5.9	
8/31/2016	5.87	
10/19/2016	5.82	
1/31/2017	5.87	
3/21/2017	5.85	
5/2/2017	5.61	
6/6/2017	5.82	
9/12/2017	5.61	
1/24/2018	5.83	
5/1/2018	5.8	
8/28/2018	5.56	
11/27/2018	5.71	
5/29/2019	5.7	
10/1/2019	4.97	
3/31/2020	5.71	
8/31/2020	5.57	
5/18/2021	5.83	
11/1/2021		5.2
5/24/2022		4.78

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-3	BY-AP-MW-3
3/2/2016	5.14	
4/19/2016	5.06	
6/7/2016	5.13	
8/31/2016	5.11	
10/19/2016	5.05	
1/31/2017	5.14	
3/21/2017	5.13	
5/2/2017	4.85	
6/6/2017	5.15	
9/12/2017	4.96	
1/24/2018	5.22	
5/1/2018	5.11	
8/28/2018	4.92	
11/27/2018	5.05	
5/29/2019	5.05	
10/1/2019	4.37	
3/31/2020	5.08	
9/1/2020	4.24	
5/18/2021	4.93	
11/1/2021		4.94
5/25/2022		4.64

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-4	BY-AP-MW-4
3/1/2016	5.19	
4/19/2016	5.06	
6/7/2016	4.7	
8/30/2016	4.77	
10/19/2016	4.67	
1/31/2017	4.42	
3/21/2017	4.45	
5/2/2017	4.46	
6/6/2017	4.89	
9/12/2017	4.71	
1/24/2018	5.03	
5/1/2018	4.44	
8/28/2018	4.85	
11/27/2018	4.78	
5/29/2019	4.65	
10/1/2019	4.28	
3/31/2020	4.69	
9/1/2020	4.23	
5/18/2021	4.17	
11/1/2021		5.18
5/25/2022		4.6

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5	BY-AP-MW-5
3/1/2016	5.99	
4/20/2016	5.96	
6/7/2016	6.03	
8/30/2016	6	
10/18/2016	5.99	
1/31/2017	5.96	
3/22/2017	6.01	
5/3/2017	5.99	
6/7/2017	6.01	
9/14/2017	6	
1/24/2018	5.98	
5/2/2018	5.99	
8/29/2018	6.03	
11/27/2018	6.01	
5/29/2019	5.93	
10/1/2019	5.47	
3/31/2020	6.01	
9/1/2020	5.93	
11/2/2021		6.36
5/25/2022		5.99

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6	BY-AP-MW-6
3/1/2016	5.59	
4/19/2016	5.55	
6/7/2016	5.43	
8/30/2016	5.39	
10/19/2016	5.31	
1/31/2017	5.26	
3/22/2017	5.32	
5/3/2017	5.35	
6/7/2017	5.32	
9/14/2017	5.29	
1/24/2018	5.32	
5/2/2018	5.33	
8/29/2018	5.41	
11/28/2018	5.46	
5/29/2019	5.31	
10/1/2019	4.7	
3/31/2020	5.22	
9/2/2020	5.16	
5/17/2021	5.21	
11/2/2021		5.59
5/25/2022		4.57

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7
3/1/2016	6.36	
4/20/2016	6.31	
6/7/2016	6.3	
8/31/2016	6.31	
10/19/2016	6.23	
1/31/2017	6.26	
3/22/2017	6.32	
5/3/2017	6.29	
6/7/2017	6.27	
9/14/2017	6.25	
1/24/2018	6.35	
5/2/2018	6.29	
11/28/2018	6.33	
5/29/2019	6.18	
9/30/2019	6.36	
3/30/2020	6.32	
9/2/2020	6.25	
5/18/2021	6.4	
10/27/2021		6.35
5/24/2022		6.32

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-8	BY-AP-MW-8
3/1/2016	6.21	
4/20/2016	6.22	
6/7/2016	6.26	
8/30/2016	6.21	
10/18/2016	6.21	
1/31/2017	6.17	
3/22/2017	6.22	
5/3/2017	6.22	
6/7/2017	6.21	
9/14/2017	6.18	
1/24/2018	6.16	
5/2/2018	6.17	
8/29/2018	6.21	
11/27/2018	6.18	
5/29/2019	6.11	
9/30/2019	6.19	
3/30/2020	6.2	
9/2/2020	5.89	
5/11/2021	6.25	
10/26/2021		6.26
5/24/2022		5.6

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-9	BY-AP-MW-9
3/1/2016	6.26	
4/20/2016	6.26	
6/8/2016	6.25	
8/31/2016	6.29	
10/19/2016	6.22	
2/1/2017	6.24	
3/22/2017	6.28	
5/3/2017	6.17	
6/7/2017	6.24	
9/14/2017	6.24	
1/23/2018	6.3	
5/2/2018	6.31	
8/28/2018	6.28	
11/28/2018	6.32	
5/30/2019	6.14	
9/30/2019	6.07	
3/31/2020	6.31	
9/2/2020	5.97	
5/18/2021	6.3	
10/27/2021		6.13
5/24/2022		6.03

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-1	BY-UP-MW-1
2/23/2016	4.62	
4/19/2016	4.74	
6/6/2016	4.65	
8/30/2016	4.64	
10/18/2016	4.74	
1/31/2017	4.54	
3/20/2017	4.67	
5/2/2017	4.79	
6/6/2017	4.76	
9/13/2017	4.81	
1/23/2018	4.79	
5/2/2018	4.62	
11/27/2018	4.73	
5/29/2019	4.65	
10/2/2019	4.57	
3/31/2020	4.64	
9/9/2020	4.65	
5/12/2021	4.74	
10/19/2021		4.67
5/31/2022		3.89

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-2	BY-UP-MW-2
2/23/2016	4.79	
4/19/2016	4.84	
6/7/2016	4.81	
8/30/2016	4.76	
10/18/2016	4.84	
1/31/2017	4.6	
3/20/2017	4.71	
5/2/2017	4.8	
6/6/2017	4.72	
9/13/2017	4.71	
1/23/2018	4.67	
5/1/2018	4.61	
11/27/2018	4.72	
5/29/2019	4.58	
10/2/2019	4.43	
3/31/2020	4.6	
9/9/2020	4.67	
5/11/2021	4.29	
10/19/2021		4.6
5/31/2022		3.31

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-3	BY-UP-MW-3
2/23/2016	4.96	
4/19/2016	4.94	
6/7/2016	4.96	
8/30/2016	4.92	
10/18/2016	4.98	
1/31/2017	4.74	
3/20/2017	4.9	
5/2/2017	4.98	
6/6/2017	4.94	
9/13/2017	4.93	
1/23/2018	4.91	
5/1/2018	4.87	
11/27/2018	4.94	
5/29/2019	4.8	
10/2/2019	4.52	
3/31/2020	4.4	
9/9/2020	4.76	
5/11/2021	4.53	
10/18/2021		4.55
5/31/2022		3.54

Prediction Limit

Constituent: pH, field (SU) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-4	BY-UP-MW-4
2/23/2016	4.74	
4/19/2016	4.86	
6/6/2016	4.88	
8/30/2016	4.91	
10/18/2016	4.95	
1/31/2017	4.71	
3/20/2017	4.83	
5/2/2017	4.93	
6/6/2017	4.9	
9/12/2017	4.82	
1/23/2018	4.85	
5/1/2018	4.8	
11/26/2018	4.88	
5/28/2019	4.73	
10/2/2019	4.67	
3/31/2020	4.51	
9/8/2020	4.75	
5/11/2021	4.67	
10/18/2021		4.38
5/31/2022		3.97

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-1
3/2/2016	0.31 (J)	
4/19/2016	0.335 (J)	
6/8/2016	0.556 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/21/2017	<5	
5/2/2017	6	
6/6/2017	<5	
9/13/2017	4.7 (J)	
5/1/2018	<5	
8/28/2018	<5	
11/28/2018	4.1 (J)	
5/29/2019	5.75	
10/1/2019		7.82
3/30/2020		28.4
9/1/2020		23.1
5/18/2021		16.5
11/1/2021		10.9
5/24/2022		21

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-10	BY-AP-MW-10
3/1/2016	0.34 (J)	
4/20/2016	<5	
6/8/2016	0.538 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/22/2017	<5	
5/3/2017	4.1 (J)	
6/7/2017	<5	
9/14/2017	<5	
5/2/2018	<5	
8/28/2018	<5	
11/28/2018	<5	
5/30/2019	3.76	
9/30/2019		2.77
3/31/2020		20.1
9/1/2020		15.6
5/11/2021		13.2
10/27/2021		5.72
5/24/2022		14.7

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-11	BY-AP-MW-11
3/1/2016	1.02	
4/20/2016	1.1	
6/8/2016	0.701 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/22/2017	2.1 (J)	
5/3/2017	3.6 (J)	
6/7/2017	<5	
9/13/2017	<5	
5/2/2018	<5	
8/29/2018	2.3 (J)	
11/28/2018	<5	
5/29/2019	24.1	
9/30/2019		37.4
3/31/2020		57.5
9/1/2020		42.8
5/19/2021		16.5
11/2/2021		133
5/23/2022		29.3

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-12	BY-AP-MW-12
3/2/2016	<5	
4/20/2016	<5	
6/8/2016	0.511 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/22/2017	<5	
5/3/2017	2.1 (J)	
6/7/2017	<5	
9/13/2017	<5	
5/2/2018	<5	
8/29/2018	<5	
11/28/2018	<50 (O)	
5/29/2019	7.04	
10/1/2019		35.3
3/31/2020		35.8
9/1/2020		32.1
5/18/2021		25.1
11/1/2021		27
5/23/2022		13

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-13
3/2/2016	<5	
4/20/2016	<5	
6/8/2016	0.496 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/22/2017	6.9	
5/3/2017	6.6	
6/7/2017	6	
9/13/2017	2.2 (J)	
5/2/2018	4.1 (J)	
8/29/2018	<5	
11/28/2018	4.9 (J)	
5/29/2019	49.5 (o)	
10/1/2019		47.7
3/31/2020		23.2
9/1/2020		14.2
5/19/2021		50.4
10/26/2021		21
5/24/2022		38.3

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14	BY-AP-MW-14
3/2/2016	<5	
4/20/2016	<5	
6/8/2016	0.514 (J)	
8/30/2016	<5	
10/18/2016	<5	
3/22/2017	<5	
5/2/2017	1.8 (J)	
6/6/2017	<5	
9/13/2017	<5	
5/2/2018	1.6 (J)	
8/29/2018	<5	
11/27/2018	<5	
5/29/2019	67.6 (o)	
10/1/2019	61.6	
3/31/2020	34.7	
9/2/2020	18.5	
5/25/2021	59.2	
10/27/2021		98.5
5/25/2022		105

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-15	BY-AP-MW-15
3/2/2016	<5	
4/19/2016	<5	
6/8/2016	0.489 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/21/2017	<5	
5/2/2017	<5	
6/6/2017	<5	
9/13/2017	<5	
5/1/2018	<5	
8/29/2018	6.2	
11/27/2018	<5	
5/29/2019	3.27	
10/1/2019	1.72	
4/1/2020	7.5	
9/2/2020	7.61	
5/11/2021	7.54	
10/26/2021		26.4
5/25/2022		1.8 (J)

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-16	BY-AP-MW-16
3/2/2016	<5	
4/19/2016	<5	
6/8/2016	0.514 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/21/2017	<5	
5/2/2017	<5	
6/6/2017	<5	
9/13/2017	2.6 (J)	
5/1/2018	<5	
8/29/2018	3.9 (J)	
11/27/2018	<5	
5/29/2019	6.72	
10/1/2019	3.4	
3/31/2020	17.5 (o)	
9/2/2020	13.3 (o)	
5/19/2021	3.11	
11/1/2021		11.9
5/25/2022		6.29

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-2	BY-AP-MW-2
3/2/2016	3.3	
4/19/2016	2.68	
6/8/2016	1.1	
8/31/2016	<1	
10/19/2016	<1	
3/21/2017	<1	
5/2/2017	<1	
6/6/2017	<1	
9/12/2017	<1	
5/1/2018	<1	
8/28/2018	<1	
11/27/2018	<1	
5/29/2019	0.885 (J)	
10/1/2019	<1	
3/31/2020	1.69	
8/31/2020	0.576 (J)	
5/18/2021	<1	
11/1/2021		1.56
5/24/2022		0.615 (J)

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-3	BY-AP-MW-3
3/2/2016	0.79 (J)	
4/19/2016	0.674 (J)	
6/7/2016	1	
8/31/2016	0.702 (J)	
10/19/2016	0.739 (J)	
3/21/2017	<5	
5/2/2017	<5	
6/6/2017	<5	
9/12/2017	<5	
5/1/2018	<5	
8/28/2018	<5	
11/27/2018	<5	
5/29/2019	0.747 (J)	
10/1/2019	0.61 (J)	
3/31/2020	1.02	
9/1/2020	0.705 (J)	
5/18/2021	0.883 (J)	
11/1/2021		1.01
5/25/2022		1.41 (J)

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-4	BY-AP-MW-4
3/1/2016	2.58	
4/19/2016	2.3	
6/7/2016	2.58	
8/30/2016	2.81	
10/19/2016	5.06	
3/21/2017	3.4 (J)	
5/2/2017	2.7 (J)	
6/6/2017	1.5 (J)	
9/12/2017	1.9 (J)	
5/1/2018	1.4 (J)	
8/28/2018	<5	
11/27/2018	2.3 (J)	
5/29/2019	2.92	
10/1/2019	2.09	
3/31/2020	4.12	
9/1/2020	1.83	
5/18/2021	4.43	
11/1/2021		3.34
5/25/2022		1.97 (J)

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5	BY-AP-MW-5
3/1/2016	<5	
4/20/2016	<5	
6/7/2016	0.583 (J)	
8/30/2016	<5	
10/18/2016	<5	
3/22/2017	<5	
5/3/2017	<5	
6/7/2017	<5	
9/14/2017	<5	
5/2/2018	<5	
8/29/2018	1.6 (J)	
11/27/2018	2.7 (J)	
5/29/2019	5.51	
10/1/2019	7.4	
3/31/2020	23.7 (o)	
9/1/2020	11	
11/2/2021		15
5/25/2022		5.53

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6	BY-AP-MW-6
3/1/2016	0.36 (J)	
4/19/2016	0.435 (J)	
6/7/2016	1.22	
8/30/2016	1.08	
10/19/2016	1.01	
3/22/2017	<5	
5/3/2017	1.4 (J)	
6/7/2017	1.5 (J)	
9/14/2017	1.8 (J)	
5/2/2018	<5	
8/29/2018	<5	
11/28/2018	<5	
5/29/2019	1.17	
10/1/2019	1.04	
3/31/2020	1.21	
9/2/2020	1.02	
5/17/2021	0.981 (J)	
11/2/2021		1.37
5/25/2022		1.27 (J)

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-7
3/1/2016	0.3 (J)	
4/20/2016	0.514 (J)	
6/7/2016	0.971 (J)	
8/31/2016	0.445 (J)	
10/19/2016	0.366 (J)	
3/22/2017	<5	
5/3/2017	<5	
6/7/2017	<5	
9/14/2017	<5	
5/2/2018	<5	
11/28/2018	<5	
5/29/2019	2.77	
9/30/2019	2.51	
3/30/2020	4.78	
9/2/2020	3.59	
5/18/2021	4.6	
10/27/2021		5.17
5/24/2022		7.14

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-8	BY-AP-MW-8
3/1/2016	<5	
4/20/2016	<5	
6/7/2016	0.504 (J)	
8/30/2016	<5	
10/18/2016	<5	
3/22/2017	<5	
5/3/2017	2.7 (J)	
6/7/2017	<5	
9/14/2017	<5	
5/2/2018	<5	
8/29/2018	<5	
11/27/2018	<5	
5/29/2019	6.01	
9/30/2019		5.29
3/30/2020		33.1
9/2/2020		15.8
5/11/2021		35.4
10/26/2021		25.7
5/24/2022		81.3

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-9	BY-AP-MW-9
3/1/2016	<5	
4/20/2016	<5	
6/8/2016	0.51 (J)	
8/31/2016	<5	
10/19/2016	<5	
3/22/2017	<5	
5/3/2017	2.7 (J)	
6/7/2017	<5	
9/14/2017	<5	
5/2/2018	<5	
8/28/2018	<5	
11/28/2018	1.4 (J)	
5/30/2019	5.91	
9/30/2019		3.77
3/31/2020		43.5
9/2/2020		21.9
5/18/2021		27.7
10/27/2021		6.33
5/24/2022		5.76

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-1	BY-UP-MW-1
2/23/2016	8.59	
4/19/2016	8.27	
6/6/2016	8.66	
8/30/2016	9.74	
10/18/2016	10.2	
3/20/2017	8.3	
5/2/2017	6.6	
6/6/2017	7.6	
9/13/2017	8.4	
5/2/2018	5.9	
11/27/2018	22	
5/29/2019	23.3	
10/2/2019	17.5	
3/31/2020	24.3	
9/9/2020	16.5	
5/12/2021	16.3	
10/19/2021		15.5
5/31/2022		12.8

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-2	BY-UP-MW-2
2/23/2016	7.2	
4/19/2016	7.22	
6/7/2016	7.92	
8/30/2016	8.17	
10/18/2016	7.99	
3/20/2017	6.1	
5/2/2017	5	
6/6/2017	5.3	
9/13/2017	4.9 (J)	
5/1/2018	4.2 (J)	
5/29/2019	5.94	
10/2/2019	6.04	
3/31/2020	6.83	
9/9/2020	6.08	
5/11/2021	7.92	
10/19/2021		7.48
5/31/2022		8.09

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-3	BY-UP-MW-3
2/23/2016	7.44	
4/19/2016	7.66	
6/7/2016	8.16	
8/30/2016	8.43	
10/18/2016	8.47	
3/20/2017	7.4	
5/2/2017	6.3	
6/6/2017	7.1	
9/13/2017	7.3	
5/1/2018	6.9	
11/27/2018	6.5	
5/29/2019	7.81	
10/2/2019	7.62	
3/31/2020	7.98	
9/9/2020	7.13	
5/11/2021	7.73	
10/18/2021		7.36
5/31/2022		7.02

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 7/20/2022 3:22 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-4	BY-UP-MW-4
2/23/2016	7.04	
4/19/2016	6.74	
6/6/2016	7.04	
8/30/2016	7.57	
10/18/2016	6.62	
3/20/2017	7	
5/2/2017	5.6	
6/6/2017	6.6	
9/12/2017	7.2	
5/1/2018	5.9	
11/26/2018	5.1	
5/28/2019	7.1	
10/2/2019	6.88	
3/31/2020	10.8	
9/8/2020	6.52	
5/11/2021	6.8	
10/18/2021		6.58
5/31/2022		7.94

FIGURE E.

Interwell Prediction Limits - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bq	N	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-1	0.188	5/24/2022	2.08	Yes	71	n/a	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-10	0.188	5/24/2022	2.34	Yes	71	n/a	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-16	0.188	5/25/2022	1.98	Yes	71	n/a	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-8	0.188	5/24/2022	1.12	Yes	71	n/a	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-9	0.188	5/24/2022	2.01	Yes	71	n/a	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	BY-AP-MW-1	2.141	5/24/2022	43.9	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-10	2.141	5/24/2022	63.9	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-11	2.141	5/23/2022	26	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-12	2.141	5/23/2022	20.6	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-13	2.141	5/24/2022	19.2	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-14	2.141	5/25/2022	11.4	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-15	2.141	5/25/2022	6.41	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-16	2.141	5/25/2022	13.9	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-2	2.141	5/24/2022	2.45	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-5	2.141	5/25/2022	14.6	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-7	2.141	5/24/2022	10.5	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-8	2.141	5/24/2022	31.5	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-9	2.141	5/24/2022	38.3	Yes	72	1.501	0.3034	0	None	No	No	0.0004702	Param Inter 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-1	9.9	5/24/2022	28.7	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-10	9.9	5/24/2022	27.7	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-11	9.9	5/23/2022	25.1	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-12	9.9	5/23/2022	26.2	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-13	9.9	5/24/2022	43.5	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-14	9.9	5/25/2022	45.3	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-15	9.9	5/25/2022	80.7	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-16	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-3	9.9	5/25/2022	15.2	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-4	9.9	5/25/2022	16.1	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-5	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-7	9.9	5/24/2022	13.2	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-8	9.9	5/24/2022	25	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-9	9.9	5/24/2022	17.3	Yes	72	n/a	n/a	0	n/a	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-15	0.125	5/25/2022	0.214	Yes	76	n/a	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
TDS (mg/L)	BY-AP-MW-1	58	5/24/2022	464	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-10	58	5/24/2022	398	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-11	58	5/23/2022	404	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-12	58	5/23/2022	345	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-13	58	5/24/2022	257	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-14	58	5/25/2022	328	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-15	58	5/25/2022	255	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-16	58	5/25/2022	299	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-5	58	5/25/2022	252	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-7	58	5/24/2022	148	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-8	58	5/24/2022	303	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-9	58	5/24/2022	268	Yes	72	n/a	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-1	0.188	5/24/2022	2.08	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-10	0.188	5/24/2022	2.34	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-11	0.188	5/23/2022	0.0558J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-12	0.188	5/23/2022	0.0626J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-13	0.188	5/24/2022	0.0457J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-14	0.188	5/25/2022	0.0618J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-15	0.188	5/25/2022	0.0826J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-16	0.188	5/25/2022	1.98	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-2	0.188	5/24/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-3	0.188	5/25/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-4	0.188	5/25/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-5	0.188	5/25/2022	0.063J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-6	0.188	5/25/2022	0.1015ND	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-7	0.188	5/24/2022	0.0369J	No	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-8	0.188	5/24/2022	1.12	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	BY-AP-MW-9	0.188	5/24/2022	2.01	Yes	71	n/a	n/a	80.28	n/a	n/a	0.000372	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	BY-AP-MW-1	2.141	5/24/2022	43.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-10	2.141	5/24/2022	63.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-11	2.141	5/23/2022	26	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-12	2.141	5/23/2022	20.6	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-13	2.141	5/24/2022	19.2	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-14	2.141	5/25/2022	11.4	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-15	2.141	5/25/2022	6.41	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-16	2.141	5/25/2022	13.9	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-2	2.141	5/24/2022	2.45	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-3	2.141	5/25/2022	1.29	No	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-4	2.141	5/25/2022	1.69	No	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-5	2.141	5/25/2022	14.6	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-6	2.141	5/25/2022	1.62	No	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-7	2.141	5/24/2022	10.5	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-8	2.141	5/24/2022	31.5	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Calcium, total (mg/L)	BY-AP-MW-9	2.141	5/24/2022	38.3	Yes	72	1.501	0.3034	0	None	No	0.0004702	Param Inter 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-1	9.9	5/24/2022	28.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-10	9.9	5/24/2022	27.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-11	9.9	5/23/2022	25.1	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-12	9.9	5/23/2022	26.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-13	9.9	5/24/2022	43.5	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-14	9.9	5/25/2022	45.3	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-15	9.9	5/25/2022	80.7	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-16	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-2	9.9	5/24/2022	9.21	No	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-3	9.9	5/25/2022	15.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-4	9.9	5/25/2022	16.1	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-5	9.9	5/25/2022	20	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-6	9.9	5/25/2022	6.63	No	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-7	9.9	5/24/2022	13.2	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-8	9.9	5/24/2022	25	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BY-AP-MW-9	9.9	5/24/2022	17.3	Yes	72	n/a	n/a	0	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-1	0.125	5/24/2022	0.0801J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-10	0.125	5/24/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-11	0.125	5/23/2022	0.0709J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-12	0.125	5/23/2022	0.0873J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-13	0.125	5/24/2022	0.0769J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-14	0.125	5/25/2022	0.0733J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-15	0.125	5/25/2022	0.214	Yes	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-16	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-2	0.125	5/24/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-3	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-4	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-5	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-6	0.125	5/25/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-7	0.125	5/24/2022	0.0724J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-8	0.125	5/24/2022	0.0713J	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
Fluoride, total (mg/L)	BY-AP-MW-9	0.125	5/24/2022	0.125ND	No	76	n/a	n/a	55.26	n/a	n/a	0.000329	NP Inter (NDs) 1 of 2
TDS (mg/L)	BY-AP-MW-1	58	5/24/2022	464	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-10	58	5/24/2022	398	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	

Interwell Prediction Limits - All Results

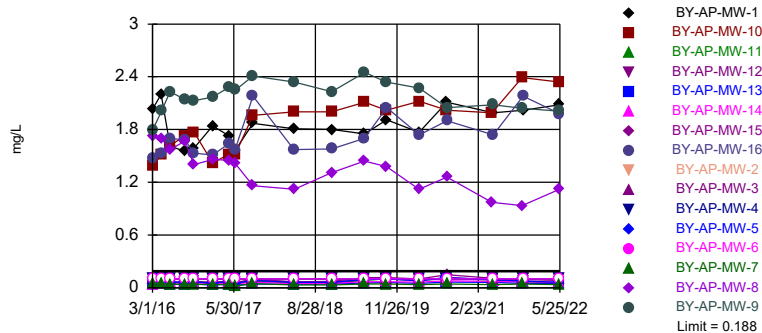
Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:14 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
TDS (mg/L)	BY-AP-MW-13	58	5/24/2022	257	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-14	58	5/25/2022	328	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-15	58	5/25/2022	255	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-16	58	5/25/2022	299	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-2	58	5/24/2022	40.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-3	58	5/25/2022	50.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-4	58	5/25/2022	48.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-5	58	5/25/2022	252	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-6	58	5/25/2022	40.7	No	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-7	58	5/24/2022	148	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-8	58	5/24/2022	303	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-9	58	5/24/2022	268	Yes	72	n/a	n/a	9.722	n/a	n/a	0.0003634	NP Inter (normality) 1 of 2

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Exceeds Limit: BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-16, BY-AP-MW-8, BY-AP-MW-9

Prediction Limit
Interwell Non-parametric



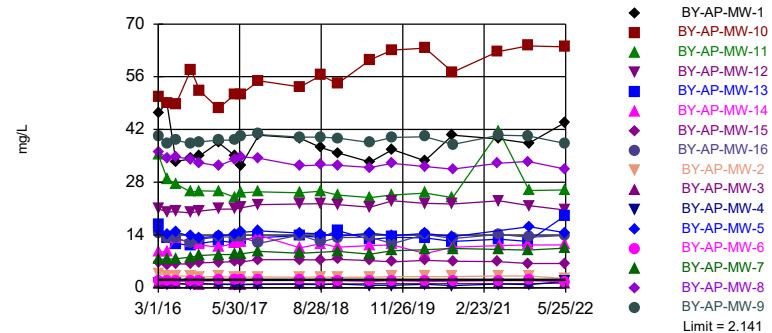
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 71 background values. 80.28% NDs. Annual per-constituent alpha = 0.01184. Individual comparison alpha = 0.000372 (1 of 2). Comparing 16 points to limit.

Constituent: Boron, total Analysis Run 7/20/2022 3:13 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG

Exceeds Limit: BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15,...

Prediction Limit
Interwell Parametric



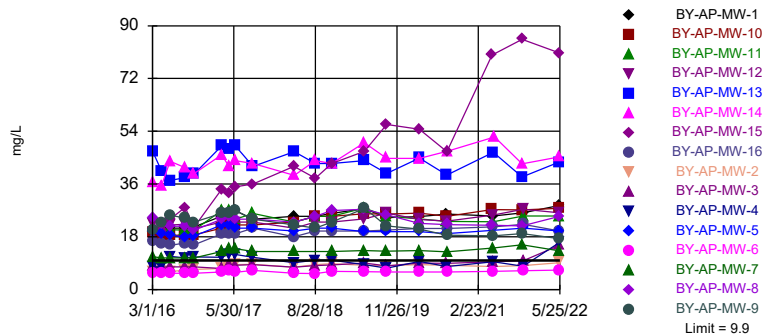
Background Data Summary: Mean=1.501, Std. Dev.=0.3034, n=72. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9742, critical = 0.954. Kappa = 2.11 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0004702. Comparing 16 points to limit.

Constituent: Calcium, total Analysis Run 7/20/2022 3:13 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

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Exceeds Limit: BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15,...

Prediction Limit
Interwell Non-parametric



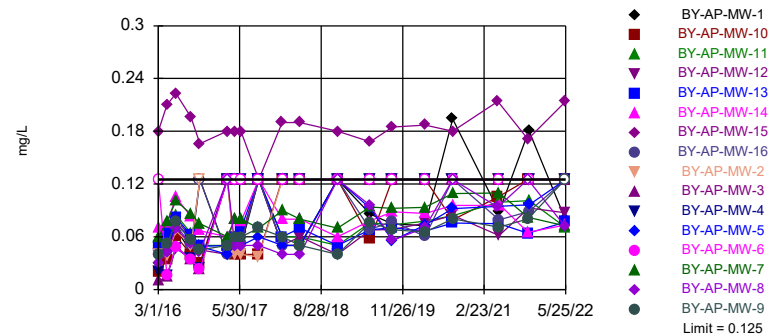
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 72 background values. Annual per-constituent alpha = 0.01156. Individual comparison alpha = 0.0003634 (1 of 2). Comparing 16 points to limit.

Constituent: Chloride, Total Analysis Run 7/20/2022 3:13 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Exceeds Limit: BY-AP-MW-15

Prediction Limit
Interwell Non-parametric

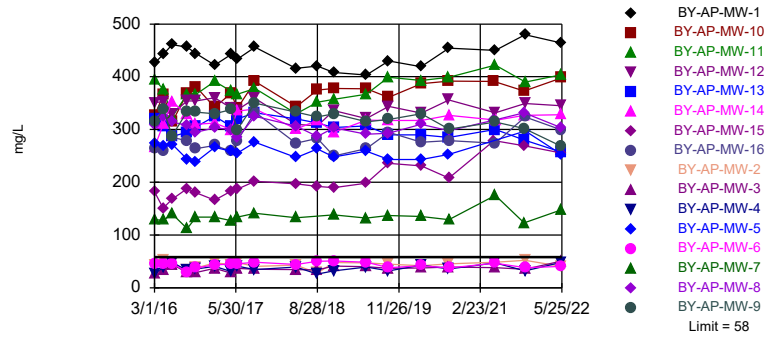


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 76 background values. 55.26% NDs. Annual per-constituent alpha = 0.01047. Individual comparison alpha = 0.000329 (1 of 2). Comparing 16 points to limit.

Constituent: Fluoride, total Analysis Run 7/20/2022 3:13 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limit: BY-AP-MW-1, BY-AP-MW-10, BY-AP-MW-11, BY-AP-MW-12, BY-AP-MW-13, BY-AP-MW-14, BY-AP-MW-15,...

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 72 background values. 9.722% NDs. Annual per-constituent alpha = 0.01156. Individual comparison alpha = 0.0003634 (1 of 2). Comparing 16 points to limit.

Constituent: TDS Analysis Run 7/20/2022 3:13 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-1 (bg)	BY-AP-MW-10	BY-AP-MW-6	BY-AP-MW-8	BY-AP-MW-5	BY-AP-MW-9
2/23/2016	<0.1015	0.0257 (J)	0.0252 (J)	0.0212 (J)					
3/1/2016					1.39	<0.1015	1.72	0.0462 (J)	1.79
3/2/2016									
4/19/2016	<0.1015	<0.1015	<0.1015	<0.1015		<0.1015			
4/20/2016					1.51		1.7	0.0719 (J)	2.01
6/6/2016		<0.1015		<0.1015					
6/7/2016	<0.1015		0.0202 (J)			<0.1015	1.57	0.0591 (J)	
6/8/2016					1.62				2.23
8/30/2016	<0.1015	<0.1015	<0.1015	<0.1015		<0.1015	1.67	0.0675 (J)	
8/31/2016					1.73				2.14
10/18/2016	<0.1015	0.022 (J)	<0.1015	<0.1015			1.4	0.0699 (J)	
10/19/2016					1.77	<0.1015			2.13
1/31/2017	<0.1015	<0.1015	<0.1015	<0.1015		<0.1015	1.46	0.0518 (J)	
2/1/2017					1.42				2.17
5/2/2017	<0.1015	<0.1015	<0.1015	<0.1015					
5/3/2017					1.52	<0.1015	1.45	0.0737 (J)	2.28
6/6/2017	<0.1015	<0.1015	<0.1015	<0.1015					
6/7/2017					1.52	<0.1015	1.41	0.0518 (J)	2.25
9/12/2017		<0.1015							
9/13/2017	<0.1015		<0.1015	<0.1015					
9/14/2017					1.96	<0.1015	1.16	0.0825 (J)	2.41
5/1/2018	<0.1015	<0.1015	<0.1015						
5/2/2018				0.0362 (J)	2	<0.1015	1.12	0.0603 (J)	2.34
11/26/2018		<0.1015							
11/27/2018	<0.1015			0.11			1.31	0.0613 (J)	
11/28/2018					2	<0.1015			2.23
5/28/2019		<0.1015							
5/29/2019	<0.1015		<0.1015	0.188		<0.1015	1.44	0.0946 (J)	
5/30/2019					2.11				2.45
9/30/2019					2.02		1.38		2.34
10/1/2019						<0.1015		0.103	
10/2/2019	<0.1015	<0.1015	<0.1015	0.097 (J)					
3/30/2020							1.12		
3/31/2020	<0.1015	<0.1015	<0.1015	0.157	2.12	<0.1015		0.0782 (J)	2.27
4/1/2020									
8/31/2020									
9/1/2020					2.02			0.115	
9/2/2020						<0.1015	1.26		2.05
9/8/2020		<0.1015							
9/9/2020	<0.1015		<0.1015	0.0999 (J)					
5/11/2021	<0.1015	<0.1015	<0.1015		1.99		0.971		
5/12/2021				0.0841 (J)					
5/17/2021						<0.1015			
5/18/2021									2.08
5/19/2021									
5/25/2021									
10/18/2021	<0.1015	<0.1015							
10/19/2021			<0.1015	0.0708 (J)					
10/26/2021							0.933		
10/27/2021					2.39				2.04
11/1/2021									
11/2/2021						<0.1015		0.0755 (J)	

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-1 (bg)	BY-AP-MW-10	BY-AP-MW-6	BY-AP-MW-8	BY-AP-MW-5	BY-AP-MW-9
5/23/2022									
5/24/2022					2.34		1.12		2.01
5/25/2022						<0.1015		0.063 (J)	
5/31/2022	<0.1015	<0.1015	<0.1015	0.0567 (J)					

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-12
2/23/2016		
3/1/2016		
3/2/2016	2.03	0.0502 (J)
4/19/2016	2.2	
4/20/2016		0.0672 (J)
6/6/2016		
6/7/2016		
6/8/2016	1.61	0.0659 (J)
8/30/2016		
8/31/2016	1.55	0.065 (J)
10/18/2016		
10/19/2016	1.59	0.0721 (J)
1/31/2017	1.84	
2/1/2017		0.06 (J)
5/2/2017	1.73	
5/3/2017		0.0768 (J)
6/6/2017	1.56	
6/7/2017		0.0625 (J)
9/12/2017		
9/13/2017	1.87	0.0926 (J)
9/14/2017		
5/1/2018	1.81	
5/2/2018		0.064 (J)
11/26/2018		
11/27/2018		
11/28/2018	1.8	0.064 (J)
5/28/2019		
5/29/2019	1.75	0.0952 (J)
5/30/2019		
9/30/2019		
10/1/2019	1.91	0.0967 (J)
10/2/2019		
3/30/2020	1.77	
3/31/2020		0.0856 (J)
4/1/2020		
8/31/2020		
9/1/2020	2.11	0.115
9/2/2020		
9/8/2020		
9/9/2020		
5/11/2021		
5/12/2021		
5/17/2021		
5/18/2021	1.99	0.0927 (J)
5/19/2021		
5/25/2021		
10/18/2021		
10/19/2021		
10/26/2021		
10/27/2021		
11/1/2021	2.02	0.0769 (J)
11/2/2021		

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-12
5/23/2022		0.0626 (J)
5/24/2022	2.08	
5/25/2022		
5/31/2022		

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-8	BY-AP-MW-6	BY-AP-MW-10	BY-AP-MW-13	BY-AP-MW-3	BY-AP-MW-12	BY-AP-MW-14	BY-AP-MW-2	BY-AP-MW-15
2/23/2016									
3/1/2016	36.1	1.87	50.6						
3/2/2016				16.7	1.11	21	9.53	3.86	6.61
4/19/2016		1.69			1.01			3.22	5.97
4/20/2016	34.5		49.1	13.1		20.1	9.55		
6/6/2016									
6/7/2016	34.7	1.75			1.06				
6/8/2016			48.7	11.7		20.2	13.1	3.17	6.36
8/30/2016	34.1	1.77					12.1		
8/31/2016			57.9	11.3	0.978	19.9		3.07	6.28
10/18/2016	33.2						11.4		
10/19/2016		1.8	52.2	11.8	0.906	20.4		2.91	6.57
1/31/2017	32.3	1.98		12.5	1.04		10.8	2.94	6.77
2/1/2017			47.6			20.9			
5/2/2017					0.969		11.9	2.82	6.94
5/3/2017	34.1	1.97	51.3	12		20.9			
6/6/2017					0.902		12.2	2.79	6.88
6/7/2017	34.7	1.98	51.4	12.8		21.2			
9/12/2017					0.988			2.88	
9/13/2017				13.3		22.1	13.9		7.43
9/14/2017	34.4	2.14	54.9						
5/1/2018					1.07			2.82	7.42
5/2/2018	32.3	2.13	53.3	13.8		22.2	10.6		
8/28/2018			56.4		1.02			2.85	
8/29/2018	32.6	1.92		13.3		22.3	11.7		7.37
11/26/2018									
11/27/2018	32.5				0.999		10.8	2.8	7.58
11/28/2018		1.91	54.2	15.2		22.1			
5/28/2019									
5/29/2019	31.9	1.72		12.8	1.09	21.4	11.2	2.82	7.22
5/30/2019			60.5						
9/30/2019	33		63.1						
10/1/2019		1.92		13.4	1.08	23.1	11.4	2.94	6.9
10/2/2019									
3/30/2020	32.2								
3/31/2020		1.68	63.6	13.2	1.1	22.4	9.04	2.95	
4/1/2020									7.32
8/31/2020								3	
9/1/2020			57.2	12.3	1.08	22.2			
9/2/2020	31.5	1.8					10.8		7.04
9/8/2020									
9/9/2020									
5/11/2021	33		62.7						6.98
5/12/2021									
5/17/2021		1.93							
5/18/2021					1.12	23.1		3.17	
5/19/2021				12.9					
5/25/2021							11.2		
10/18/2021									
10/19/2021									
10/26/2021	33.5			12.3					6.46
10/27/2021			64.2				11.4		

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-16
2/23/2016		
3/1/2016		
3/2/2016	46.5	14.6
4/19/2016	49	13.3
4/20/2016		
6/6/2016		
6/7/2016		
6/8/2016	33.5	13.2
8/30/2016		
8/31/2016	34.2	11.8
10/18/2016		
10/19/2016	35.1	12.9
1/31/2017	38.5	13.5
2/1/2017		
5/2/2017	35.1	13.5
5/3/2017		
6/6/2017	32.4	13.6
6/7/2017		
9/12/2017		
9/13/2017	40.5	11.8
9/14/2017		
5/1/2018	39.7	14
5/2/2018		
8/28/2018	37.2	
8/29/2018		12.1
11/26/2018		
11/27/2018		13.3
11/28/2018	35.8	
5/28/2019		
5/29/2019	33.4	13.4
5/30/2019		
9/30/2019		
10/1/2019	36.7	11.7
10/2/2019		
3/30/2020	33.7	
3/31/2020		14.2
4/1/2020		
8/31/2020		
9/1/2020	40.5	
9/2/2020		13.1
9/8/2020		
9/9/2020		
5/11/2021		
5/12/2021		
5/17/2021		
5/18/2021	39.5	
5/19/2021		14.2
5/25/2021		
10/18/2021		
10/19/2021		
10/26/2021		
10/27/2021		

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-16
11/1/2021	38.4	13.4
11/2/2021		
5/23/2022		
5/24/2022	43.9	
5/25/2022		13.9
5/31/2022		

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-1 (bg)	BY-UP-MW-4 (bg)	BY-AP-MW-4	BY-AP-MW-5	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-11
2/23/2016	3.99	3.68	3.59	3.5					
3/1/2016					7.74	19.7	11.2	24.5	21.7
3/2/2016									
4/19/2016	4.08	3.72	2.89	3.63	7.66				
4/20/2016						18.9	10.8	22.5	20.7
6/6/2016			3.12	3.6					
6/7/2016	4.28	3.66			11.3	18.5	10.8	21.6	
6/8/2016									20.4
8/30/2016	4.26	3.7	3.91	3.54	10.8	17.9		21.6	
8/31/2016							10.8		20.3
10/18/2016	4.26	3.77	3.9	3.68		18.2		20.2	
10/19/2016					11.1		10.8		20.3
3/20/2017	4.1	3.7	3.5	4.6					
3/21/2017					11				
3/22/2017						22	13	24	27
5/2/2017	5 (D)	4.6 (D)	3.5 (D)	3.9 (D)	12				
5/3/2017						22	14	25	27
6/6/2017	3.9 (D)	3.4 (D)	3.1 (D)	3.4 (D)	12				
6/7/2017						21	14	24	24
9/12/2017				4.3	11				
9/13/2017	4.3	3.9	4						26
9/14/2017						21	13	24	
5/1/2018	3.7	4.1		3.8	9.2				
5/2/2018			9.9			20	13	23	23
8/28/2018					10				
8/29/2018						21		25	25
11/26/2018				3.6					
11/27/2018	3.2	3.5	4.7		10	21		27	
11/28/2018							13		25
5/28/2019				3.6					
5/29/2019	2.93	3.58	5.48		8.53	19.7	13.3	27.4	27.8
5/30/2019									
9/30/2019							13.1	25.5	25
10/1/2019					7.35	19.8			
10/2/2019	2.75	3.64	3.65	3.5					
3/30/2020							13.3	22.6	
3/31/2020	2.72	3.47	3.17	3.34	9.54	19.8			24.1
4/1/2020									
8/31/2020									
9/1/2020					7.82	19.1			23.2
9/2/2020							12.9	22.2	
9/8/2020				3.29					
9/9/2020	2.32	3.47	2.92						
5/11/2021	2.16	3.42		3.33				21.9	
5/12/2021			2.18						
5/17/2021									
5/18/2021					9.53		14.2		
5/19/2021									23.1
5/25/2021									
10/18/2021		3.45		3.32					
10/19/2021	2.08		2.37						
10/26/2021							21.7		

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-1 (bg)	BY-UP-MW-4 (bg)	BY-AP-MW-4	BY-AP-MW-5	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-11
10/27/2021							15.3		
11/1/2021					7.99				
11/2/2021						21			25.1
5/23/2022									25.1
5/24/2022							13.2	25	
5/25/2022					16.1	20			
5/31/2022	2.17	3.39	1.93	3.31					

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All
 Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-10	BY-AP-MW-9	BY-AP-MW-6	BY-AP-MW-2	BY-AP-MW-3	BY-AP-MW-15	BY-AP-MW-14	BY-AP-MW-13	BY-AP-MW-16
2/23/2016									
3/1/2016	19.6	20.4	5.77						
3/2/2016				6.08	8.04	20.9	36.6	47.3	16.6
4/19/2016			5.57	6.2	7.6	19.8			15.7
4/20/2016	18.8	22.7					35.5	40.5	
6/6/2016									
6/7/2016			5.52		7.7				
6/8/2016	18.6	25.3		6.2		24	43.8	37.2	15.1
8/30/2016			5.5				41.6		
8/31/2016	18.5	24.4		6.51	7.7	28		38.2	15.9
10/18/2016							39.5		
10/19/2016	18.7	23	5.55	6.85	7.73	21.3		39.4	15.3
3/20/2017									
3/21/2017				7.2	7.2	34			19
3/22/2017	21	26	6				46	49	
5/2/2017				8.3	8.6	33	42		19
5/3/2017	22	26	6.4					48	
6/6/2017				8.5	8.3	35	44		19
6/7/2017	22	27	5.9					49	
9/12/2017				8.6	8.5				
9/13/2017						36	43	42	21
9/14/2017	22	24	6.5						
5/1/2018				7.6	7.6	42			18
5/2/2018	23	22	5.5				39	47	
8/28/2018	25	21		8.5	8.2				
8/29/2018			5.4			38	44	43	20
11/26/2018									
11/27/2018				8.8	8.4	43	43		20
11/28/2018	25	23	6.2					43	
5/28/2019									
5/29/2019			6.15	8.31	9.01	47.2	50.1	44	20
5/30/2019	25.9	27.7							
9/30/2019	25.7	21.7							
10/1/2019			5.99	8.19	8.05	56.3	44.8	39.6	20.3
10/2/2019									
3/30/2020									
3/31/2020	26.1	20.6	5.94	8.48	9.07		44.7	44.9	20.8
4/1/2020						54.7			
8/31/2020				8.3					
9/1/2020	25				8.97			39.1	
9/2/2020		18.5	5.94			47	47.2		20.8
9/8/2020									
9/9/2020									
5/11/2021	27.3					80			
5/12/2021									
5/17/2021			6.26						
5/18/2021		18.3		7.89	9.52				
5/19/2021								46.8	21.4
5/25/2021							52.1		
10/18/2021									
10/19/2021									
10/26/2021						85.4		38.4	

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-12	BY-AP-MW-1
2/23/2016		
3/1/2016		
3/2/2016	22.2	2.18 (O)
4/19/2016		9.01 (O)
4/20/2016	21.7	
6/6/2016		
6/7/2016		
6/8/2016	22	21
8/30/2016		
8/31/2016	22.3	21
10/18/2016		
10/19/2016	20.8	21.4
3/20/2017		
3/21/2017		25
3/22/2017	23	
5/2/2017		26
5/3/2017	25	
6/6/2017		27
6/7/2017	23	
9/12/2017		
9/13/2017	23	24
9/14/2017		
5/1/2018		25
5/2/2018	21	
8/28/2018		25
8/29/2018	23	
11/26/2018		
11/27/2018		
11/28/2018	23	26
5/28/2019		
5/29/2019	24.1	27.6
5/30/2019		
9/30/2019		
10/1/2019	26.1	24.6
10/2/2019		
3/30/2020		24.9
3/31/2020	23.9	
4/1/2020		
8/31/2020		
9/1/2020	23.4	25.7
9/2/2020		
9/8/2020		
9/9/2020		
5/11/2021		
5/12/2021		
5/17/2021		
5/18/2021	25.4	25.1
5/19/2021		
5/25/2021		
10/18/2021		
10/19/2021		
10/26/2021		

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-12	BY-AP-MW-1
10/27/2021		
11/1/2021	27.4	26.2
11/2/2021		
5/23/2022	26.2	
5/24/2022		28.7
5/25/2022		
5/31/2022		

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-2 (bg)	BY-UP-MW-1 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-4	BY-AP-MW-5	BY-AP-MW-6
2/23/2016	0.02 (J)	0.03 (J)	0.02 (J)	0.02 (J)					
3/1/2016					0.02 (J)	0.06 (J)	0.02 (J)	0.04 (J)	<0.125
3/2/2016									
4/19/2016	0.021 (J)	0.023 (J)	0.016 (J)	0.015 (J)			0.016 (J)		0.016 (J)
4/20/2016					0.034 (J)	0.073 (J)		0.043 (J)	
6/6/2016		0.062 (J)		0.05 (J)					
6/7/2016	0.06 (J)		0.052 (J)				0.047 (J)	0.075 (J)	0.048 (J)
6/8/2016					0.061 (J)	0.085 (J)			
8/30/2016	0.05 (J)	0.053 (J)	0.038 (J)	0.036 (J)			0.035 (J)	0.057 (J)	0.034 (J)
8/31/2016					0.04 (J)	0.064 (J)			
10/18/2016	0.04 (J)	0.042 (J)	0.03 (J)	0.025 (J)				0.049 (J)	
10/19/2016					0.03 (J)	0.05 (J)	0.025 (J)		0.023 (J)
3/20/2017	<0.125	<0.125	<0.125	<0.125					
3/21/2017							<0.125		
3/22/2017					<0.125	0.05 (J)		0.04 (J)	<0.125
5/2/2017	0.04 (JD)	0.04 (JD)	0.1 (D)	0.1 (D)			<0.125		
5/3/2017					0.04 (J)	0.06 (J)		0.05 (J)	<0.125
6/6/2017	0.04 (JD)	0.1 (D)	0.1 (D)	0.1 (D)			<0.125		
6/7/2017					0.04 (J)	0.06 (J)		0.05 (J)	<0.125
9/12/2017				<0.125			<0.125		
9/13/2017	0.043 (J)	0.04 (J)	<0.125			<0.125 (U*)			
9/14/2017					0.04 (J)			0.06 (J)	<0.125
1/22/2018									
1/23/2018	0.04 (J)	<0.125	<0.125	<0.125	<0.125	0.06 (J)			
1/24/2018							<0.125	0.05 (J)	<0.125
5/1/2018	0.04 (J)		<0.125	<0.125			<0.125		
5/2/2018		0.04 (J)			<0.125	0.06 (J)		0.05 (J)	<0.125
11/26/2018				<0.125					
11/27/2018	<0.125	<0.125	<0.125				<0.125	<0.125	
11/28/2018					<0.125	0.05 (J)			<0.125
5/28/2019				<0.125					
5/29/2019	<0.125	0.0502 (J)	<0.125			0.0759 (J)	<0.125	0.0923 (J)	<0.125
5/30/2019					0.0573 (J)				
9/30/2019					<0.125	0.0733 (J)			
10/1/2019							<0.125	0.0557 (J)	<0.125
10/2/2019	<0.125	<0.125	<0.125	<0.125					
3/30/2020									
3/31/2020	<0.125	<0.125	<0.125	<0.125	<0.125	0.078 (J)	<0.125	0.0735 (J)	<0.125
4/1/2020									
8/31/2020									
9/1/2020					0.0794 (J)	0.0841 (J)	<0.125	0.0921 (J)	
9/2/2020									<0.125
9/8/2020				<0.125					
9/9/2020	<0.125	<0.125	<0.125						
5/11/2021	<0.125		<0.125	<0.125	0.105				
5/12/2021		<0.125							
5/17/2021									<0.125
5/18/2021							<0.125		
5/19/2021						0.0994 (J)			
5/25/2021									
10/18/2021			<0.125	<0.125					
10/19/2021	<0.125	<0.125							

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 7/20/2022 3:14 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-2 (bg)	BY-UP-MW-1 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-4 (bg)	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-4	BY-AP-MW-5	BY-AP-MW-6
10/26/2021									
10/27/2021					<0.125				
11/1/2021							<0.125		
11/2/2021						0.101		0.0964 (J)	<0.125
5/23/2022						0.0709 (J)			
5/24/2022					<0.125 (D)				
5/25/2022							<0.125	<0.125	<0.125
5/31/2022	<0.125	<0.125	<0.125	<0.125					

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 7/20/2022 3:15 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-2
2/23/2016		
3/1/2016		
3/2/2016	0.03 (J)	0.04 (J)
4/19/2016	0.052 (J)	0.038 (J)
4/20/2016		
6/6/2016		
6/7/2016		
6/8/2016	0.069 (J)	0.067 (J)
8/30/2016		
8/31/2016	0.043 (J)	0.05 (J)
10/18/2016		
10/19/2016	<0.125	<0.125
3/20/2017		
3/21/2017	0.04 (J)	<0.125
3/22/2017		
5/2/2017	0.05 (J)	0.04 (J)
5/3/2017		
6/6/2017	0.049 (J)	0.04 (J)
6/7/2017		
9/12/2017		0.037 (J)
9/13/2017	<0.125 (U*)	
9/14/2017		
1/22/2018		
1/23/2018		
1/24/2018	0.05 (J)	<0.125
5/1/2018	0.05 (J)	<0.125
5/2/2018		
11/26/2018		
11/27/2018		<0.125
11/28/2018	<0.125	
5/28/2019		
5/29/2019	0.0858 (J)	<0.125
5/30/2019		
9/30/2019		
10/1/2019	0.0744 (J)	<0.125
10/2/2019		
3/30/2020	0.0726 (J)	
3/31/2020		<0.125
4/1/2020		
8/31/2020		<0.125
9/1/2020	0.194	
9/2/2020		
9/8/2020		
9/9/2020		
5/11/2021		
5/12/2021		
5/17/2021		
5/18/2021	0.0884 (J)	<0.125
5/19/2021		
5/25/2021		
10/18/2021		
10/19/2021		

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 7/20/2022 3:15 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-2
10/26/2021		
10/27/2021		
11/1/2021	0.181	<0.125
11/2/2021		
5/23/2022		
5/24/2022	0.0801 (J)	<0.125
5/25/2022		
5/31/2022		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 7/20/2022 3:15 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-4 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-1 (bg)	BY-AP-MW-5	BY-AP-MW-11	BY-AP-MW-7	BY-AP-MW-9	BY-AP-MW-4
2/23/2016	<25	30.7	40	26.7					
3/1/2016					273	395	129	314	27.3
3/2/2016									
4/19/2016	<25	<25	32	<25					38
4/20/2016					269	376	128	338	
6/6/2016	28.7			32.7					
6/7/2016		35.3	38.7		272		140		48.7
6/8/2016						324		288	
8/30/2016	25.3	27.3	31.3	33.3	244				32.7
8/31/2016						367	112	334	
10/18/2016	<25	<25	26.7	27.3	238				
10/19/2016						367	134	333	36
1/31/2017	26	32.7	30	32	266		134		40.7
2/1/2017						391		330	
5/2/2017	<25	30.7	30.7	31.3					30.7
5/3/2017					259	373	127	338	
6/6/2017	42.7	34.7	32.7	35.3					41.3
6/7/2017					255	367	134	300	
9/12/2017	26.7								34.7
9/13/2017		39.3	38	36.7		378			
9/14/2017					276		141	350	
5/1/2018	34.7	42	35.3						39.3
5/2/2018				34	247	330	133	333	
8/28/2018								324	26
8/29/2018					263	352			
11/26/2018	32.7								
11/27/2018		31.3	36	50.7	248				32
11/28/2018						357	138	330	
5/28/2019	31.3								
5/29/2019		40	37.3	58	259	367	132		39.3
5/30/2019								315	
9/30/2019						399	137	319	
10/1/2019					243				32
10/2/2019	36	41.3	36.7	46					
3/30/2020							135		
3/31/2020	36.7	40	39.3	53.3	243	393		330	42.7
4/1/2020									
8/31/2020									
9/1/2020					253	399			36
9/2/2020							129	301	
9/8/2020	39.3								
9/9/2020		40.7	42.7	42					
5/11/2021	46.7	35.3	44						
5/12/2021				40.7					
5/17/2021									
5/18/2021							175	314	47.3
5/19/2021						422			
5/25/2021									
10/18/2021	36		36						
10/19/2021		36		40					
10/26/2021									
10/27/2021							123	302	

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 7/20/2022 3:15 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-UP-MW-4 (bg)	BY-UP-MW-2 (bg)	BY-UP-MW-3 (bg)	BY-UP-MW-1 (bg)	BY-AP-MW-5	BY-AP-MW-11	BY-AP-MW-7	BY-AP-MW-9	BY-AP-MW-4
11/1/2021									32
11/2/2021					297	390			
5/23/2022						404			
5/24/2022							148	268	
5/25/2022					252				48.7
5/31/2022	36.7	30.7	35.3	32					

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 7/20/2022 3:15 PM View: All

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-8	BY-AP-MW-6	BY-AP-MW-10	BY-AP-MW-13	BY-AP-MW-3	BY-AP-MW-12	BY-AP-MW-14	BY-AP-MW-2	BY-AP-MW-15
2/23/2016									
3/1/2016	309	45.3	326						
3/2/2016				319	27.3	351	266	42	182
4/19/2016		46			33.3			51.3	151
4/20/2016	324		366	305		353	311		
6/6/2016									
6/7/2016	314	46			44				
6/8/2016			314	287		330	353	46.7	168
8/30/2016	308	30					328		
8/31/2016			368	295	29.3	354		32.7	188
10/18/2016	295						310		
10/19/2016		37.3	381	305	29.3	354		37.3	180
1/31/2017	303	43.3		325	36.7		312	47.3	166
2/1/2017			342			360			
5/2/2017					28		300	44	183
5/3/2017	300	44.7	369	306		341			
6/6/2017					36.7		335	48	187
6/7/2017	284	45.3	340	320		337			
9/12/2017					35.3			40.7	
9/13/2017				332		359	339		202
9/14/2017	325	48.7	391						
5/1/2018					34.7			42.7	197
5/2/2018	306	44	343	320		310	301		
8/28/2018			375		34			28	
8/29/2018	287	50		312		307	318		192
11/26/2018									
11/27/2018	303				41.3		295	48	190
11/28/2018		50.7	378	304		336			
5/28/2019									
5/29/2019	291	48.7		307	40	321	318	47.3	198
5/30/2019			377						
9/30/2019	293		361						
10/1/2019		38		290	36.7	344	317	44.7	236
10/2/2019									
3/30/2020	310								
3/31/2020		42	387	290	37.3	331	317	42	
4/1/2020									231
8/31/2020								45.3	
9/1/2020			392	285	39.3	356			
9/2/2020	298	37.3					327		208
9/8/2020									
9/9/2020									
5/11/2021	318		391						279
5/12/2021									
5/17/2021		46.7							
5/18/2021					38	332		48.7	
5/19/2021				300					
5/25/2021							318		
10/18/2021									
10/19/2021									
10/26/2021	332			280					269
10/27/2021			373				327		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 7/20/2022 3:15 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-16
2/23/2016		
3/1/2016		
3/2/2016	426	263
4/19/2016	442	259
4/20/2016		
6/6/2016		
6/7/2016		
6/8/2016	461	285
8/30/2016		
8/31/2016	456	279
10/18/2016		
10/19/2016	444	264
1/31/2017	422	270
2/1/2017		
5/2/2017	442	259
5/3/2017		
6/6/2017	433	278
6/7/2017		
9/12/2017		
9/13/2017	456	333
9/14/2017		
5/1/2018	416	274
5/2/2018		
8/28/2018	420	
8/29/2018		283
11/26/2018		
11/27/2018		250
11/28/2018	408	
5/28/2019		
5/29/2019	403	264
5/30/2019		
9/30/2019		
10/1/2019	430	295
10/2/2019		
3/30/2020	419	
3/31/2020		276
4/1/2020		
8/31/2020		
9/1/2020	454	
9/2/2020		279
9/8/2020		
9/9/2020		
5/11/2021		
5/12/2021		
5/17/2021		
5/18/2021	450	
5/19/2021		274
5/25/2021		
10/18/2021		
10/19/2021		
10/26/2021		
10/27/2021		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 7/20/2022 3:15 PM View: All
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-16
11/1/2021	480	324
11/2/2021		
5/23/2022		
5/24/2022	464	
5/25/2022		299
5/31/2022		

FIGURE F.

Trend Test - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:26 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-10	0.1311	110	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-16	0.0646	84	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-8	-0.1071	-112	-68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-10	2.463	117	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-12	0.4261	87	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-7	0.4635	133	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-8	-0.4562	-88	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-3 (bg)	0.07505	86	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-4 (bg)	0.1262	111	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-1	0.8122	65	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-10	1.596	139	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-12	0.6575	105	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-14	1.34	83	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-15	9.506	151	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-16	0.8393	115	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-3	0.359	107	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-7	0.4288	75	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-2 (bg)	-0.3942	-104	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-3 (bg)	-0.04984	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-4 (bg)	-0.05925	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-1 (bg)	0.01277	80	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-2 (bg)	0.01673	85	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-3 (bg)	0.01205	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-4 (bg)	0.01076	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-13	-0.0481	-128	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-2	-0.09486	-137	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-2 (bg)	-0.07015	-123	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-3 (bg)	-0.07433	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-4 (bg)	-0.05992	-98	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-1	2.168	106	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-11	5.258	114	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-12	2.096	77	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-14	7.276	79	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-8	2.306	104	74	Yes	19	52.63	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-10	6.544	88	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-15	15.07	125	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-1 (bg)	3.147	72	68	Yes	18	5.556	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-4 (bg)	3.695	95	68	Yes	18	22.22	n/a	n/a	0.01	NP

Trend Test - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:26 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron, total (mg/L)	BY-AP-MW-1	0.05988	45	68	No	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-10	0.1311	110	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-16	0.0646	84	68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-8	-0.1071	-112	-68	Yes	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-AP-MW-9	0.01049	10	68	No	18	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-1 (bg)	0	-19	-68	No	18	44.44	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-2 (bg)	0	27	63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-3 (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	BY-UP-MW-4 (bg)	0	25	68	No	18	88.89	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-1	0.3773	13	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-10	2.463	117	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-11	-0.333	-43	-74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-12	0.4261	87	74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-13	0.1429	36	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-14	0	-7	-74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-15	0.1185	41	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-16	0.06036	18	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-2	-0.05034	-36	-74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-5	0	4	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-7	0.4635	133	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-8	-0.4562	-88	-74	Yes	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-AP-MW-9	0.09472	21	74	No	19	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-1 (bg)	0.02597	19	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-2 (bg)	0.06598	57	68	No	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-3 (bg)	0.07505	86	68	Yes	18	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	BY-UP-MW-4 (bg)	0.1262	111	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-1	0.8122	65	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-10	1.596	139	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-11	0.5172	43	74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-12	0.6575	105	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-13	-0.07749	-5	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-14	1.34	83	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-15	9.506	151	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-16	0.8393	115	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-3	0.359	107	74	Yes	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-4	-0.3427	-26	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-5	0.02448	15	68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-7	0.4288	75	68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-8	0.08022	18	74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-AP-MW-9	-1.025	-69	-74	No	19	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-1 (bg)	-0.1668	-34	-68	No	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-2 (bg)	-0.3942	-104	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-3 (bg)	-0.04984	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BY-UP-MW-4 (bg)	-0.05925	-69	-68	Yes	18	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-AP-MW-15	0	0	74	No	19	5.263	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-1 (bg)	0.01277	80	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-2 (bg)	0.01673	85	74	Yes	19	47.37	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-3 (bg)	0.01205	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	BY-UP-MW-4 (bg)	0.01076	92	74	Yes	19	63.16	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-1	0	0	87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-10	-0.01552	-32	-87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-13	-0.0481	-128	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-2	-0.09486	-137	-87	Yes	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-6	-0.04963	-83	-87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-AP-MW-8	-0.01141	-56	-87	No	21	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-1 (bg)	-0.004287	-14	-81	No	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-2 (bg)	-0.07015	-123	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-3 (bg)	-0.07433	-113	-81	Yes	20	0	n/a	n/a	0.01	NP
pH, field (SU)	BY-UP-MW-4 (bg)	-0.05992	-98	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-1	2.168	106	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-10	0.812	67	74	No	19	47.37	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-11	5.258	114	74	Yes	19	31.58	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-12	2.096	77	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-13	3.002	67	68	No	18	27.78	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-14	7.276	79	68	Yes	18	50	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-7	0.7261	62	68	No	18	33.33	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-AP-MW-8	2.306	104	74	Yes	19	52.63	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-UP-MW-1 (bg)	1.548	45	68	No	18	0	n/a	n/a	0.01	NP

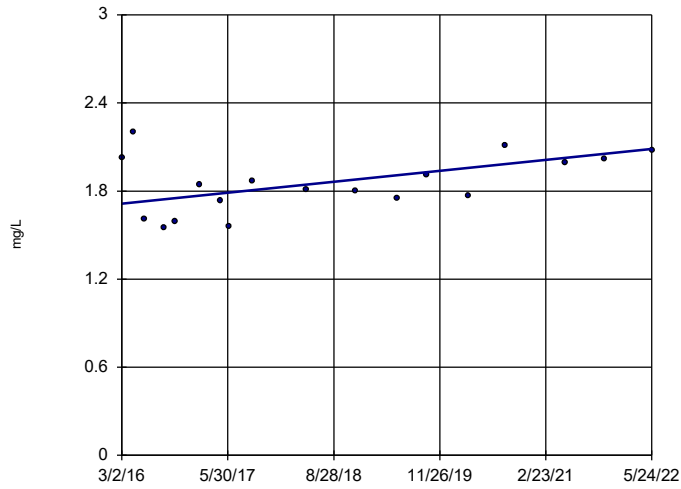
Trend Test - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:26 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate as SO4 (mg/L)	BY-UP-MW-2 (bg)	0.0231	3	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-UP-MW-3 (bg)	-0.07308	-27	-68	No	18	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BY-UP-MW-4 (bg)	-0.02454	-6	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-1	0	1	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-10	6.544	88	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-11	5.887	54	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-12	-1.313	-20	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-13	-5.166	-64	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-14	2.028	33	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-15	15.07	125	74	Yes	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-16	3.704	49	74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-5	-2.941	-31	-68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-7	1.47	31	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-8	-0.7384	-8	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-9	-5.014	-59	-74	No	19	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-1 (bg)	3.147	72	68	Yes	18	5.556	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-2 (bg)	1.703	57	68	No	18	11.11	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-3 (bg)	1.36	45	68	No	18	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-UP-MW-4 (bg)	3.695	95	68	Yes	18	22.22	n/a	n/a	0.01	NP

Sen's Slope Estimator

BY-AP-MW-1

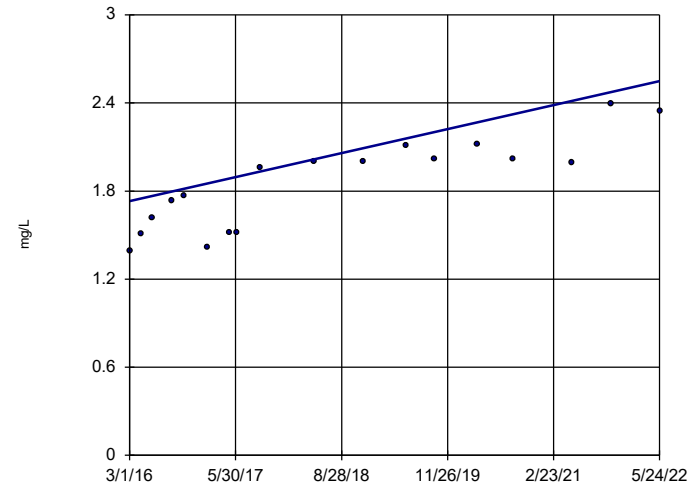


n = 18
 Slope = 0.05988
 units per year.
 Mann-Kendall
 statistic = 45
 critical = 68
 Trend not signi-
 ficant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-10

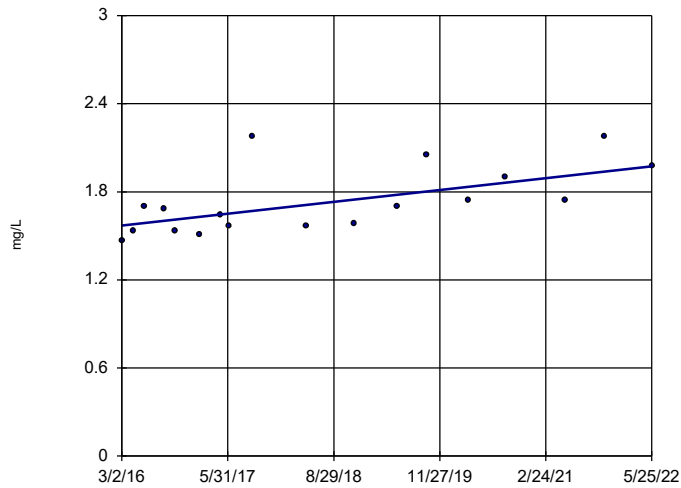


n = 18
 Slope = 0.1311
 units per year.
 Mann-Kendall
 statistic = 110
 critical = 68
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-16

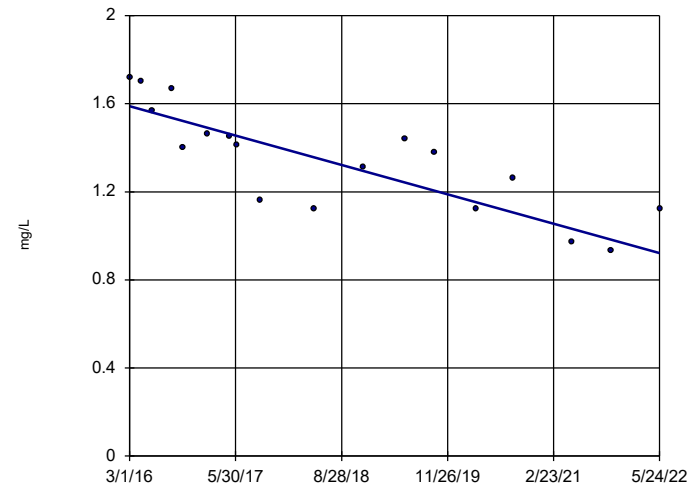


n = 18
 Slope = 0.0646
 units per year.
 Mann-Kendall
 statistic = 84
 critical = 68
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

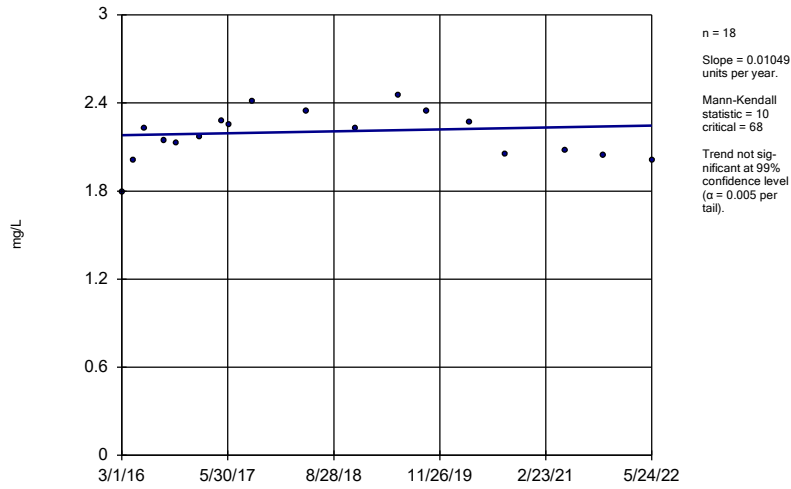
BY-AP-MW-8



n = 18
 Slope = -0.1071
 units per year.
 Mann-Kendall
 statistic = -112
 critical = -68
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

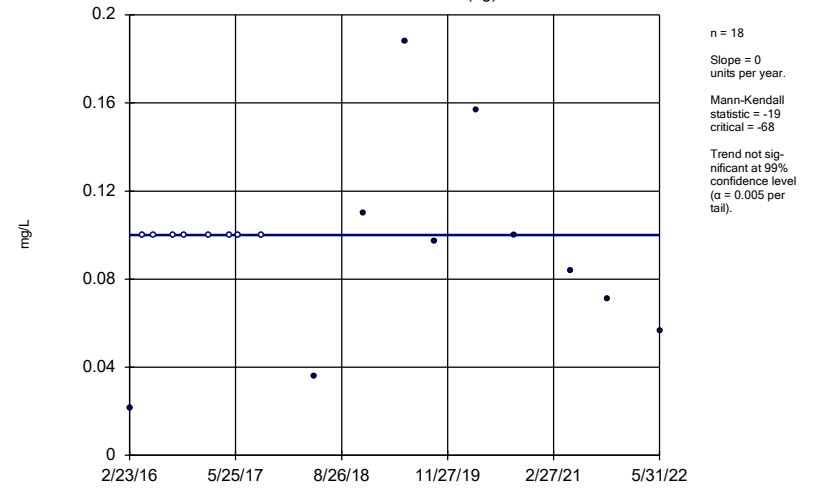
Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-9



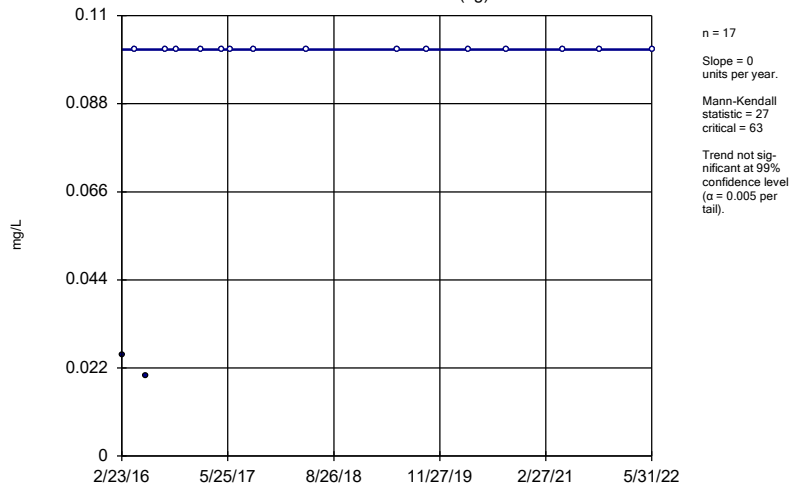
Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-1 (bg)



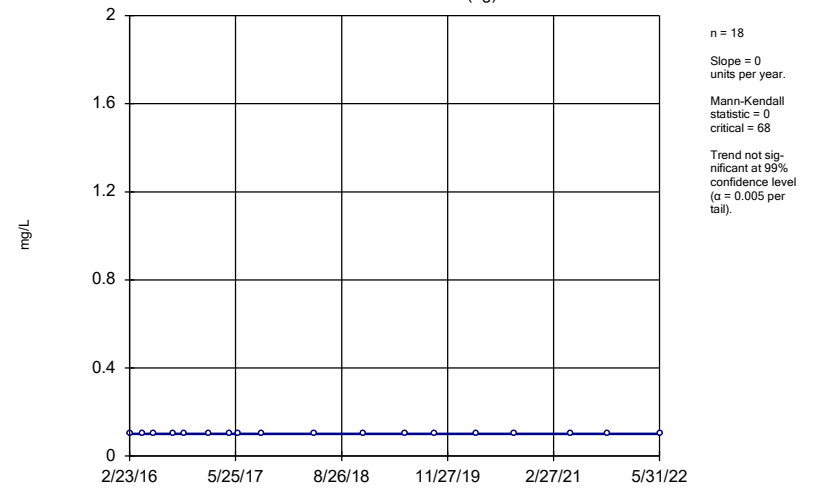
Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-2 (bg)



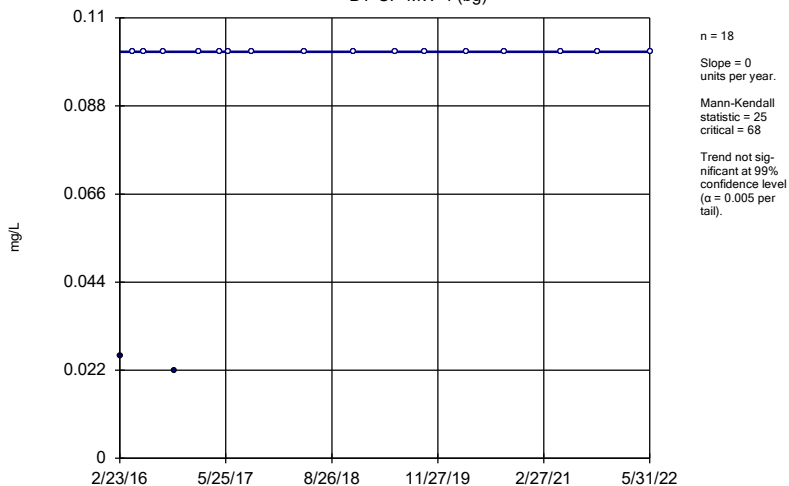
Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-3 (bg)



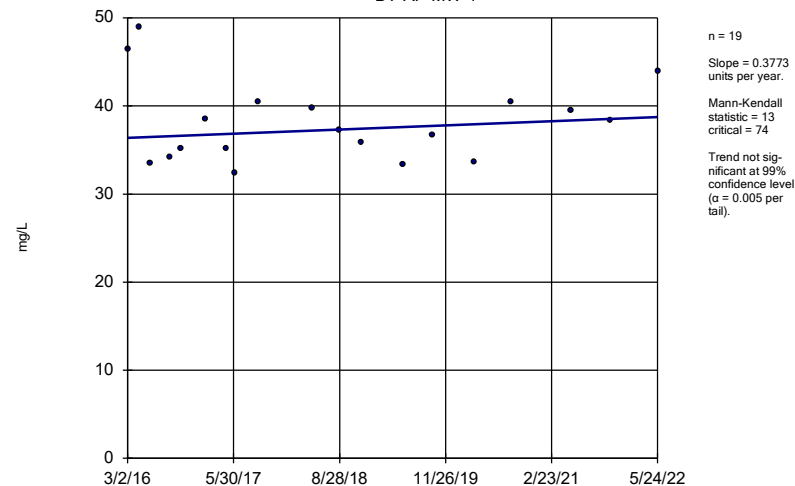
Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-4 (bg)



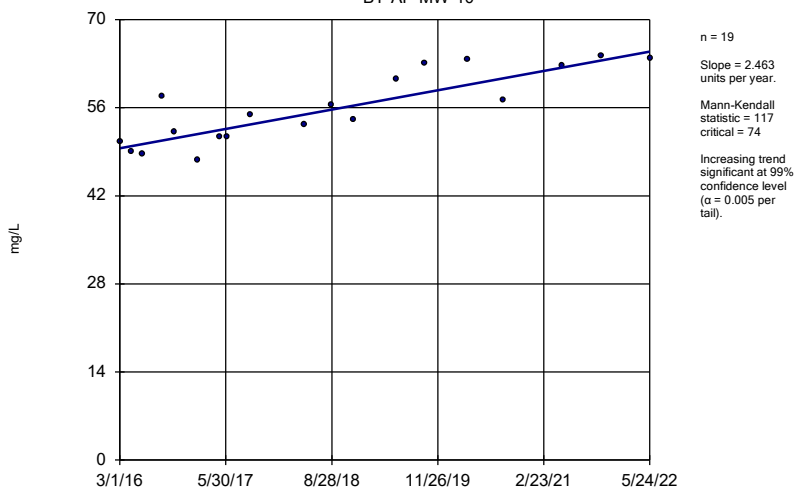
Constituent: Boron, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-1



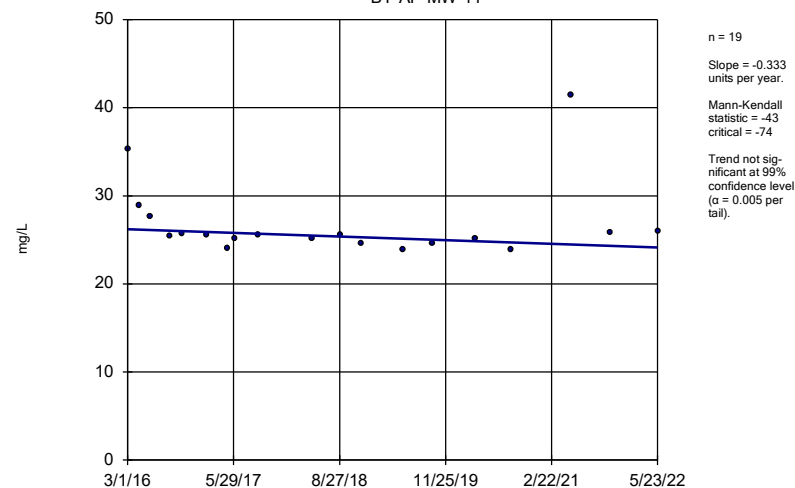
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-10



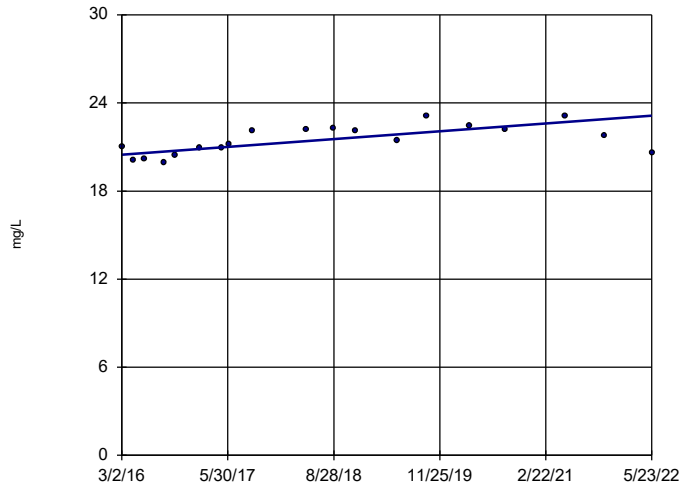
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-11



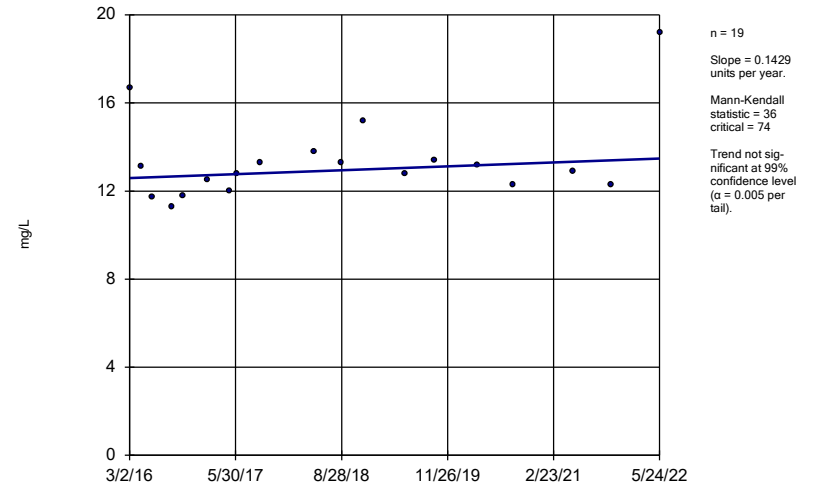
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-12



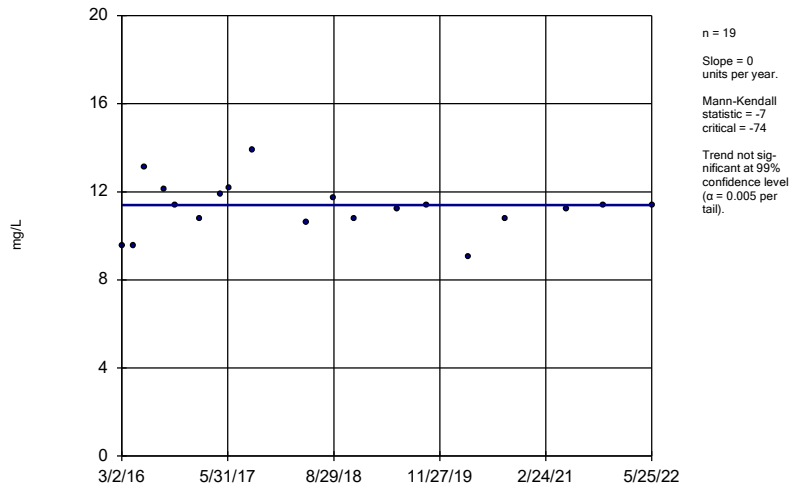
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-13



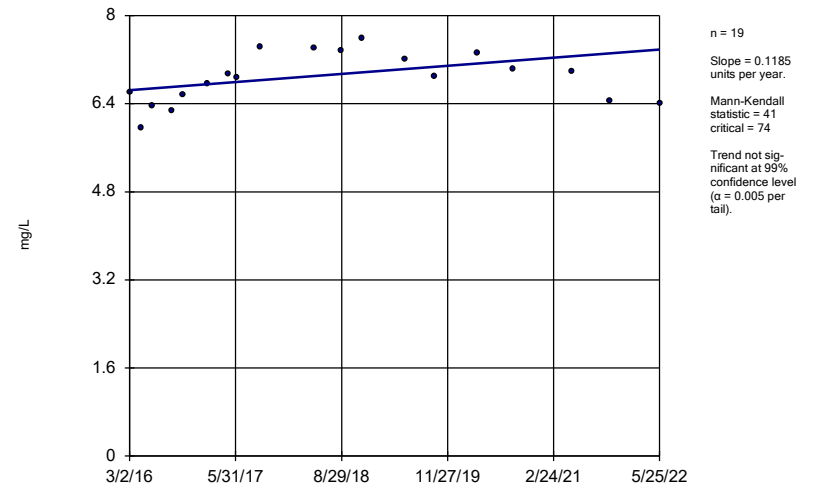
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-14



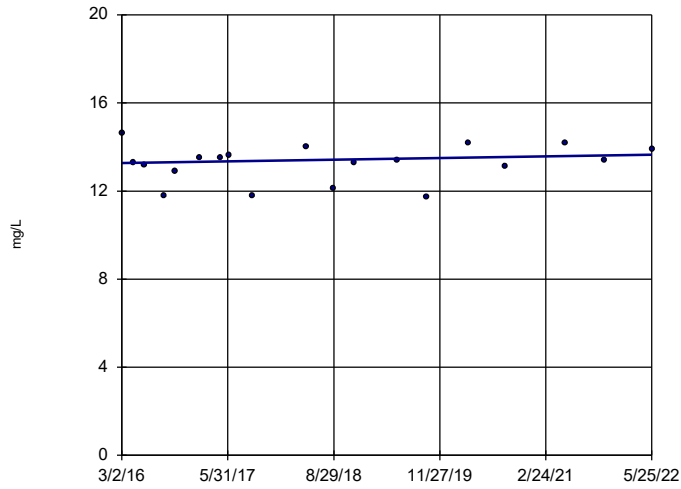
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-15



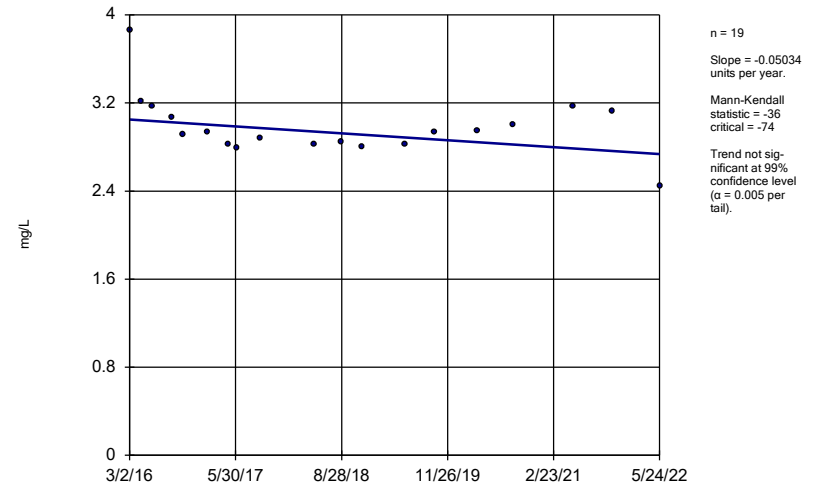
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-16



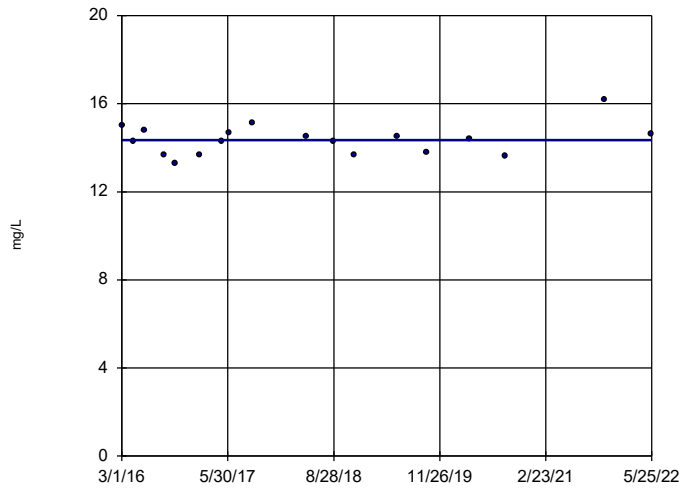
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-2



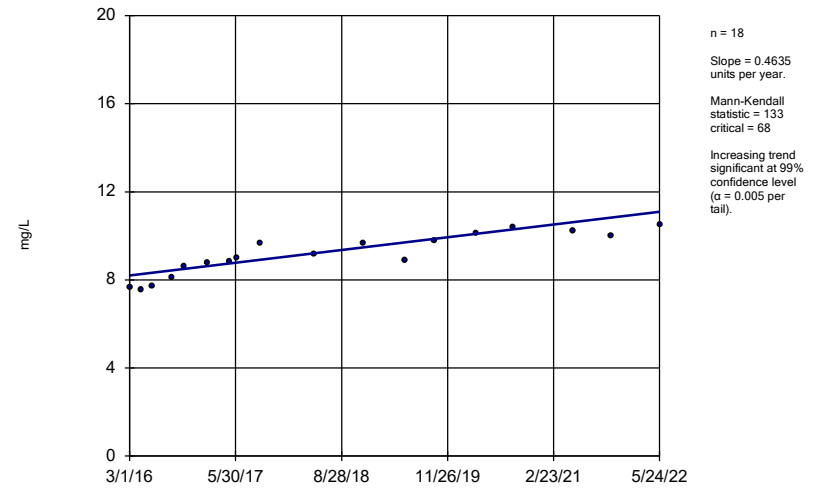
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-5



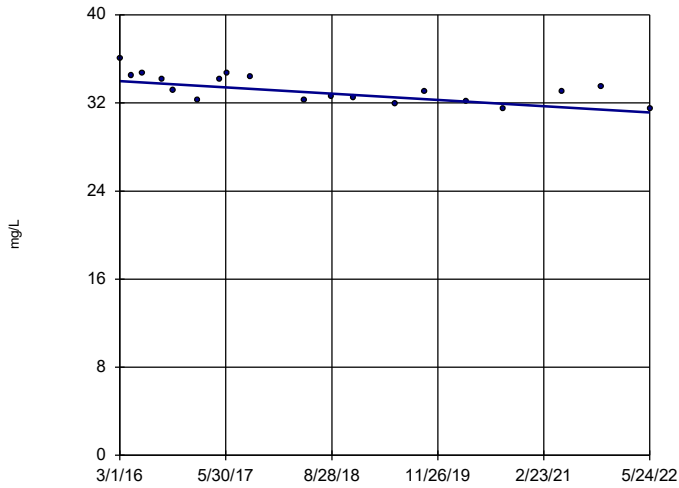
Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-7



Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

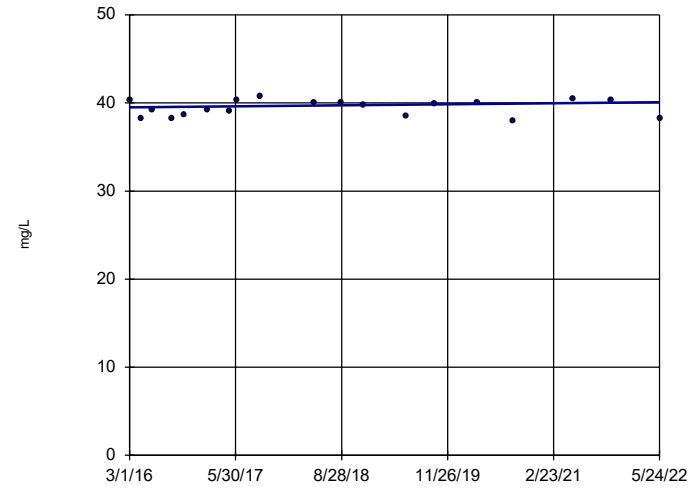
Sen's Slope Estimator BY-AP-MW-8



n = 19
 Slope = -0.4562
 units per year.
 Mann-Kendall
 statistic = -88
 critical = -74
 Decreasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

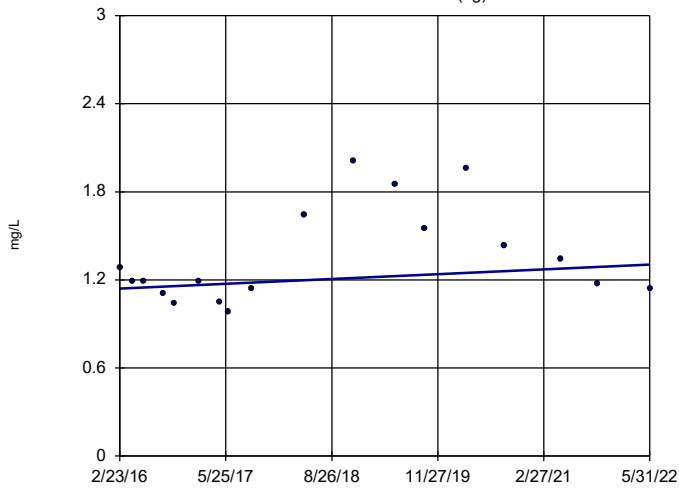
Sen's Slope Estimator BY-AP-MW-9



n = 19
 Slope = 0.09472
 units per year.
 Mann-Kendall
 statistic = 21
 critical = 74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

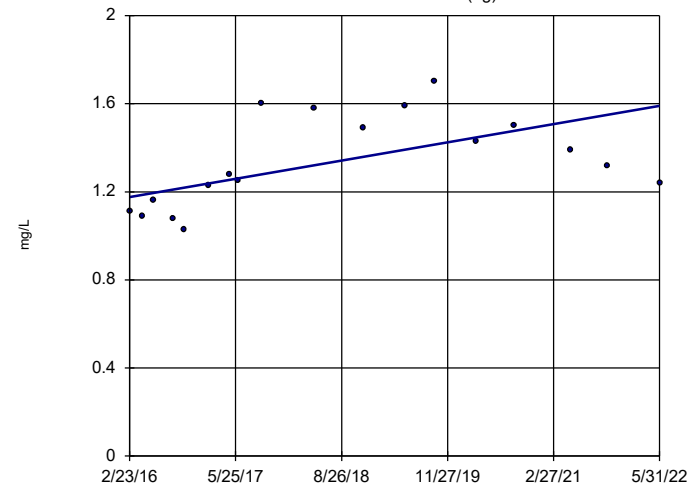
Sen's Slope Estimator BY-UP-MW-1 (bg)



n = 18
 Slope = 0.02597
 units per year.
 Mann-Kendall
 statistic = 19
 critical = 68
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-2 (bg)

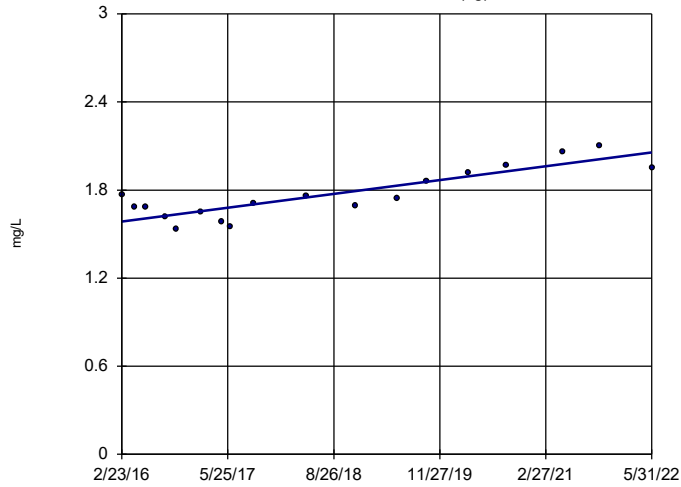


n = 18
 Slope = 0.06598
 units per year.
 Mann-Kendall
 statistic = 57
 critical = 68
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-UP-MW-3 (bg)

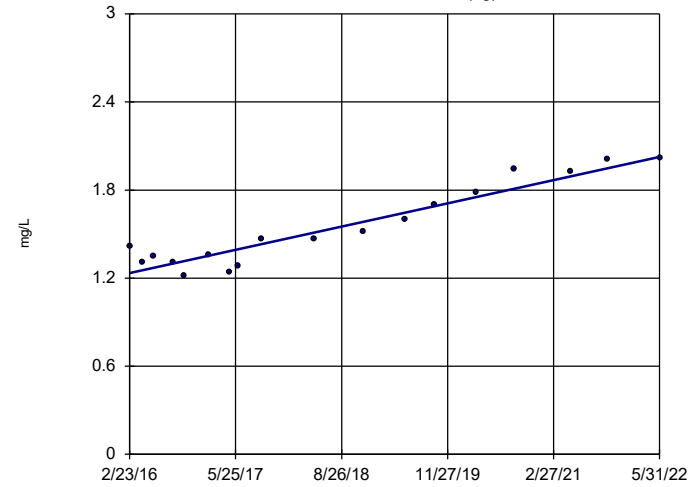


n = 18
 Slope = 0.07505
 units per year.
 Mann-Kendall
 statistic = 86
 critical = 68
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-UP-MW-4 (bg)

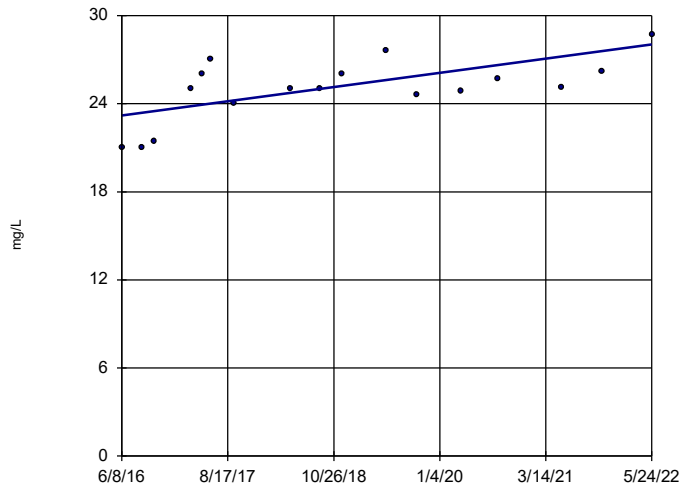


n = 18
 Slope = 0.1262
 units per year.
 Mann-Kendall
 statistic = 111
 critical = 68
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Calcium, total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-1

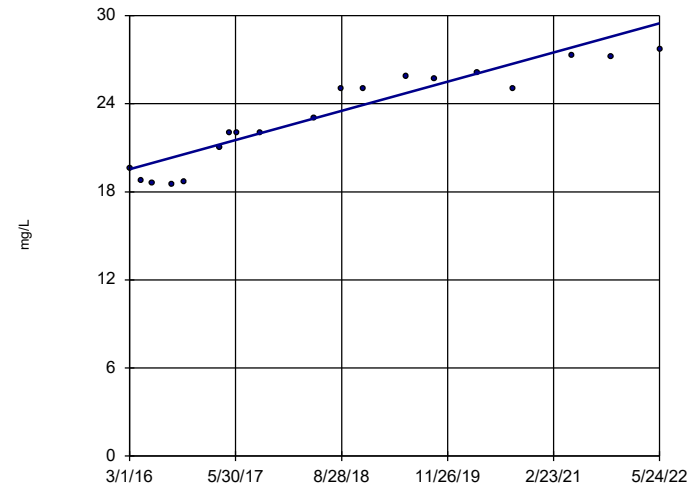


n = 17
 Slope = 0.8122
 units per year.
 Mann-Kendall
 statistic = 65
 critical = 63
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-10

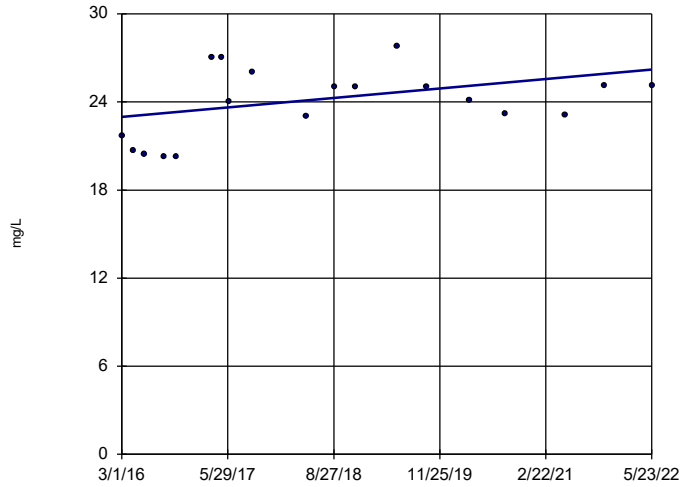


n = 19
 Slope = 1.596
 units per year.
 Mann-Kendall
 statistic = 139
 critical = 74
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-11

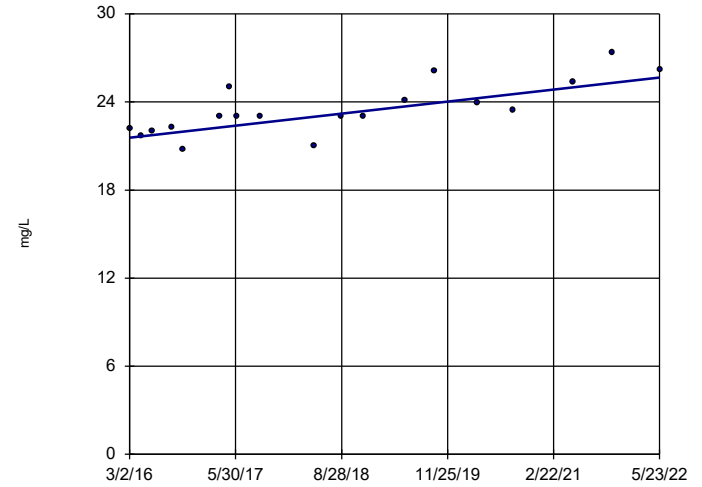


n = 19
 Slope = 0.5172 units per year.
 Mann-Kendall statistic = 43
 critical = 74
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-12

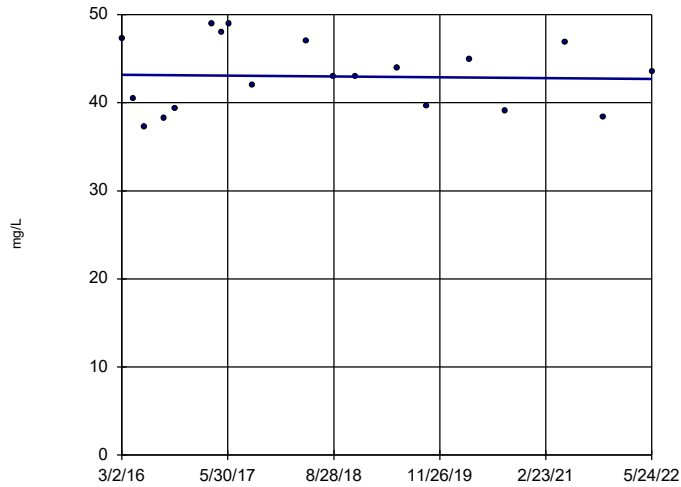


n = 19
 Slope = 0.6575 units per year.
 Mann-Kendall statistic = 105
 critical = 74
 Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-13

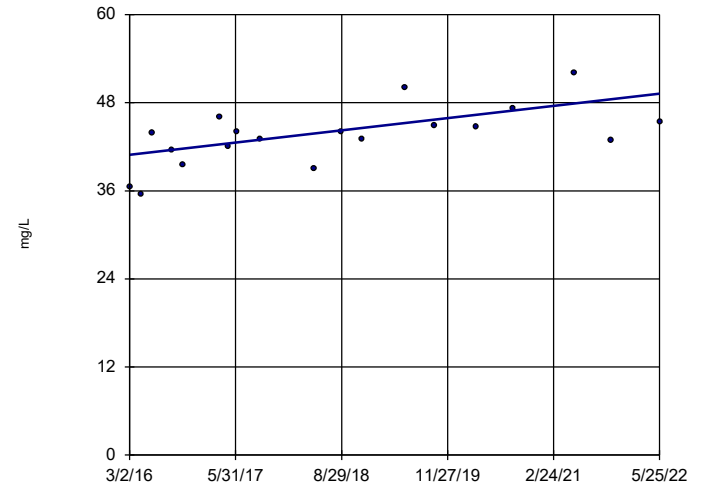


n = 19
 Slope = -0.07749 units per year.
 Mann-Kendall statistic = -5
 critical = -74
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-14

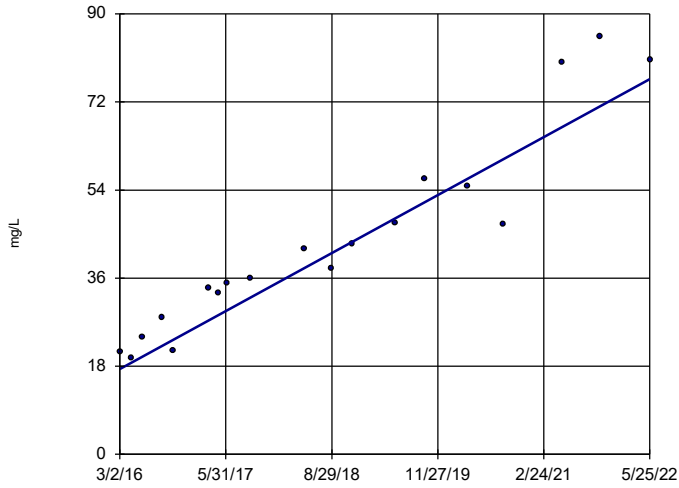


n = 19
 Slope = 1.34 units per year.
 Mann-Kendall statistic = 83
 critical = 74
 Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-15

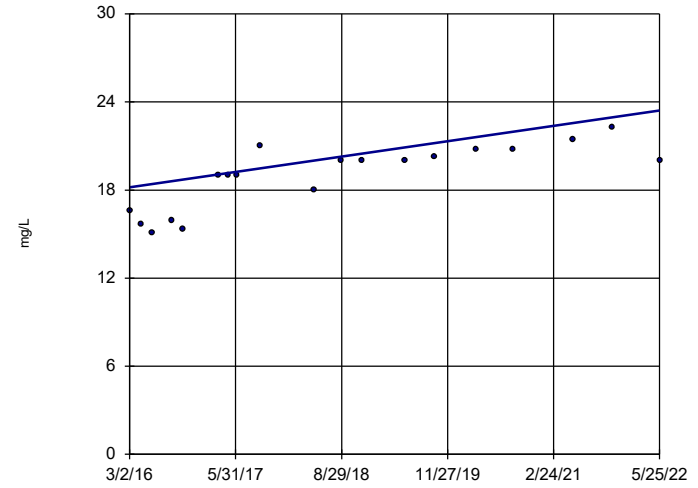


n = 19
 Slope = 9.506
 units per year.
 Mann-Kendall
 statistic = 151
 critical = 74
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-16

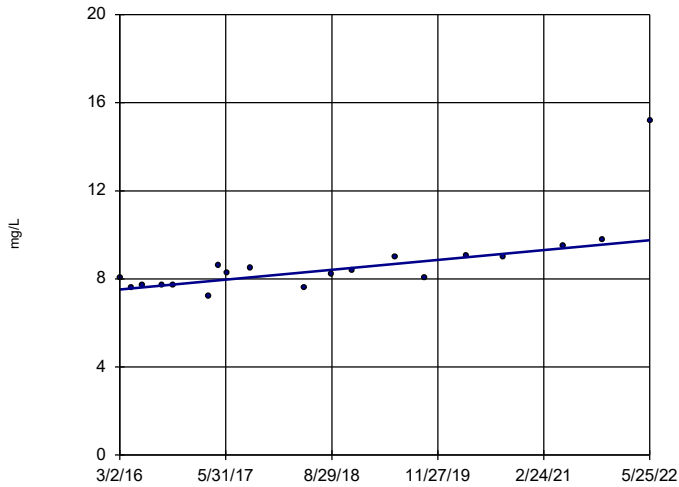


n = 19
 Slope = 0.8393
 units per year.
 Mann-Kendall
 statistic = 115
 critical = 74
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:23 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-3

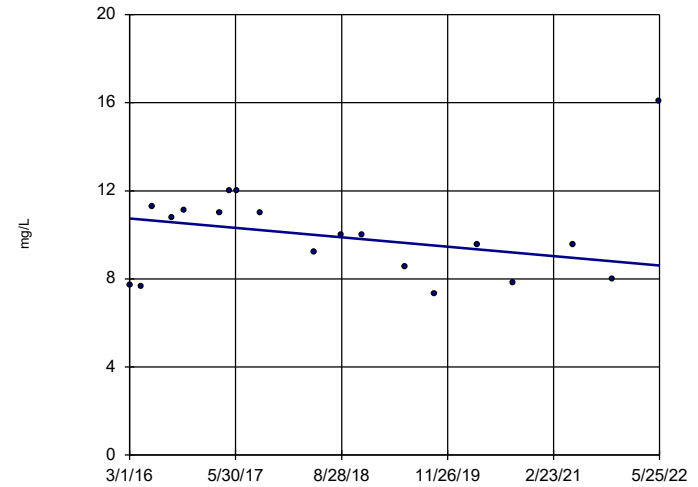


n = 19
 Slope = 0.359
 units per year.
 Mann-Kendall
 statistic = 107
 critical = 74
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

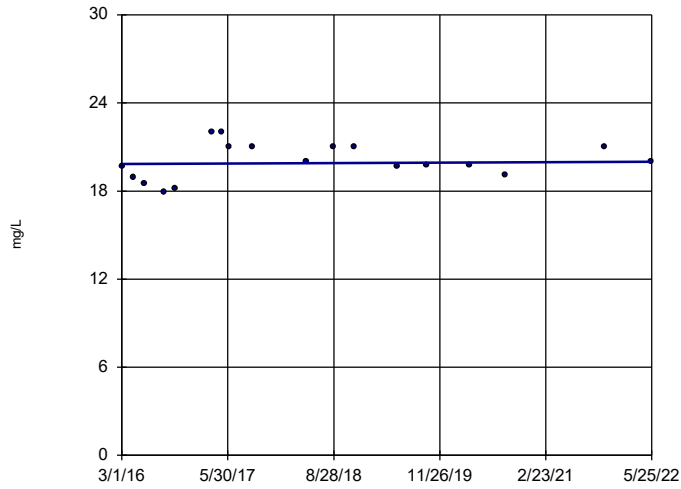
BY-AP-MW-4



n = 19
 Slope = -0.3427
 units per year.
 Mann-Kendall
 statistic = -26
 critical = -74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

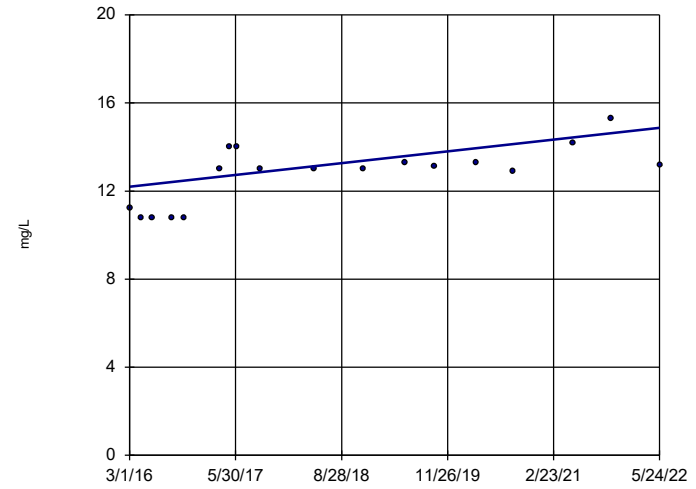
Sen's Slope Estimator BY-AP-MW-5



n = 18
 Slope = 0.02448
 units per year.
 Mann-Kendall
 statistic = 15
 critical = 68
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

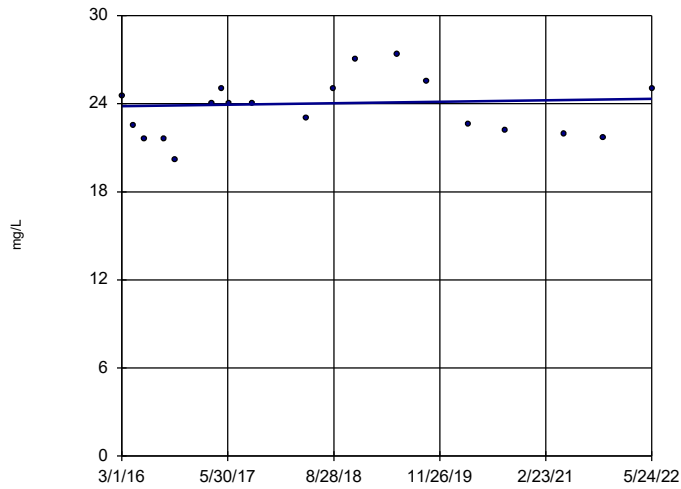
Sen's Slope Estimator BY-AP-MW-7



n = 18
 Slope = 0.4288
 units per year.
 Mann-Kendall
 statistic = 75
 critical = 68
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

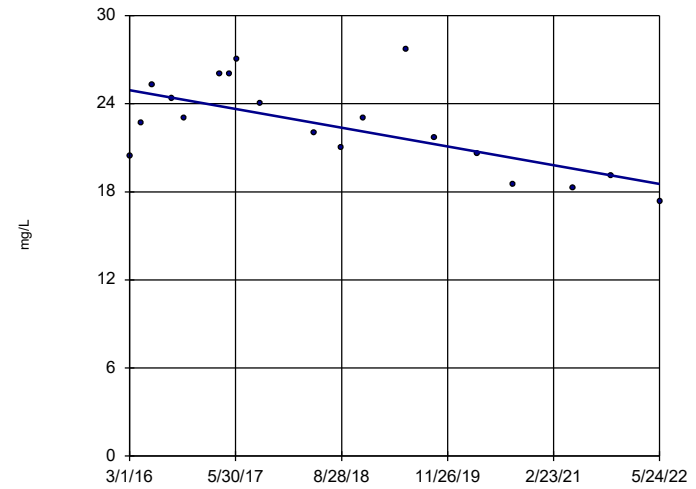
Sen's Slope Estimator BY-AP-MW-8



n = 19
 Slope = 0.08022
 units per year.
 Mann-Kendall
 statistic = 18
 critical = 74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

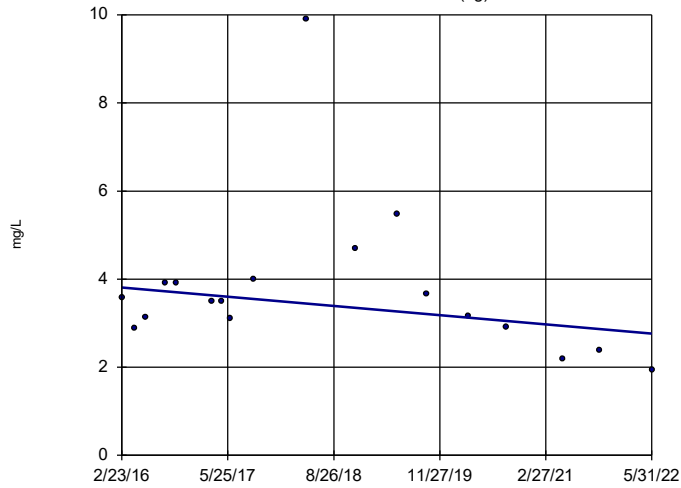
Sen's Slope Estimator BY-AP-MW-9



n = 19
 Slope = -1.025
 units per year.
 Mann-Kendall
 statistic = -69
 critical = -74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

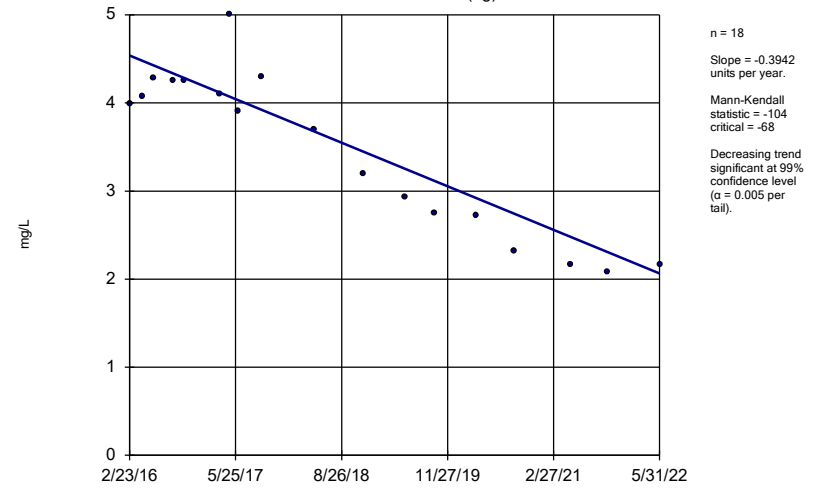
Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-1 (bg)



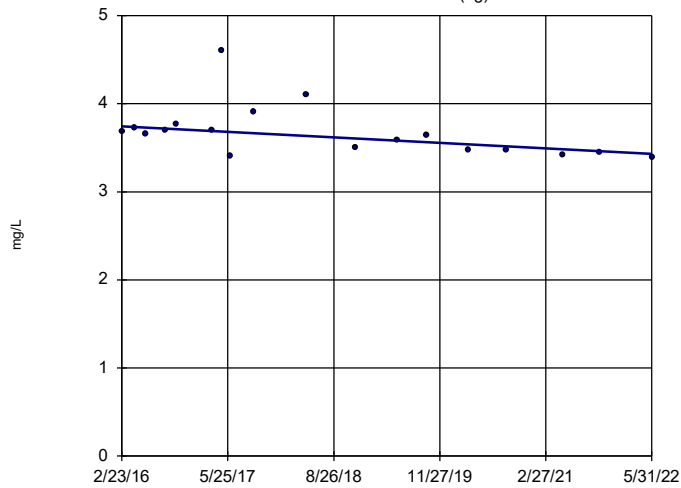
Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-2 (bg)



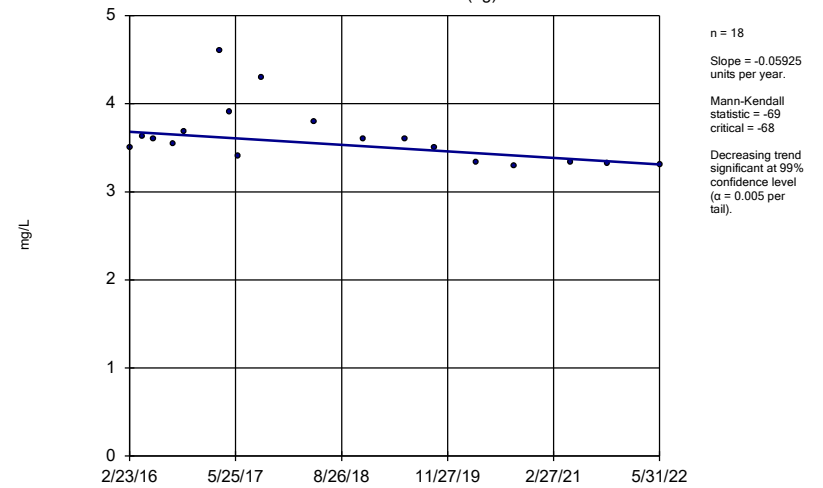
Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-3 (bg)



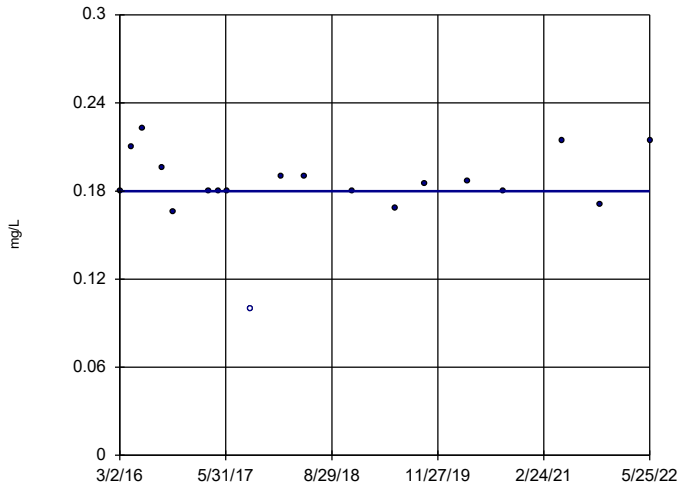
Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-4 (bg)



Constituent: Chloride, Total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

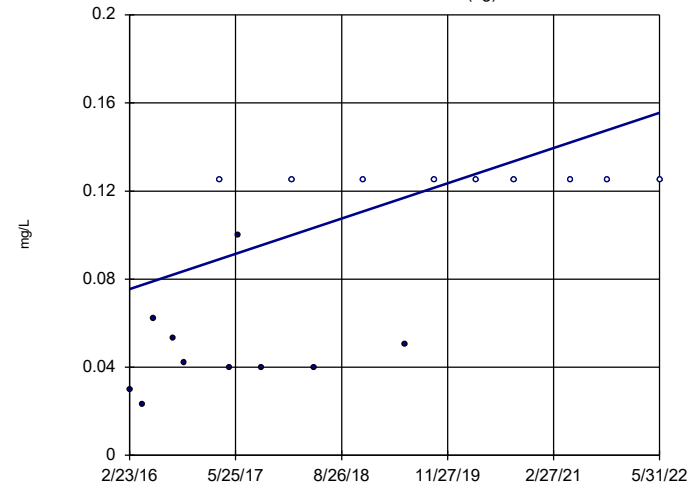
Sen's Slope Estimator BY-AP-MW-15



n = 19
Slope = 0
units per year.
Mann-Kendall
statistic = 0
critical = 74
Trend not significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Fluoride, total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

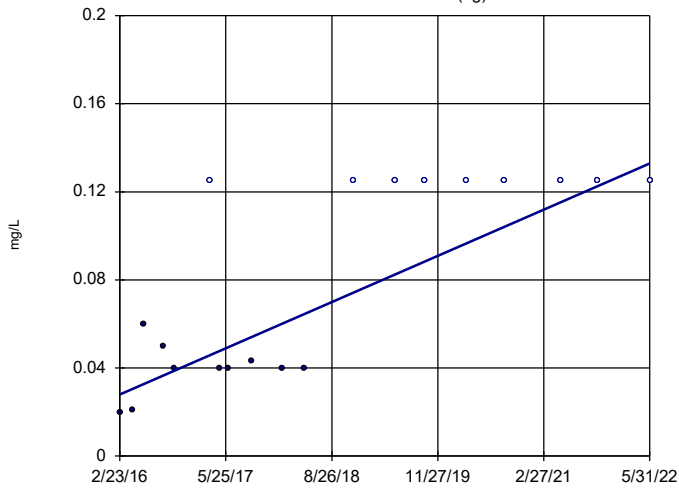
Sen's Slope Estimator BY-UP-MW-1 (bg)



n = 19
Slope = 0.01277
units per year.
Mann-Kendall
statistic = 80
critical = 74
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Fluoride, total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

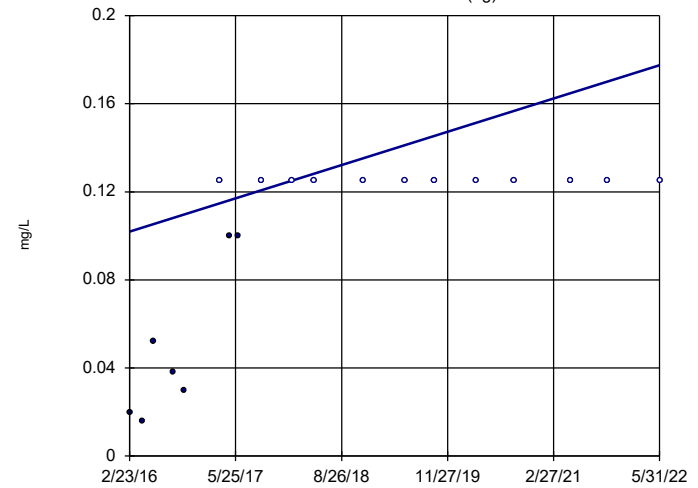
Sen's Slope Estimator BY-UP-MW-2 (bg)



n = 19
Slope = 0.01673
units per year.
Mann-Kendall
statistic = 85
critical = 74
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: Fluoride, total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

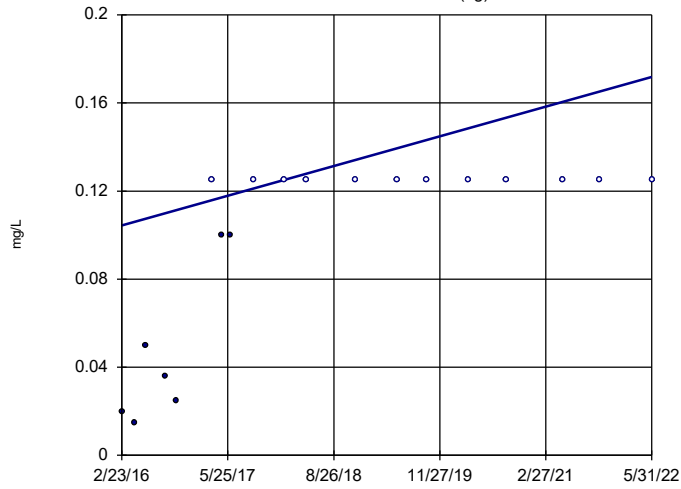
Sen's Slope Estimator BY-UP-MW-3 (bg)



n = 19
Slope = 0.01205
units per year.
Mann-Kendall
statistic = 92
critical = 74
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

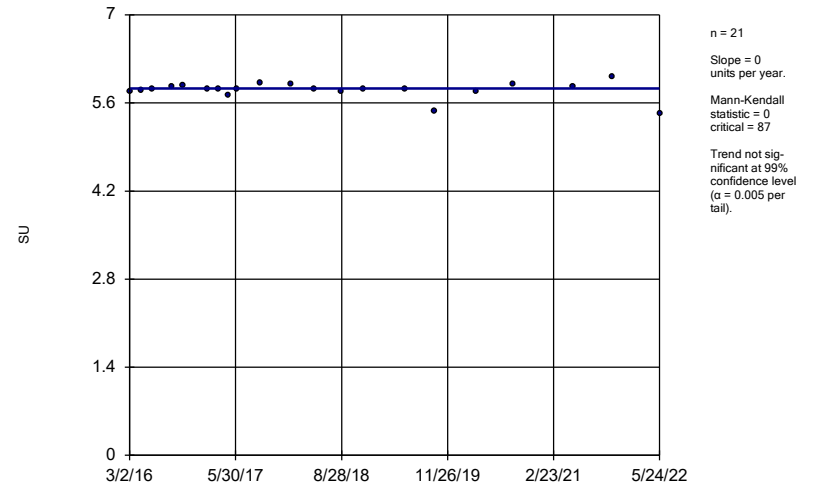
Constituent: Fluoride, total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-4 (bg)



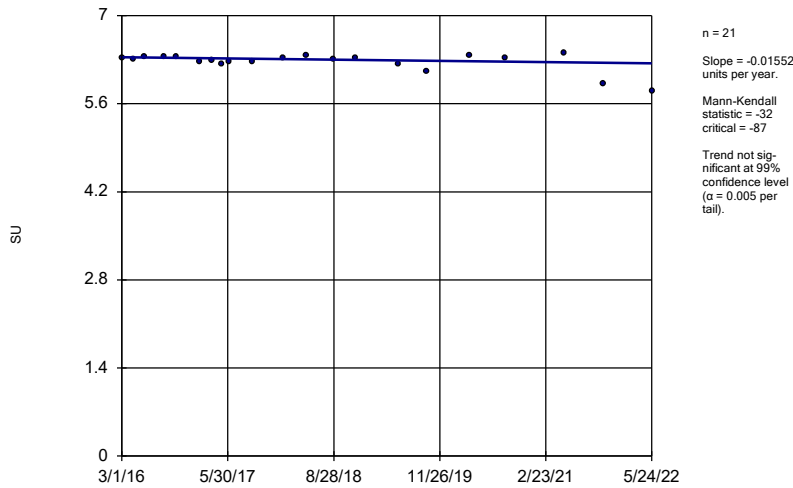
Constituent: Fluoride, total Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-1



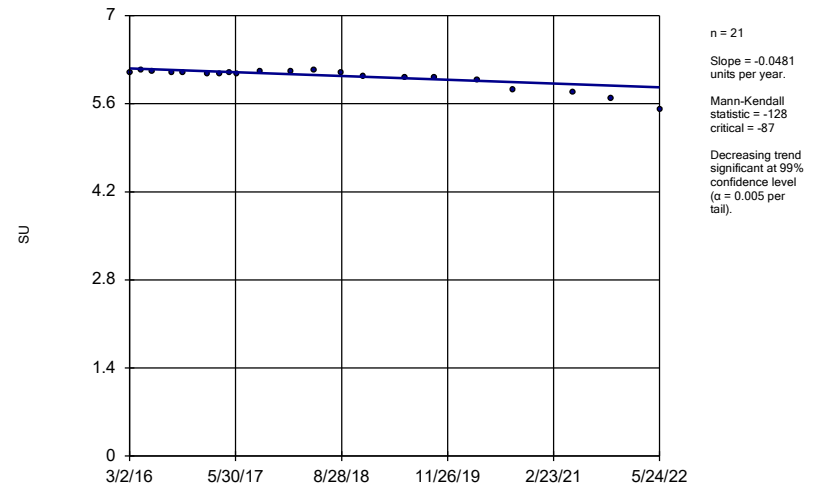
Constituent: pH, field Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-10



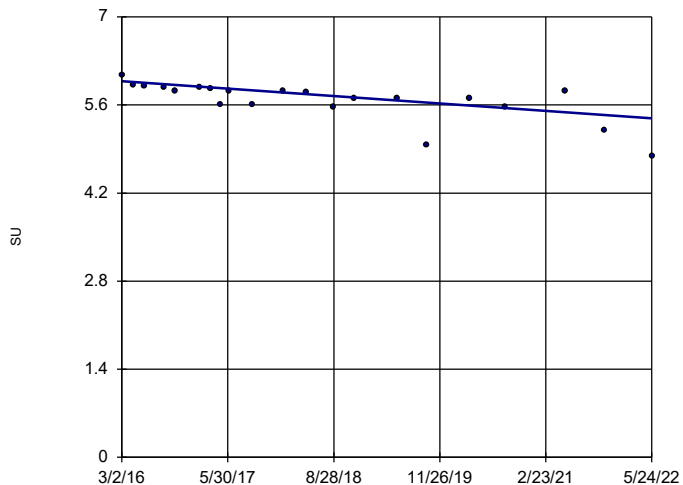
Constituent: pH, field Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-13



Constituent: pH, field Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

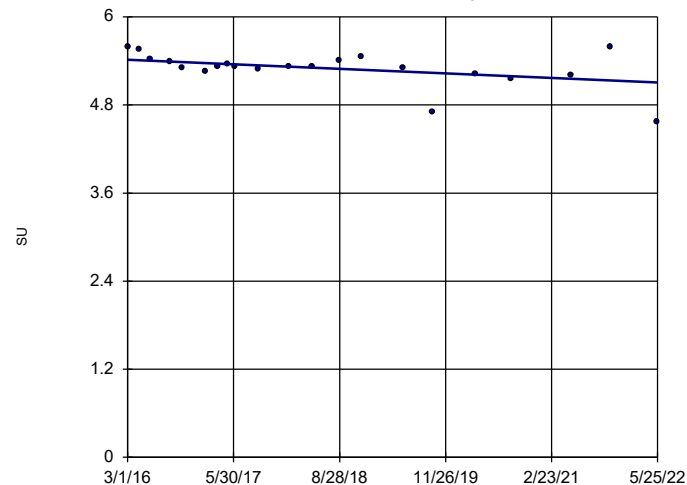
Sen's Slope Estimator BY-AP-MW-2



n = 21
Slope = -0.09486
units per year.
Mann-Kendall
statistic = -137
critical = -87
Decreasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH, field Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

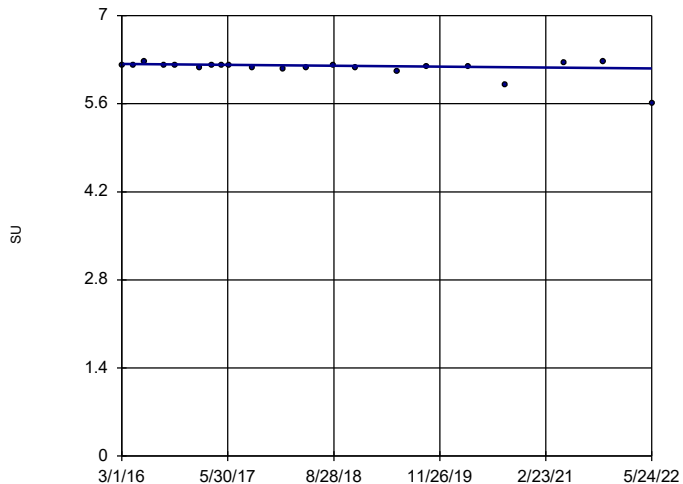
Sen's Slope Estimator BY-AP-MW-6



n = 21
Slope = -0.04963
units per year.
Mann-Kendall
statistic = -83
critical = -87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH, field Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

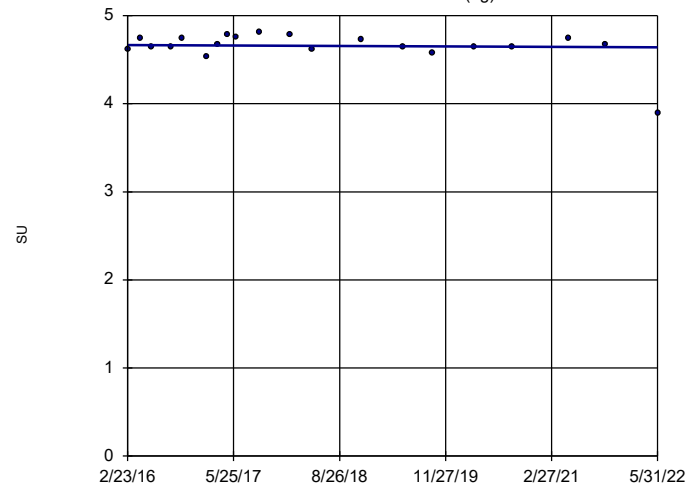
Sen's Slope Estimator BY-AP-MW-8



n = 21
Slope = -0.01141
units per year.
Mann-Kendall
statistic = -56
critical = -87
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: pH, field Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-1 (bg)

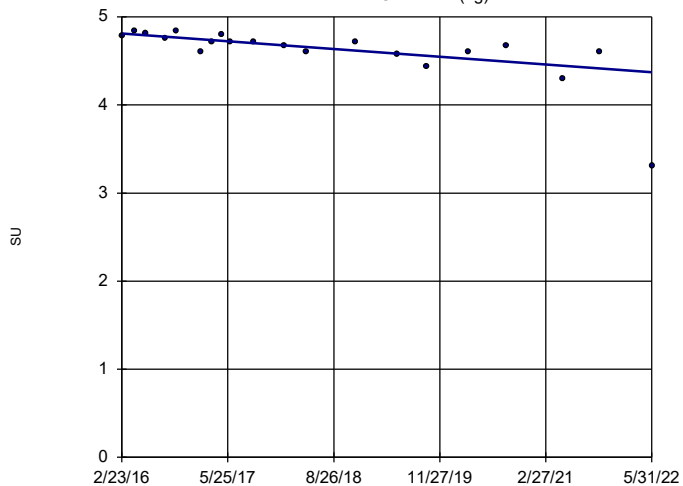


n = 20
Slope = -0.004287
units per year.
Mann-Kendall
statistic = -14
critical = -81
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

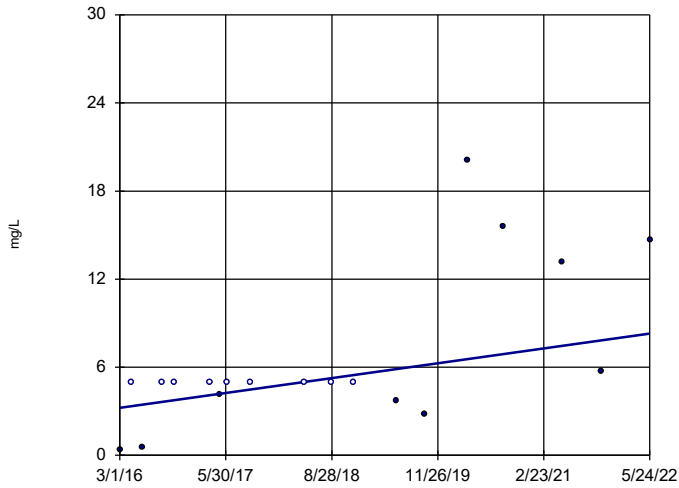
Constituent: pH, field Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-UP-MW-2 (bg)

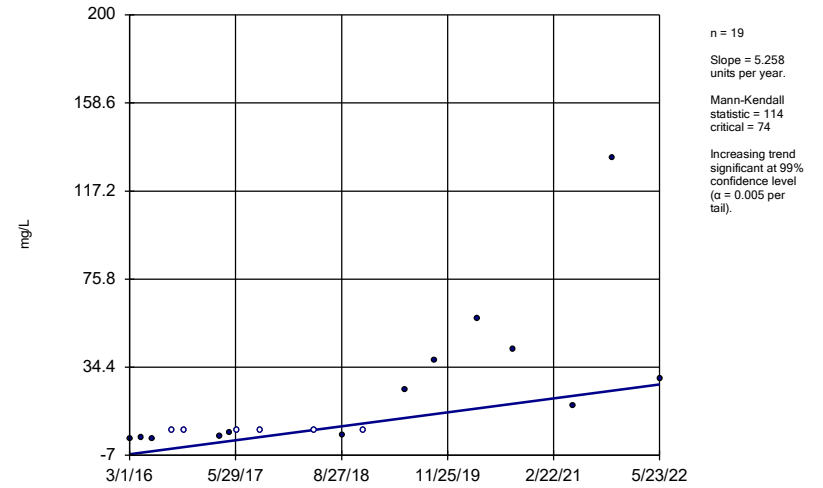


Sen's Slope Estimator BY-AP-MW-10



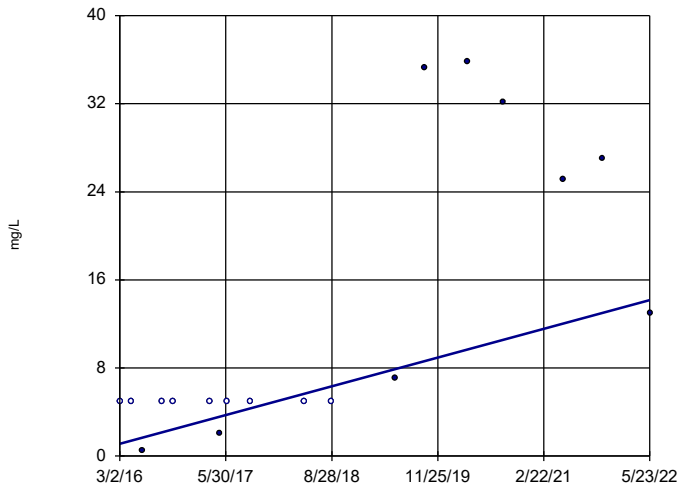
Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-11



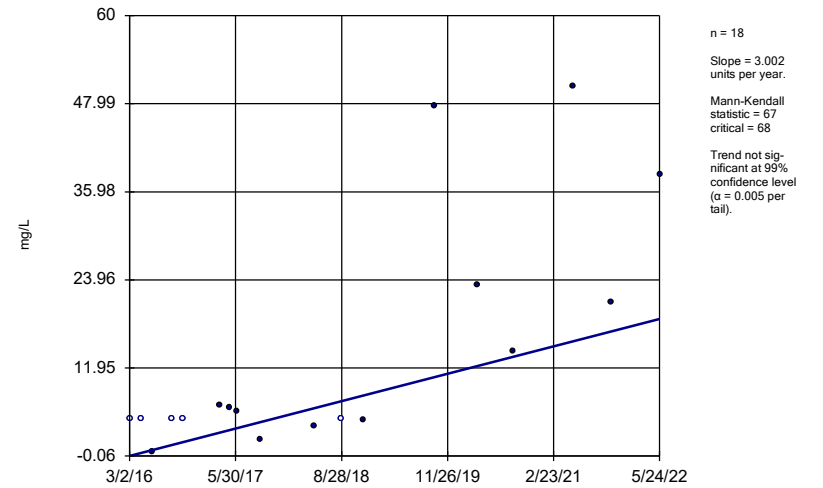
Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-12



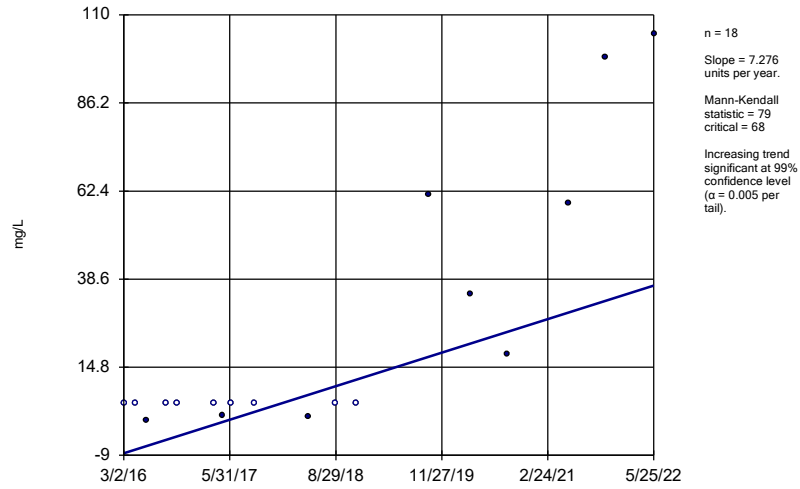
Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-13



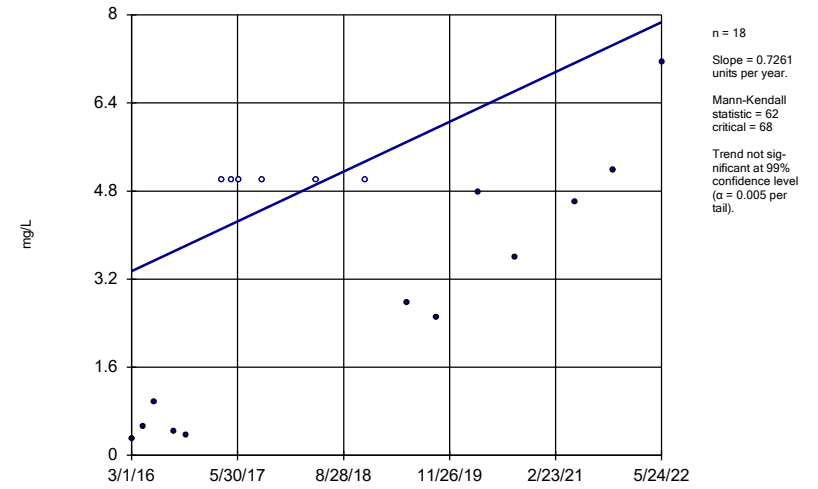
Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-14



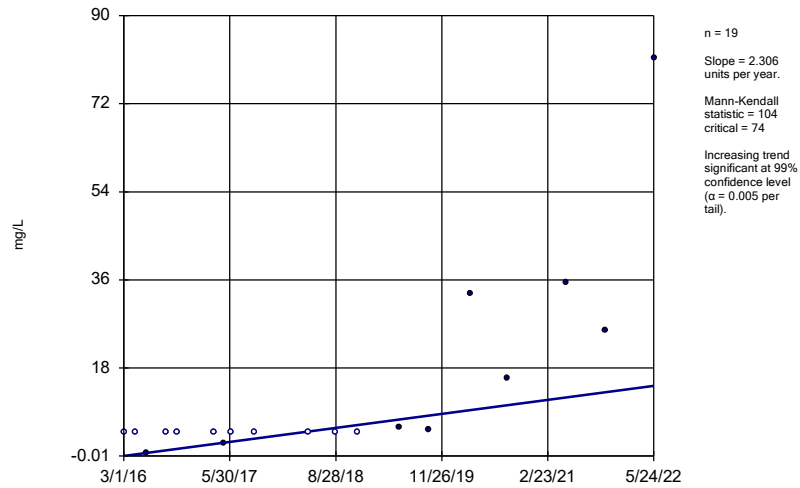
Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-7



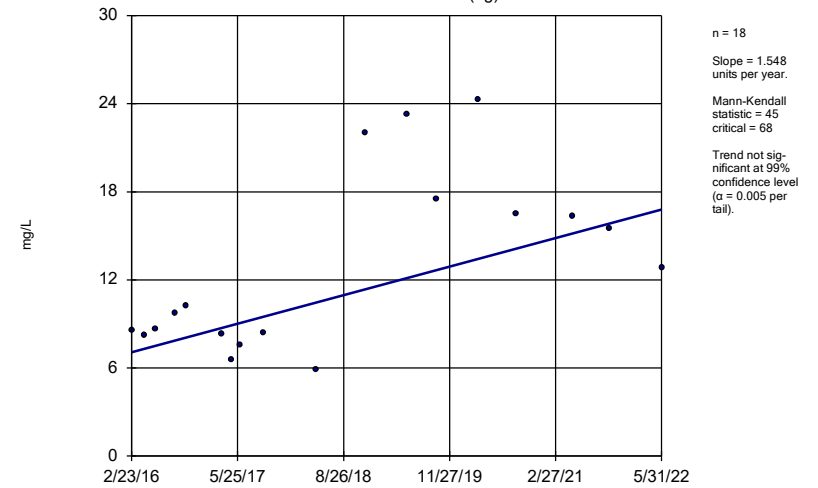
Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-8



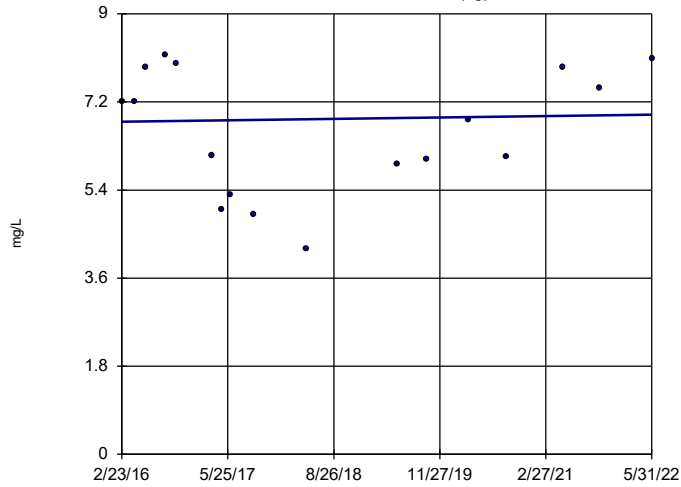
Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-UP-MW-1 (bg)



Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

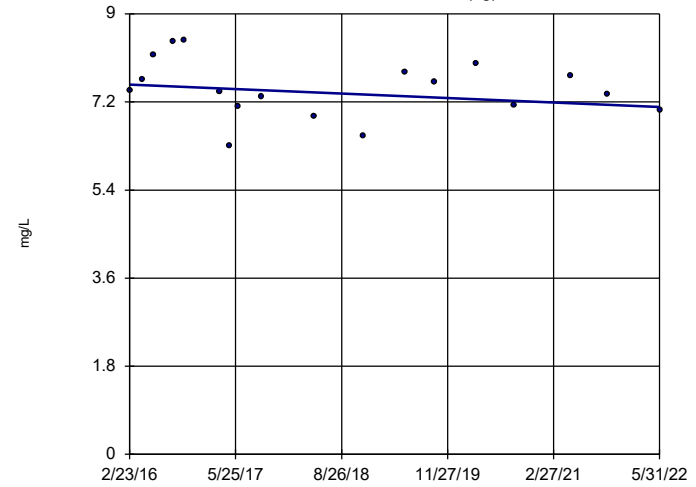
Sen's Slope Estimator BY-UP-MW-2 (bg)



n = 17
 Slope = 0.0231
 units per year.
 Mann-Kendall
 statistic = 3
 critical = 63
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

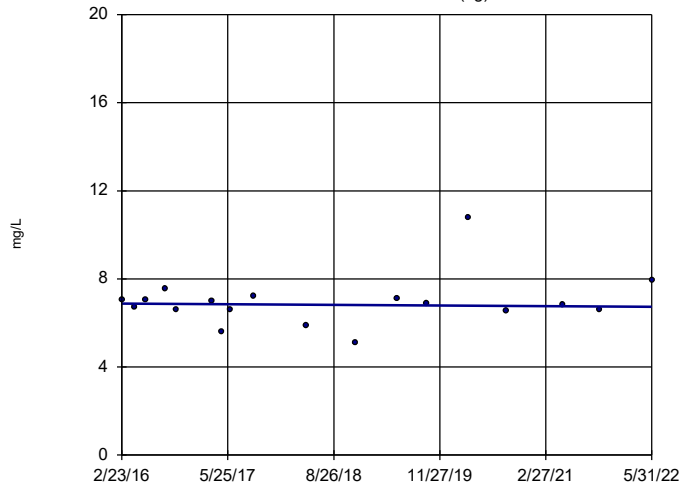
Sen's Slope Estimator BY-UP-MW-3 (bg)



n = 18
 Slope = -0.07308
 units per year.
 Mann-Kendall
 statistic = -27
 critical = -68
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

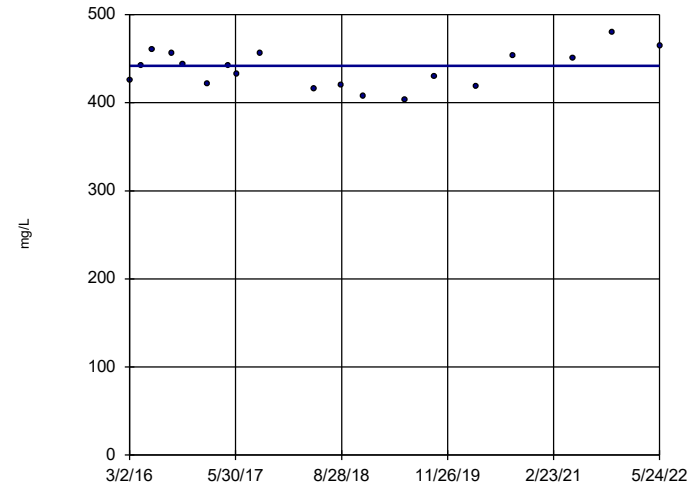
Sen's Slope Estimator BY-UP-MW-4 (bg)



n = 18
 Slope = -0.02454
 units per year.
 Mann-Kendall
 statistic = -6
 critical = -68
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Sulfate as SO4 Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-1

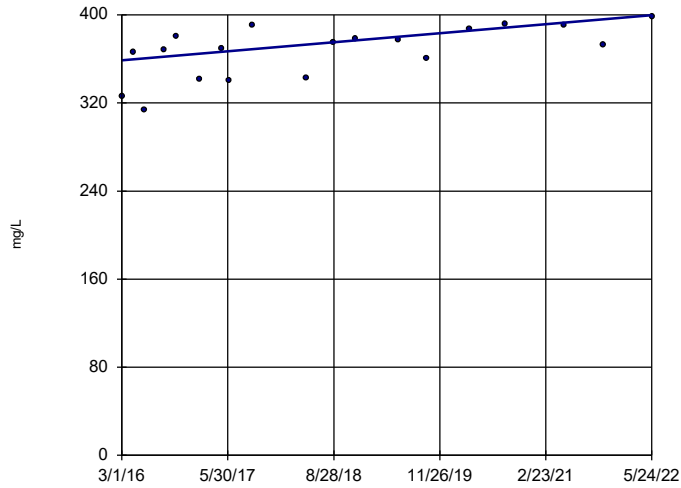


n = 19
 Slope = 0
 units per year.
 Mann-Kendall
 statistic = 1
 critical = 74
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-10

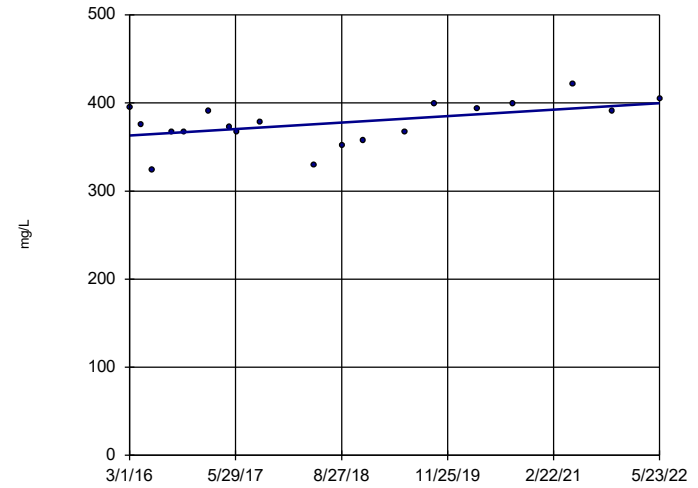


n = 19
 Slope = 6.544
 units per year.
 Mann-Kendall
 statistic = 88
 critical = 74
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-11

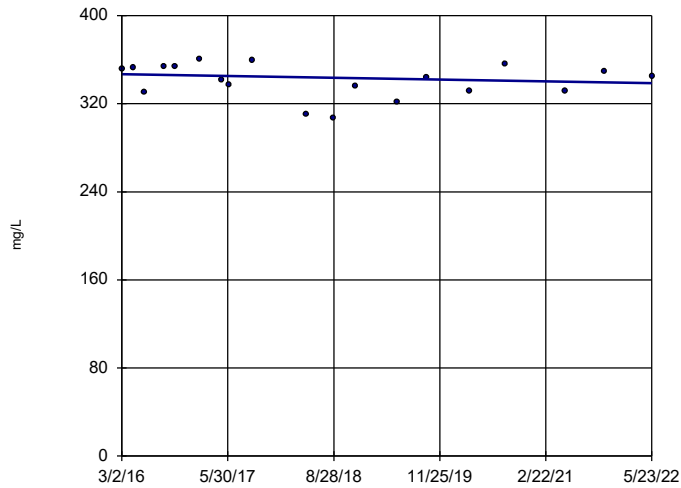


n = 19
 Slope = 5.887
 units per year.
 Mann-Kendall
 statistic = 54
 critical = 74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-12

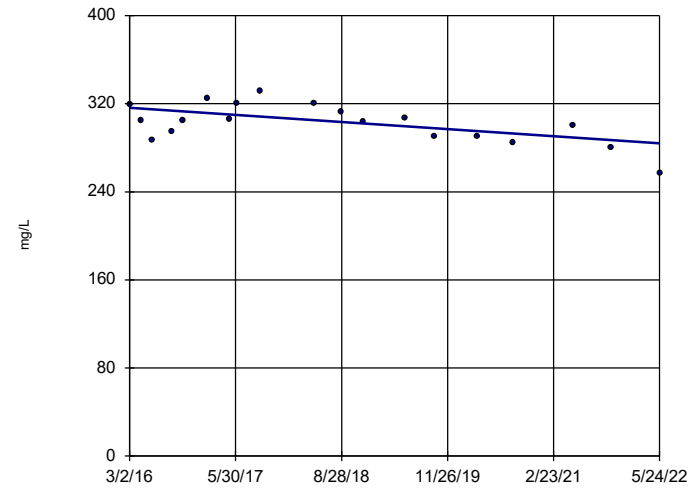


n = 19
 Slope = -1.313
 units per year.
 Mann-Kendall
 statistic = -20
 critical = -74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-13

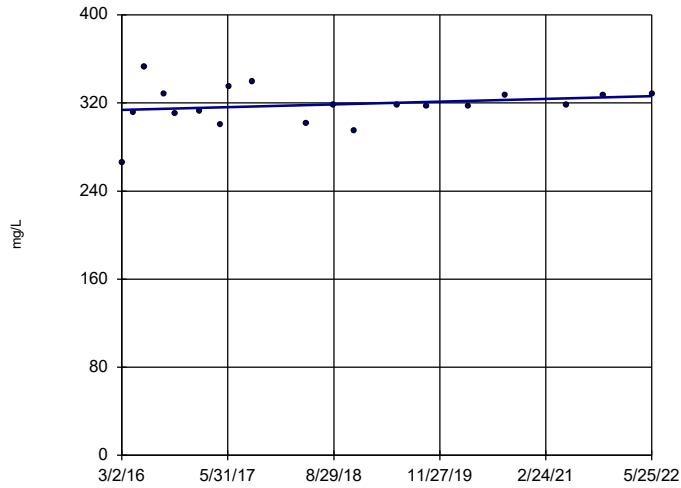


n = 19
 Slope = -5.166
 units per year.
 Mann-Kendall
 statistic = -64
 critical = -74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-14

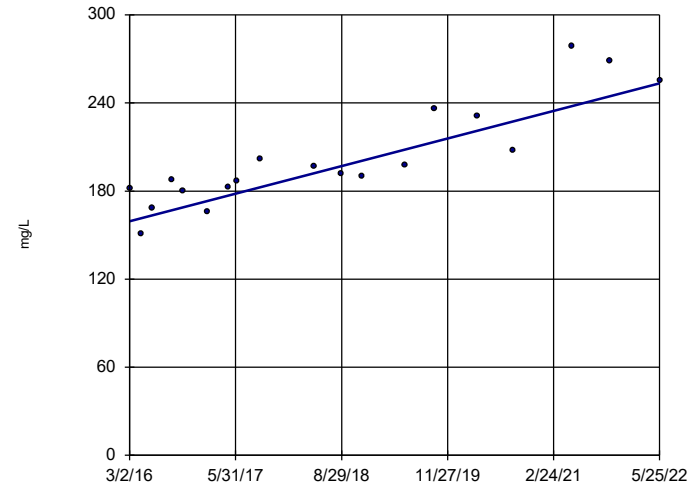


n = 19
 Slope = 2.028
 units per year.
 Mann-Kendall
 statistic = 33
 critical = 74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-15

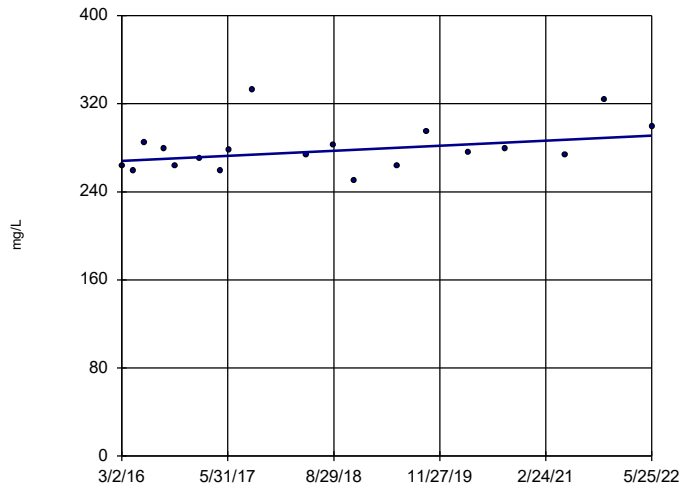


n = 19
 Slope = 15.07
 units per year.
 Mann-Kendall
 statistic = 125
 critical = 74
 Increasing trend
 significant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-16

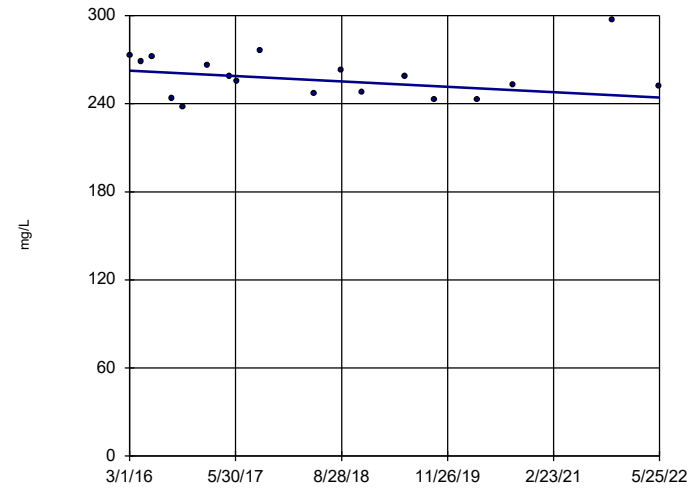


n = 19
 Slope = 3.704
 units per year.
 Mann-Kendall
 statistic = 49
 critical = 74
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

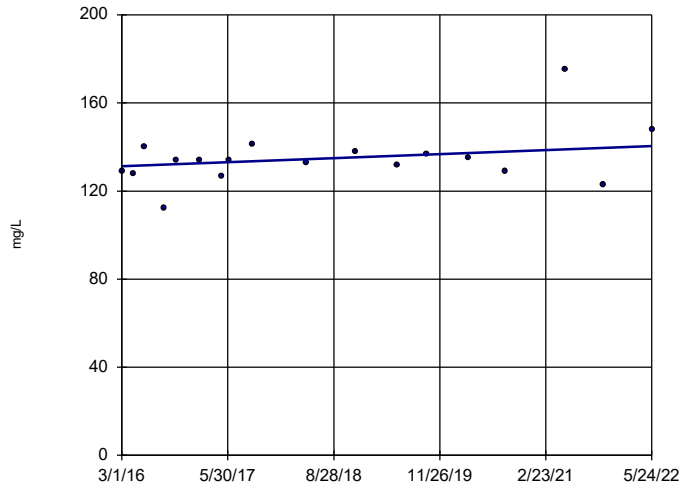
BY-AP-MW-5



n = 18
 Slope = -2.941
 units per year.
 Mann-Kendall
 statistic = -31
 critical = -68
 Trend not sig-
 nificant at 99%
 confidence level
 ($\alpha = 0.005$ per
 tail).

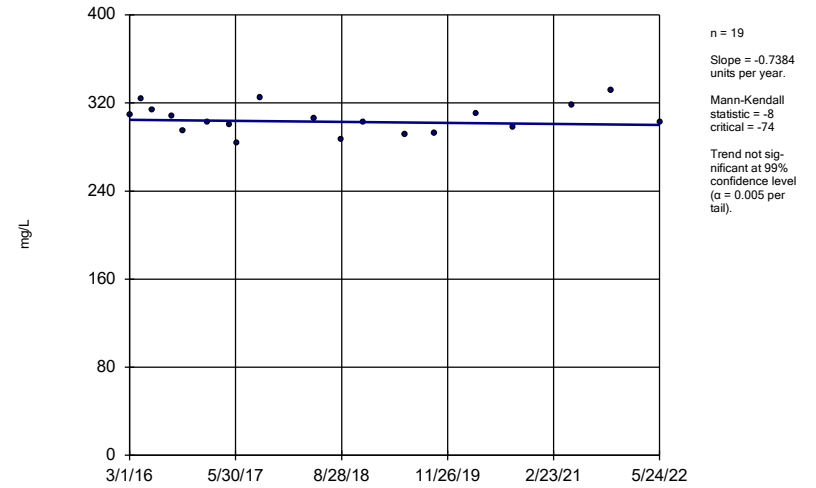
Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-7



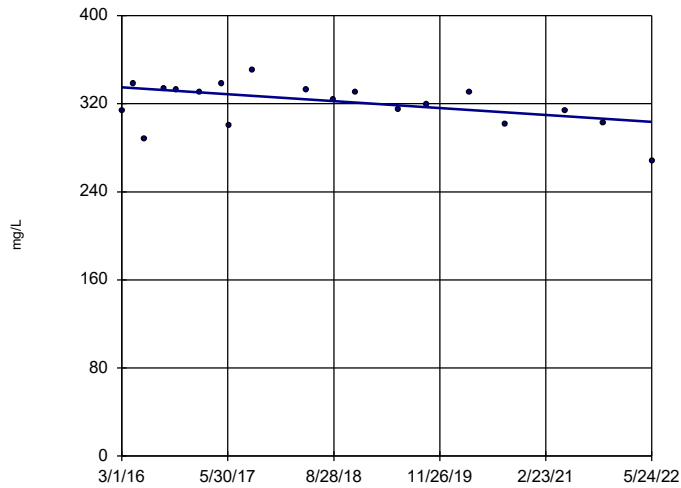
Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-8



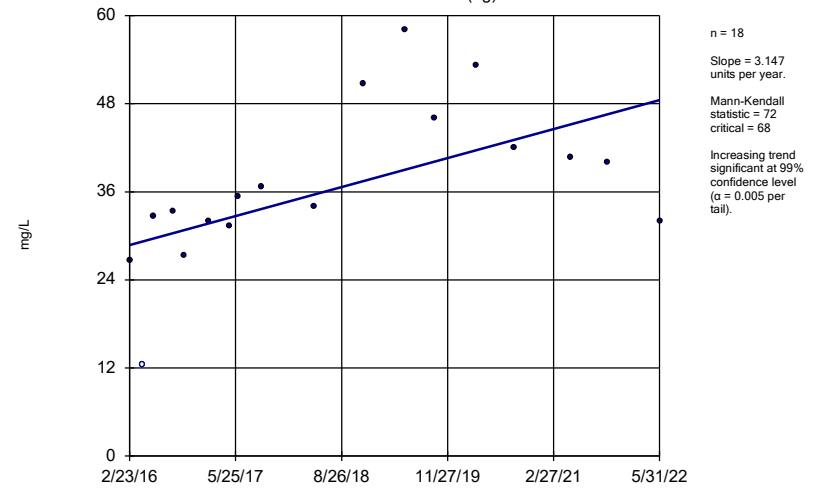
Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-9



Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

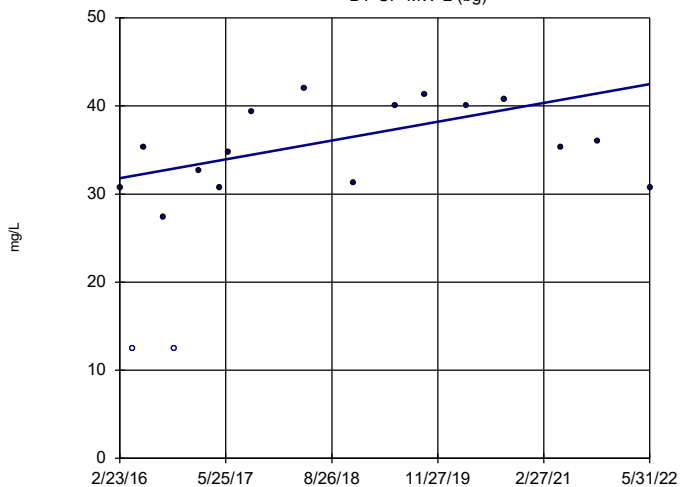
Sen's Slope Estimator BY-UP-MW-1 (bg)



Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-UP-MW-2 (bg)

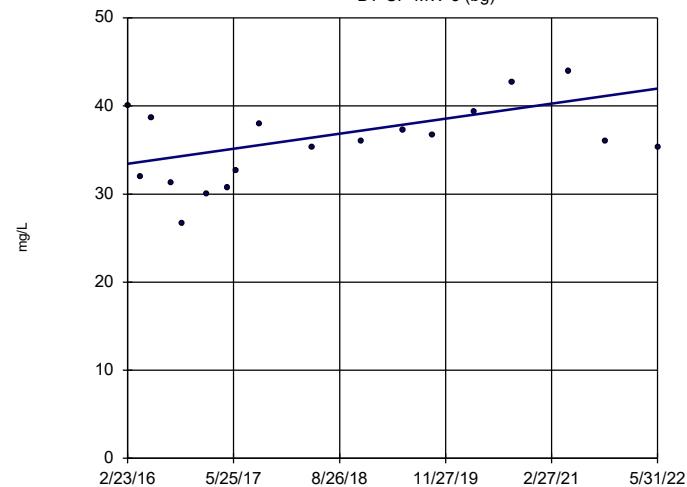


n = 18
Slope = 1.703
units per year.
Mann-Kendall
statistic = 57
critical = 68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-UP-MW-3 (bg)

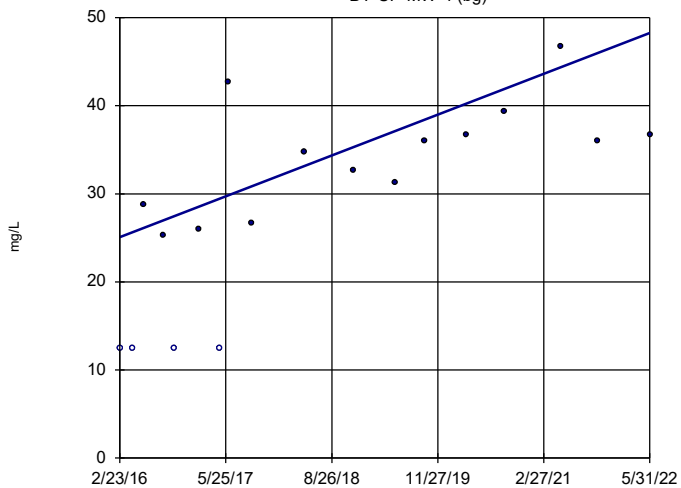


n = 18
Slope = 1.36
units per year.
Mann-Kendall
statistic = 45
critical = 68
Trend not sig-
nificant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-UP-MW-4 (bg)



n = 18
Slope = 3.695
units per year.
Mann-Kendall
statistic = 95
critical = 68
Increasing trend
significant at 99%
confidence level
($\alpha = 0.005$ per
tail).

Constituent: TDS Analysis Run 7/20/2022 3:24 PM View: Trend
Plant Barry Client: Southern Company Data: Barry Ash Pond

FIGURE G.

Upper Tolerance Limits - Summary Table

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 1/19/2022, 3:44 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	92.65	n/a	n/a	0.03056	NP Inter
Arsenic (mg/L)	n/a	0.0017	n/a	n/a	n/a	68	n/a	n/a	88.24	n/a	n/a	0.03056	NP Inter
Barium (mg/L)	n/a	0.183	n/a	n/a	n/a	68	n/a	n/a	0	n/a	n/a	0.03056	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	66	n/a	n/a	93.94	n/a	n/a	0.03387	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Chromium (mg/L)	n/a	0.01	n/a	n/a	n/a	68	n/a	n/a	83.82	n/a	n/a	0.03056	NP Inter
Cobalt (mg/L)	n/a	0.0157	n/a	n/a	n/a	67	n/a	n/a	58.21	n/a	n/a	0.03217	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	3	n/a	n/a	n/a	60	n/a	n/a	0	n/a	n/a	0.04607	NP Inter
Fluoride, total (mg/L)	n/a	0.1	n/a	n/a	n/a	72	n/a	n/a	52.78	n/a	n/a	0.02489	NP Inter
Lead (mg/L)	n/a	0.00126	n/a	n/a	n/a	68	n/a	n/a	89.71	n/a	n/a	0.03056	NP Inter
Lithium (mg/L)	n/a	0.02	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Molybdenum (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	68	n/a	n/a	98.53	n/a	n/a	0.03056	NP Inter
Thallium (mg/L)	n/a	0.0002	n/a	n/a	n/a	68	n/a	n/a	100	n/a	n/a	0.03056	NP Inter

FIGURE H.

BARRY ASH POND GWPS			
Analyte	Units	Background	GWPS
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.0017	0.01
Barium	mg/L	0.183	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0157	0.0157
Combined Radium-226/228	pCi/L	3	5
Fluoride	mg/L	0.1	4
Lead	mg/L	0.00126	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.00102	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 second semi-annual sampling event in 2021.

FIGURE I.

Confidence Interval Summary Table - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	BY-AP-MW-1	0.07688	0.05769	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-10	0.07651	0.06677	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-11	0.01648	0.01374	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-12	0.0246	0.0215	0.01	Yes	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	BY-AP-MW-13	0.01495	0.01312	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-14	0.0182	0.01473	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-15	0.01954	0.01573	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-16	0.01434	0.01096	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-5	0.03536	0.02914	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-7	0.02326	0.01926	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-8	0.06545	0.05105	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-9	0.04498	0.03737	0.01	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-15	0.037	0.03248	0.0157	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-7	0.02135	0.01752	0.0157	Yes	8	0	No	0.01	Param.

Confidence Interval Summary Table - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	BY-AP-MW-1	0.07688	0.05769	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-10	0.07651	0.06677	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-11	0.01648	0.01374	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-12	0.0246	0.0215	0.01	Yes	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	BY-AP-MW-13	0.01495	0.01312	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-14	0.0182	0.01473	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-15	0.01954	0.01573	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-16	0.01434	0.01096	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-2	0.001765	0.00125	0.01	No	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-4	0.0002	0.0001	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	BY-AP-MW-5	0.03536	0.02914	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-6	0.000103	0.0001	0.01	No	8	75	No	0.004	NP (NDs)
Arsenic (mg/L)	BY-AP-MW-7	0.02326	0.01926	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-8	0.06545	0.05105	0.01	Yes	8	0	No	0.01	Param.
Arsenic (mg/L)	BY-AP-MW-9	0.04498	0.03737	0.01	Yes	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-1	0.3384	0.2783	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-10	0.07502	0.06196	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-11	0.09918	0.06777	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-12	0.08641	0.07752	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-13	0.07647	0.06744	2	No	8	0	ln(x)	0.01	Param.
Barium (mg/L)	BY-AP-MW-14	0.07075	0.0594	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-15	0.08085	0.05845	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-16	0.1005	0.08087	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-2	0.02663	0.02375	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-3	0.04373	0.03406	2	No	8	0	sqrt(x)	0.01	Param.
Barium (mg/L)	BY-AP-MW-4	0.03257	0.01483	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-5	0.1575	0.1412	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-6	0.02913	0.02379	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-7	0.07229	0.06041	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-8	0.1473	0.1367	2	No	8	0	No	0.01	Param.
Barium (mg/L)	BY-AP-MW-9	0.1232	0.1143	2	No	8	0	No	0.01	Param.
Beryllium (mg/L)	BY-AP-MW-4	0.00102	0.00065	0.004	No	8	75	No	0.004	NP (NDs)
Cadmium (mg/L)	BY-AP-MW-6	0.00031	0.00007	0.005	No	8	75	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-1	0.00415	0.00223	0.1	No	8	0	No	0.004	NP (normality)
Chromium (mg/L)	BY-AP-MW-10	0.00102	0.00052	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-11	0.003956	0.002066	0.1	No	8	0	No	0.01	Param.
Chromium (mg/L)	BY-AP-MW-12	0.0056	0.00325	0.1	No	8	0	No	0.004	NP (normality)
Chromium (mg/L)	BY-AP-MW-13	0.008713	0.006678	0.1	No	8	0	ln(x)	0.01	Param.
Chromium (mg/L)	BY-AP-MW-14	0.005123	0.003732	0.1	No	8	0	No	0.01	Param.
Chromium (mg/L)	BY-AP-MW-15	0.00102	0.00049	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-16	0.0018	0.00102	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-2	0.00102	0.00029	0.1	No	8	75	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-3	0.00104	0.000919	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-4	0.00102	0.00026	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-5	0.00103	0.00101	0.1	No	8	75	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-6	0.00102	0.00023	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-7	0.00709	0.00058	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-8	0.00165	0.00102	0.1	No	8	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	BY-AP-MW-9	0.00102	0.0007	0.1	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-1	0.005	0.00091	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-10	0.005	0.00054	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-11	0.005	0.00118	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-12	0.003937	0.00292	0.0157	No	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-13	0.005	0.00113	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-14	0.005	0.00124	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-15	0.037	0.03248	0.0157	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-16	0.02062	0.01343	0.0157	No	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-2	0.007575	0.006423	0.0157	No	8	0	x^2	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-3	0.005	0.00016	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-4	0.0205	0.00363	0.0157	No	8	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	BY-AP-MW-5	0.005	0.00184	0.0157	No	8	75	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-6	0.005	0.0006	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-7	0.02135	0.01752	0.0157	Yes	8	0	No	0.01	Param.
Cobalt (mg/L)	BY-AP-MW-8	0.005	0.00067	0.0157	No	8	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	BY-AP-MW-9	0.005	0.00069	0.0157	No	8	62.5	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-1	2.783	1.67	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-10	1.332	0.3915	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-11	0.8362	0.3081	5	No	8	0	sqrt(x)	0.01	Param.

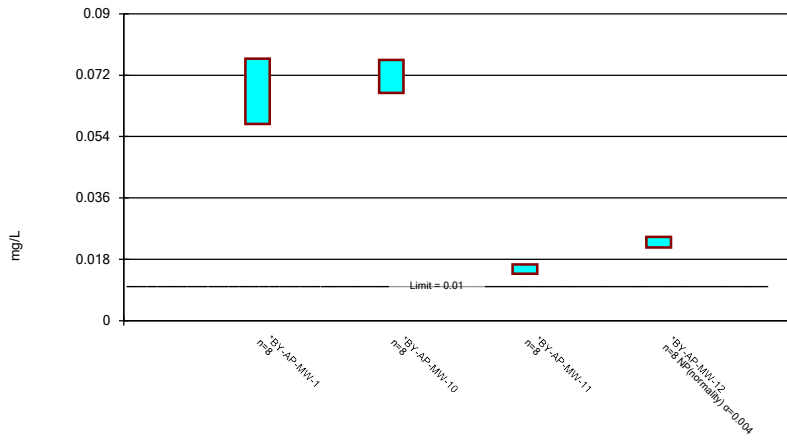
Confidence Interval Summary Table - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 7/20/2022, 3:37 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-12	1.76	0.8804	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-13	1.375	0.5961	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-14	1.124	0.476	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-15	1.443	0.3816	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-16	1.569	0.285	5	No	8	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-2	0.9189	0.3196	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-3	1.8	0.3065	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-4	0.9614	0.3385	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-5	2.221	0.9224	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-6	1.312	-0.03787	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-7	1.116	0.294	5	No	8	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-8	1.054	0.4141	5	No	8	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BY-AP-MW-9	1.478	0.636	5	No	8	0	x^(1/3)	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-1	0.194	0.0625	4	No	8	12.5	No	0.004	NP (normality)
Fluoride, total (mg/L)	BY-AP-MW-10	0.105	0.0573	4	No	8	62.5	No	0.004	NP (NDs)
Fluoride, total (mg/L)	BY-AP-MW-11	0.09643	0.06172	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-12	0.09011	0.05424	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-13	0.07751	0.05904	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-14	0.09472	0.06606	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-15	0.2059	0.1691	4	No	8	0	sqrt(x)	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-16	0.08512	0.06444	4	No	8	37.5	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-5	0.09618	0.05716	4	No	8	25	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-7	0.1062	0.07458	4	No	8	0	No	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-8	0.09399	0.06127	4	No	8	37.5	ln(x)	0.01	Param.
Fluoride, total (mg/L)	BY-AP-MW-9	0.08187	0.05408	4	No	8	12.5	No	0.01	Param.
Lead (mg/L)	BY-AP-MW-11	0.0002	0.00009	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-12	0.000326	0.00018	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-13	0.0002	0.00015	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-14	0.0002	0.0000764	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-16	0.0002	0.000191	0.015	No	8	87.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-4	0.0002	0.00007	0.015	No	8	62.5	No	0.004	NP (NDs)
Lead (mg/L)	BY-AP-MW-6	0.006786	0.0006176	0.015	No	8	12.5	sqrt(x)	0.01	Param.
Lead (mg/L)	BY-AP-MW-9	0.00108	0.0002	0.015	No	8	87.5	No	0.004	NP (NDs)
Lithium (mg/L)	BY-AP-MW-11	0.02902	0.00914	0.04	No	8	25	No	0.01	Param.
Lithium (mg/L)	BY-AP-MW-15	0.02368	0.01029	0.04	No	8	12.5	No	0.01	Param.
Lithium (mg/L)	BY-AP-MW-7	0.0882	0.0102	0.04	No	8	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-1	0.0002	0.00008	0.1	No	8	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-11	0.00652	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-12	0.00109	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-13	0.00356	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-14	0.000701	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-15	0.00209	0.0002	0.1	No	8	50	No	0.004	NP (normality)
Molybdenum (mg/L)	BY-AP-MW-16	0.0002	0.000136	0.1	No	8	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-5	0.0002	0.00011	0.1	No	8	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-6	0.00033	0.00011	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-7	0.000214	0.00018	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-8	0.000321	0.00019	0.1	No	8	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	BY-AP-MW-9	0.00024	0.0002	0.1	No	8	62.5	No	0.004	NP (NDs)
Selenium (mg/L)	BY-AP-MW-13	0.00102	0.00056	0.05	No	8	87.5	No	0.004	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

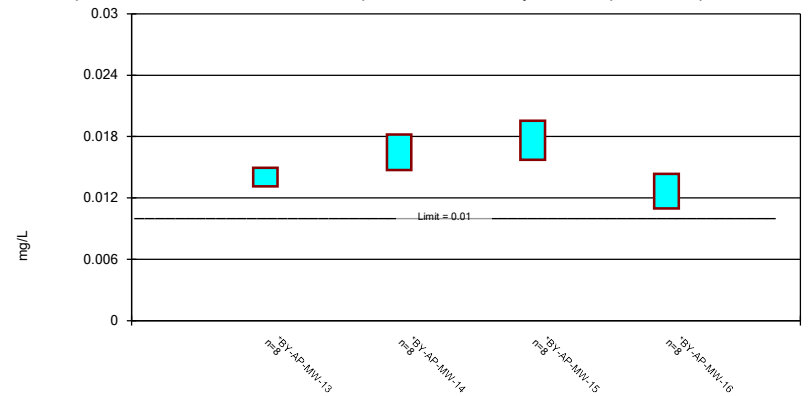
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

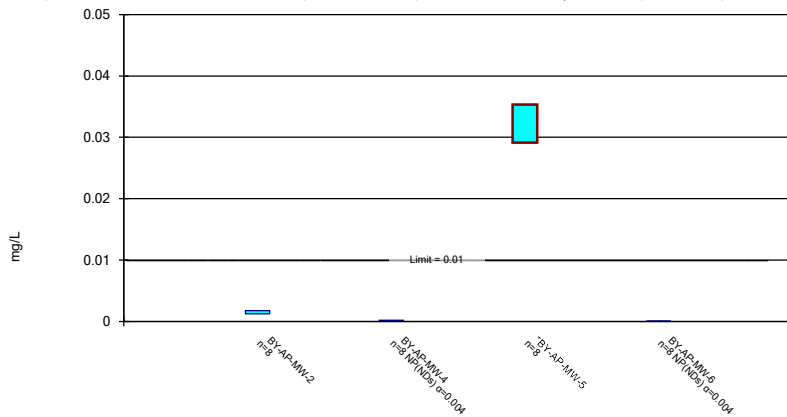
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

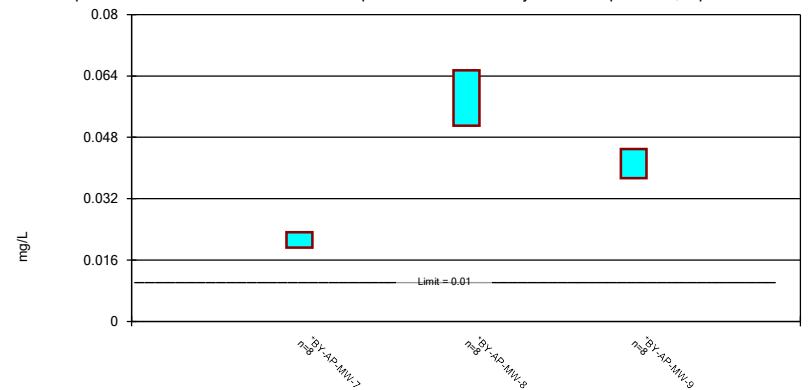
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

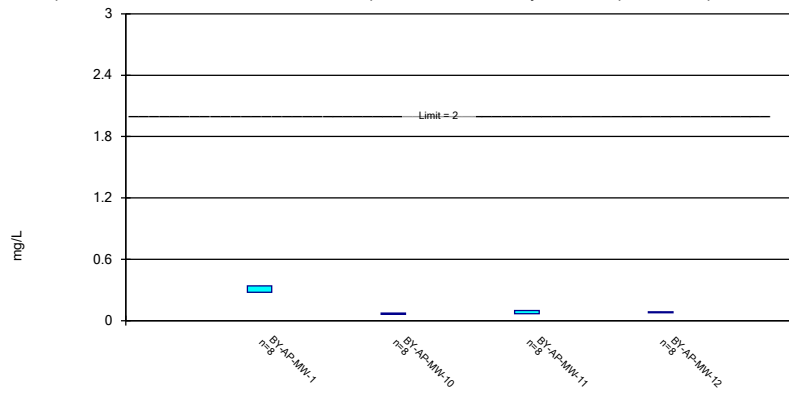
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

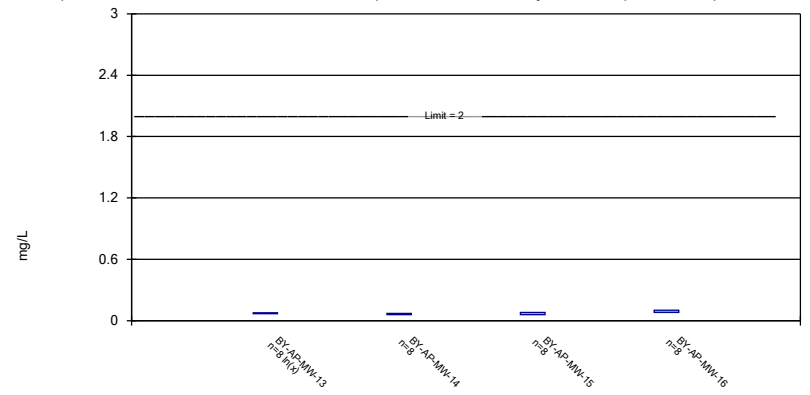
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

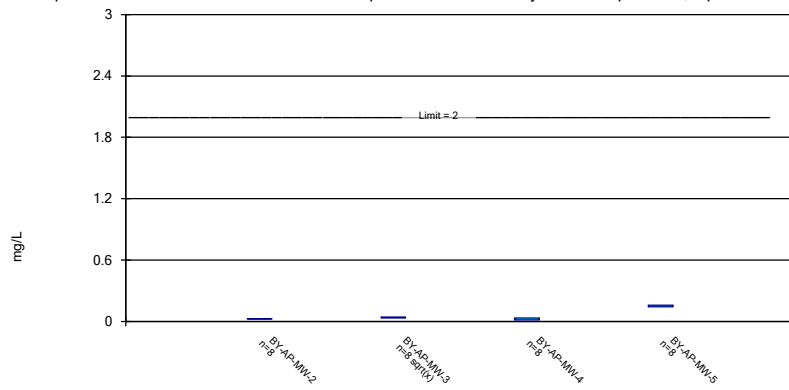
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

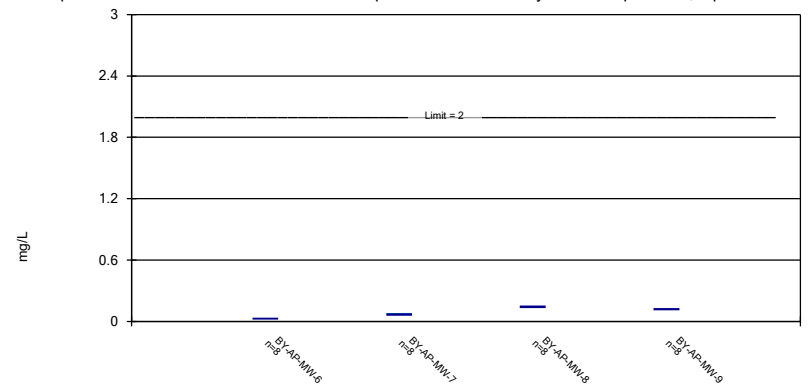
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

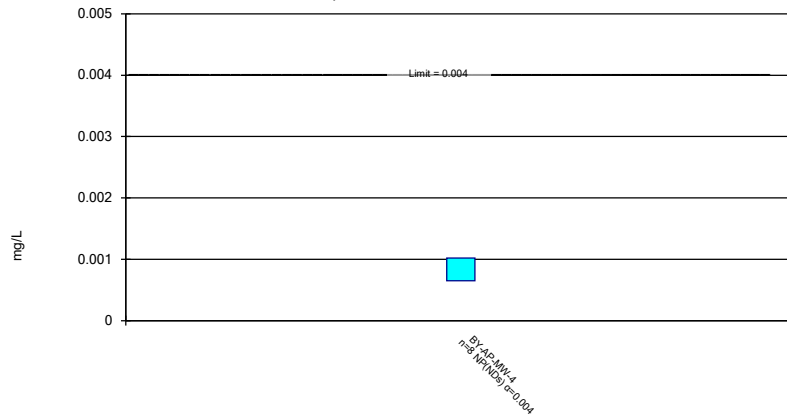
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



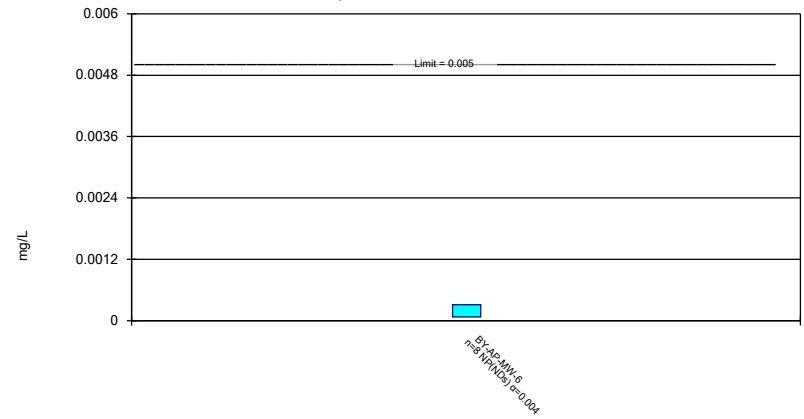
Constituent: Barium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

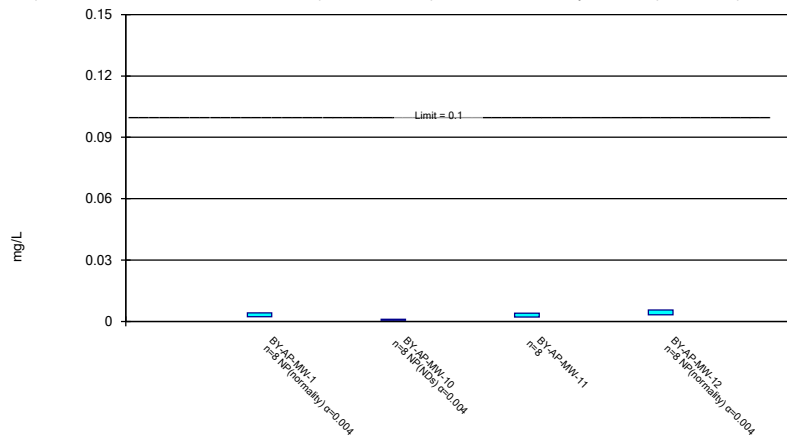
Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

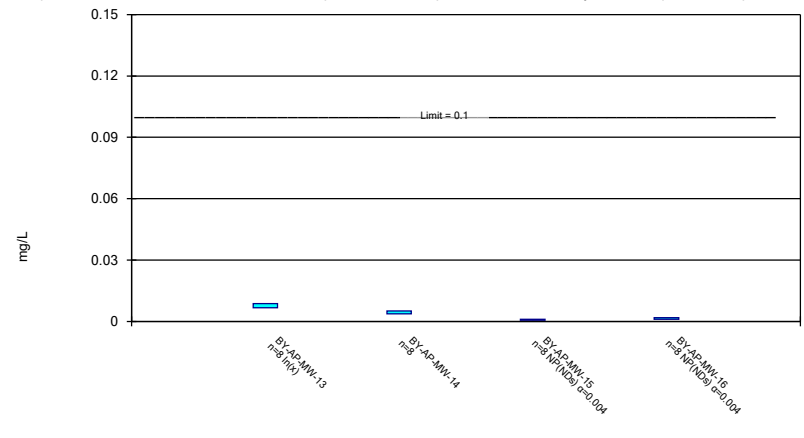
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

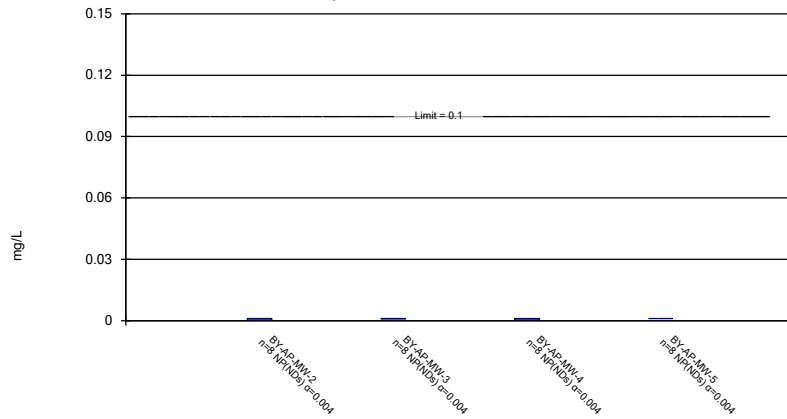
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



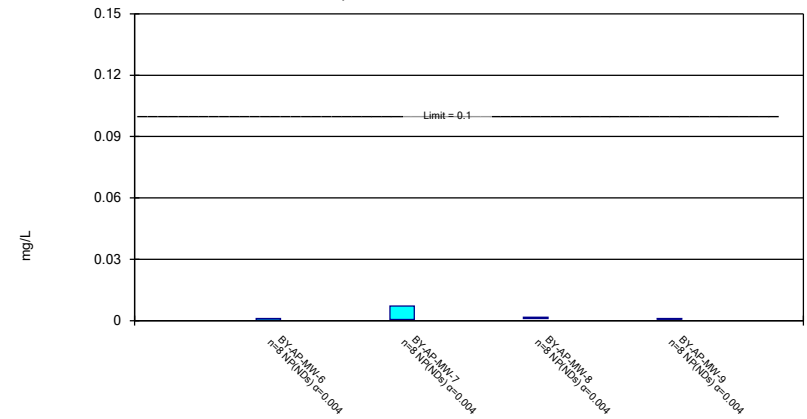
Constituent: Chromium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Non-Parametric Confidence Interval
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

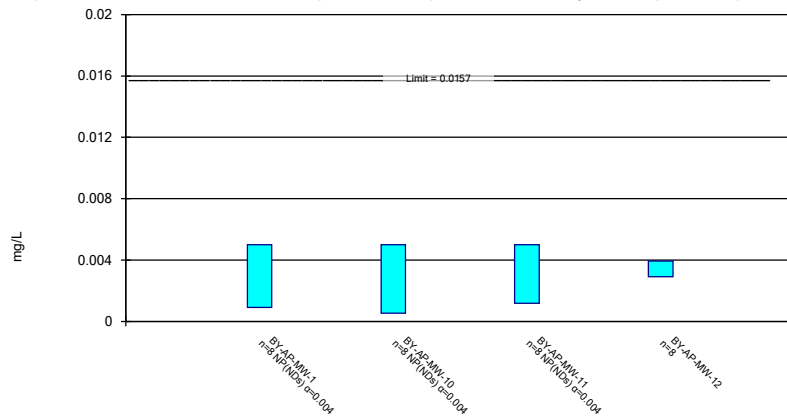
Non-Parametric Confidence Interval
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

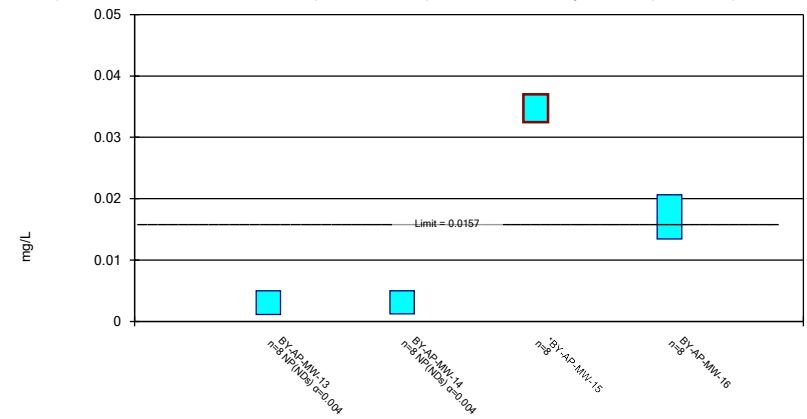
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

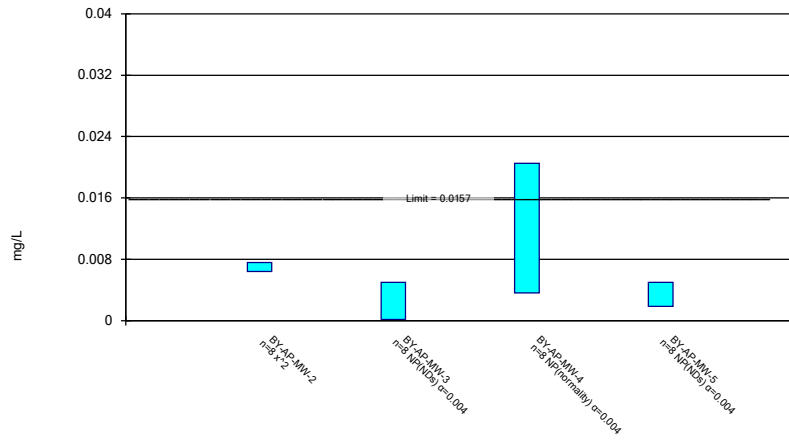
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

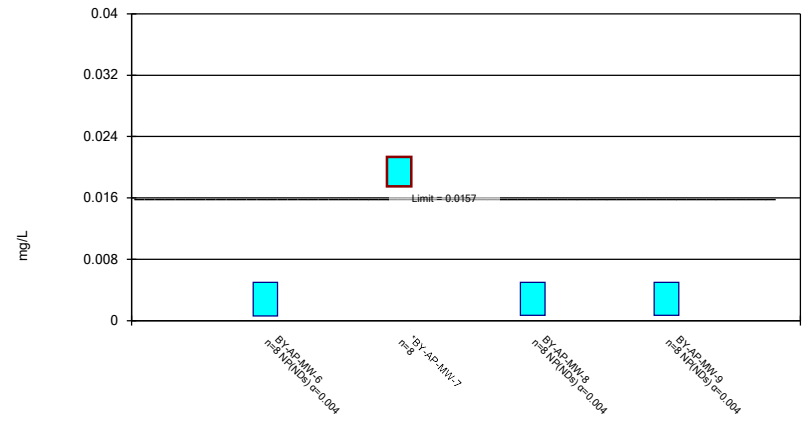
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

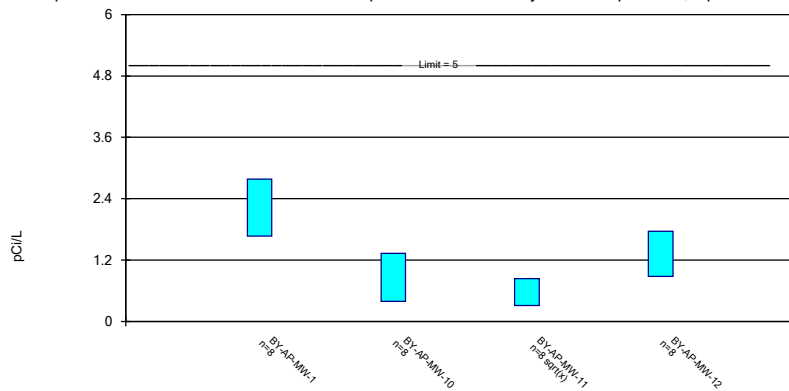
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

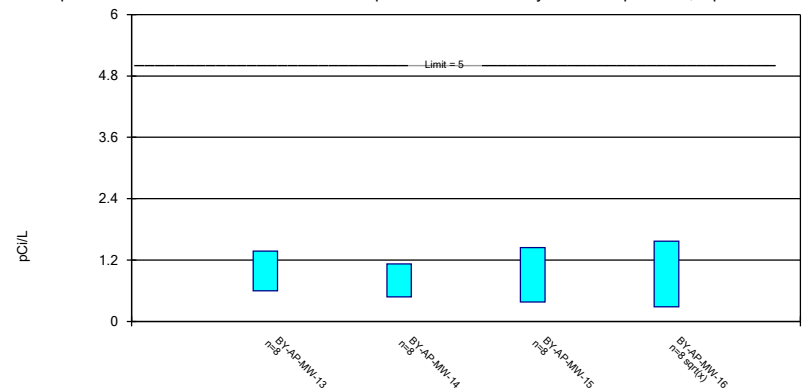
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

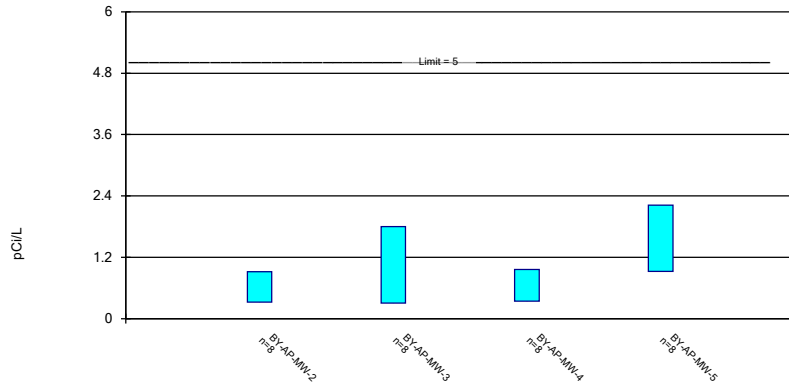
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

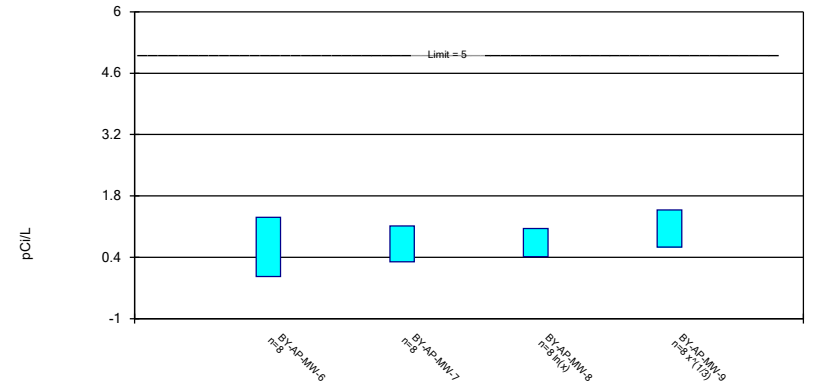
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2022 3:35 PM View: AIV
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

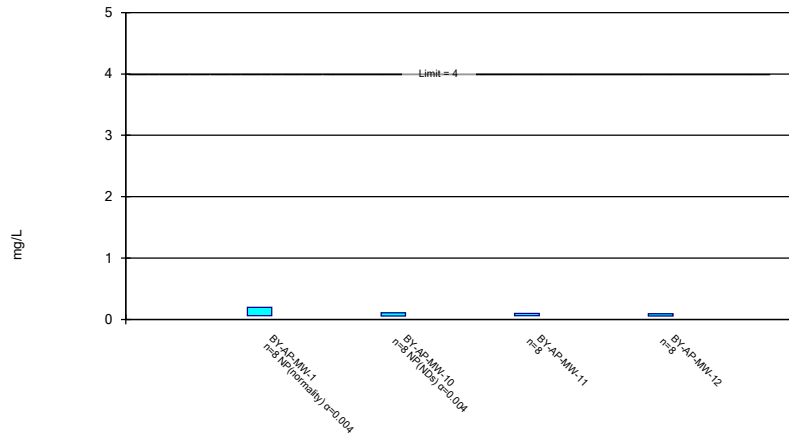
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/20/2022 3:35 PM View: AIV
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

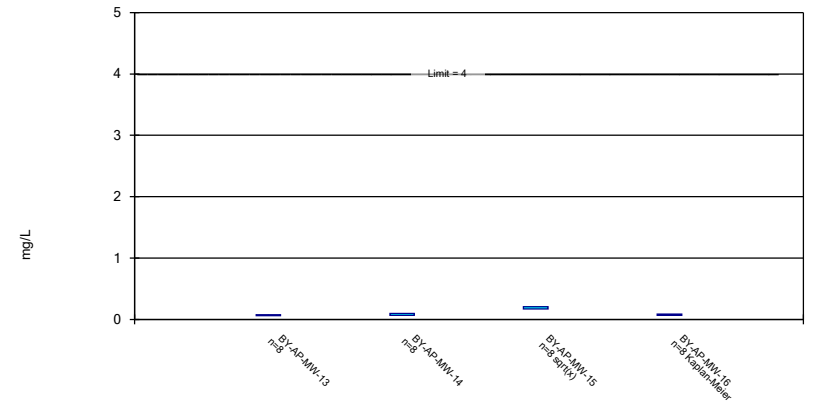
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 7/20/2022 3:35 PM View: AIV
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

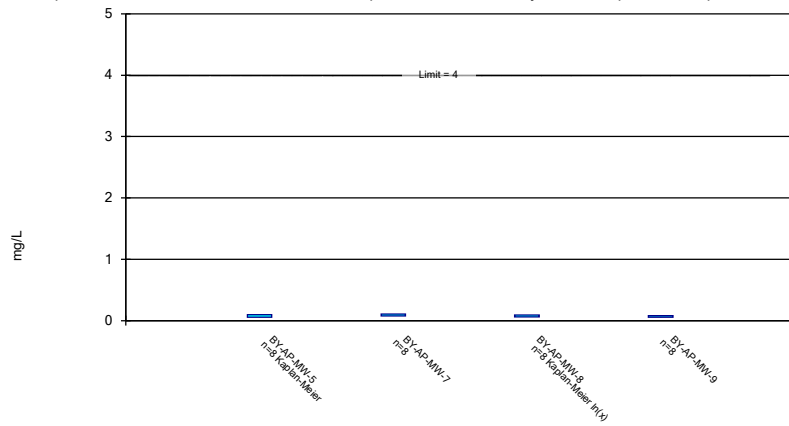
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 7/20/2022 3:35 PM View: AIV
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric Confidence Interval

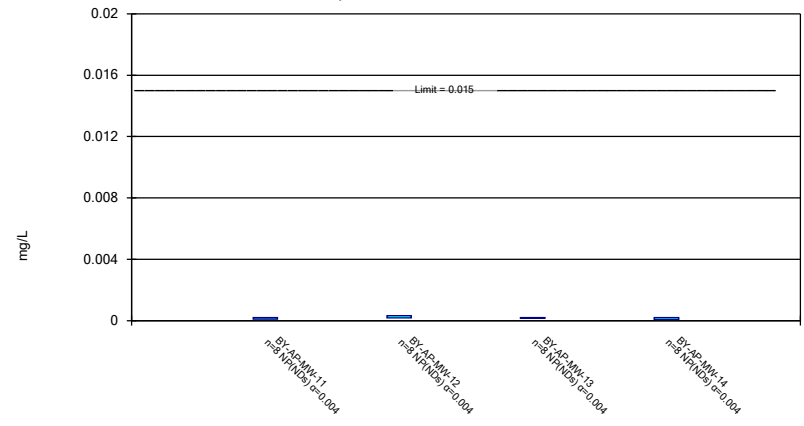
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Non-Parametric Confidence Interval

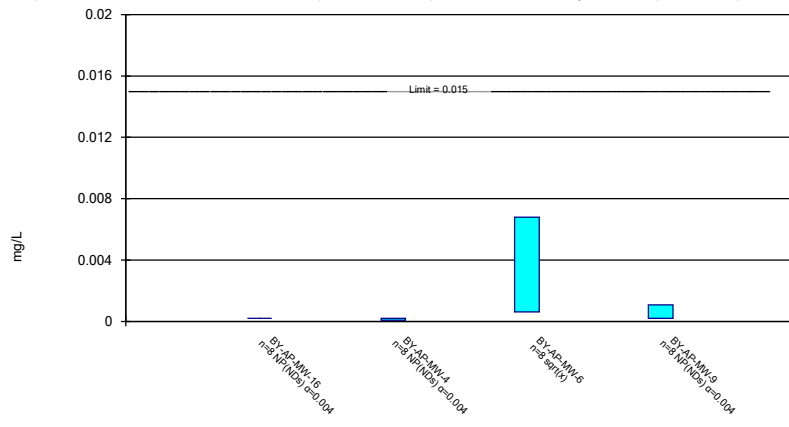
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

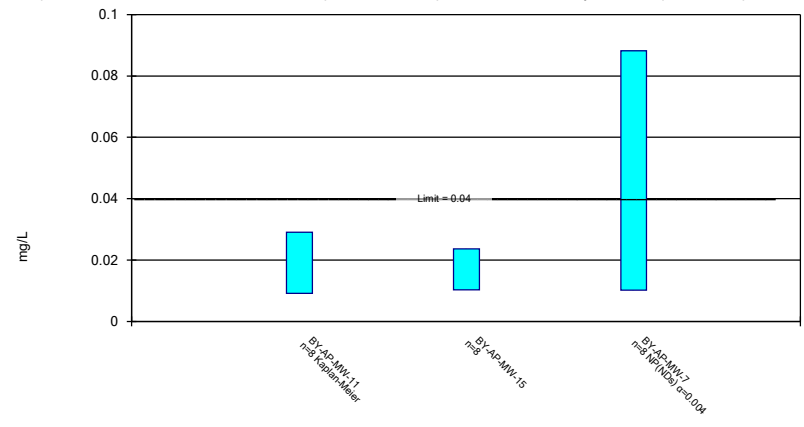
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

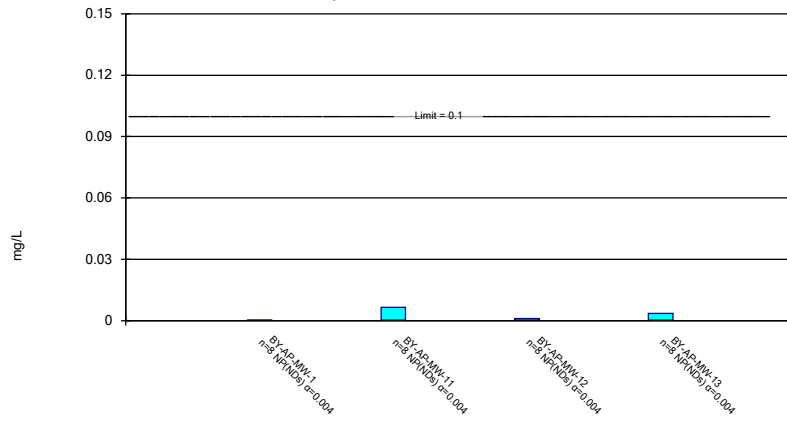
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



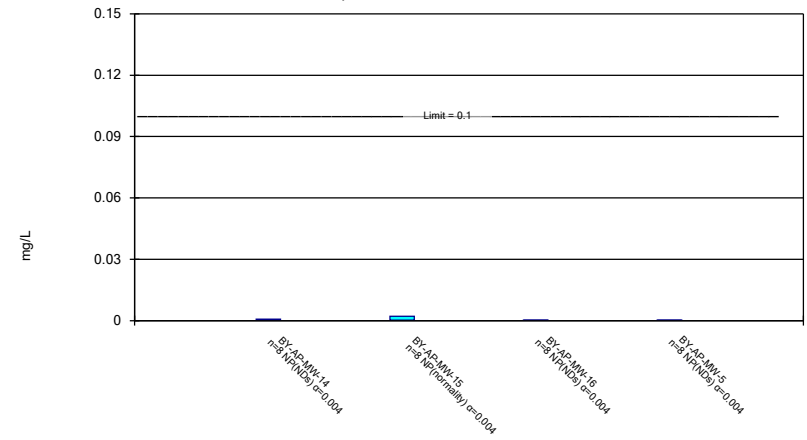
Constituent: Lithium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



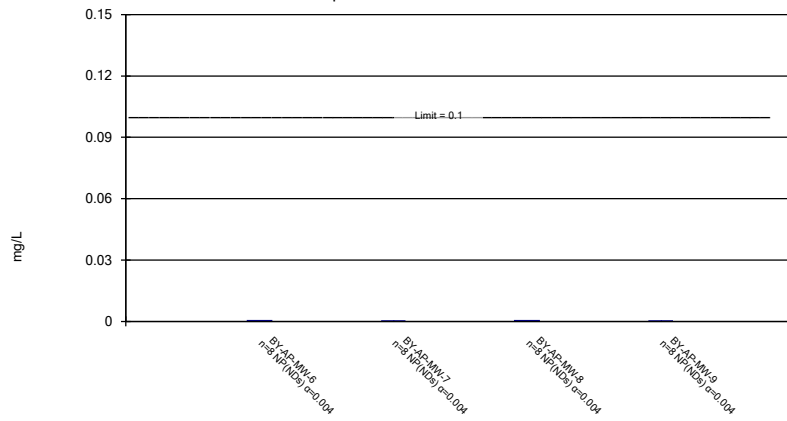
Constituent: Molybdenum Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



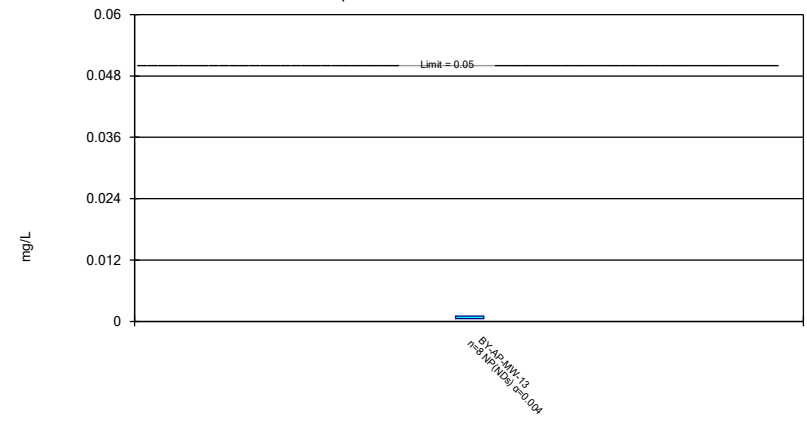
Constituent: Molybdenum Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 7/20/2022 3:35 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-12
11/28/2018	0.0677		0.014	0.0216
5/29/2019	0.0555		0.0132	0.0215
5/30/2019		0.0671		
7/31/2019		0.0649		
9/30/2019		0.0704	0.0145	
10/1/2019	0.0635			0.0221
3/30/2020	0.0557			
3/31/2020		0.0702	0.0158	0.0246
9/1/2020	0.0811	0.0763	0.0165	0.0246
5/11/2021		0.0762		
5/18/2021	0.0687			0.0237
5/19/2021			0.0166	
10/27/2021		0.0705		
11/1/2021	0.0694			0.0245
11/2/2021			0.0161	
5/23/2022			0.0142	0.0245
5/24/2022	0.0767	0.0775		
Mean	0.06729	0.07164	0.01511	0.02339
Std. Dev.	0.009052	0.004595	0.001292	0.001411
Upper Lim.	0.07688	0.07651	0.01648	0.0246
Lower Lim.	0.05769	0.06677	0.01374	0.0215

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-14	BY-AP-MW-15	BY-AP-MW-16
11/27/2018		0.0145	0.0158	0.0108
11/28/2018	0.0141			
5/29/2019	0.0138	0.014	0.0148	0.0106
10/1/2019	0.0144	0.0152	0.017	0.0138
3/31/2020	0.0154	0.0177		0.012
4/1/2020			0.0183	
9/1/2020	0.0148			
9/2/2020		0.0174	0.0206	0.0137
5/11/2021			0.0184	
5/19/2021	0.014			0.0118
5/25/2021		0.0172		
10/26/2021	0.013		0.0186	
10/27/2021		0.0174		
11/1/2021				0.0151
5/24/2022	0.0128			
5/25/2022		0.0183	0.0176	0.0134
Mean	0.01404	0.01646	0.01764	0.01265
Std. Dev.	0.0008651	0.001635	0.001795	0.001593
Upper Lim.	0.01495	0.0182	0.01954	0.01434
Lower Lim.	0.01312	0.01473	0.01573	0.01096

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-2	BY-AP-MW-4	BY-AP-MW-5	BY-AP-MW-6
5/2/2018			0.0315	
11/27/2018	0.00144 (J)	<0.0002	0.0283	
11/28/2018				<0.0002
5/29/2019	0.00132 (J)	<0.0002	0.0301	<0.0002
10/1/2019	0.0014 (J)	<0.0002	0.0307	<0.0002
3/31/2020	0.00149 (J)	<0.0002	0.0329	<0.0002
8/31/2020	0.00176 (J)			
9/1/2020		<0.0002	0.0372	
9/2/2020				<0.0002
5/17/2021				0.000103 (J)
5/18/2021	0.00159	0.000125 (J)		
11/1/2021	0.00191	0.0002		
11/2/2021			0.0357	0.0001 (J)
5/24/2022	0.00115			
5/25/2022		<0.0002	0.0316	<0.0002
Mean	0.001508	0.0001156	0.03225	0.0001004
Std. Dev.	0.0002426	3.52E-05	0.002938	1.061E-06
Upper Lim.	0.001765	0.0002	0.03536	0.000103
Lower Lim.	0.00125	0.0001	0.02914	0.0001

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-9
11/27/2018		0.0536	
11/28/2018	0.0209		0.0422
5/29/2019	0.0178	0.0482	
5/30/2019			0.0349
9/30/2019	0.0217	0.0514	0.0391
3/30/2020	0.0215	0.0589	
3/31/2020			0.0393
9/2/2020	0.0234	0.0629	0.0432
5/11/2021		0.0659	
5/18/2021	0.0215		0.0435
10/26/2021		0.0668	
10/27/2021	0.0236		0.0468
5/24/2022	0.0197	0.0583	0.0404
Mean	0.02126	0.05825	0.04118
Std. Dev.	0.001886	0.006795	0.003586
Upper Lim.	0.02326	0.06545	0.04498
Lower Lim.	0.01926	0.05105	0.03737

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-12
11/28/2018	0.271	0.066	0.0796	0.0788
5/29/2019	0.29		0.0653	0.0769
5/30/2019		0.063		
9/30/2019		0.0669	0.0759	
10/1/2019	0.293			0.0795
3/30/2020	0.279			
3/31/2020		0.0727	0.0842	0.0851
9/1/2020	0.33	0.078	0.0923	0.0827
5/11/2021		0.0757		
5/18/2021	0.339			0.0902
5/19/2021			0.112	
10/27/2021		0.0638		
11/1/2021	0.322			0.0823
11/2/2021			0.0894	
5/23/2022			0.0691	0.0802
5/24/2022	0.343	0.0618		
Mean	0.3084	0.06849	0.08348	0.08196
Std. Dev.	0.02834	0.006162	0.01482	0.004195
Upper Lim.	0.3384	0.07502	0.09918	0.08641
Lower Lim.	0.2783	0.06196	0.06777	0.07752

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-14	BY-AP-MW-15	BY-AP-MW-16
11/27/2018		0.0589	0.0557	0.0792
11/28/2018	0.0697			
5/29/2019	0.0704	0.0617	0.0562	0.081
10/1/2019	0.0696	0.0605	0.0628	0.0803
3/31/2020	0.0728	0.0619		0.091
4/1/2020			0.0697	
9/1/2020	0.0722			
9/2/2020		0.0687	0.0736	0.0954
5/11/2021			0.0762	
5/19/2021	0.0817			0.102
5/25/2021		0.0745		
10/26/2021	0.0667		0.0784	
10/27/2021		0.0651		
11/1/2021				0.0988
5/24/2022	0.0723			
5/25/2022		0.0693	0.0846	0.0977
Mean	0.07193	0.06508	0.06965	0.09068
Std. Dev.	0.004416	0.00535	0.01056	0.00925
Upper Lim.	0.07647	0.07075	0.08085	0.1005
Lower Lim.	0.06744	0.0594	0.05845	0.08087

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-2	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
5/2/2018				0.154
11/27/2018	0.0249	0.0339	0.0321	0.139
5/29/2019	0.0232	0.037	0.0203	0.146
10/1/2019	0.0241	0.0356	0.0207	0.138
3/31/2020	0.0264	0.0393	0.0193	0.15
8/31/2020	0.0275			
9/1/2020		0.038	0.0131	0.154
5/18/2021	0.0259	0.0406	0.0225	
11/1/2021	0.0247	0.0371	0.0217	
11/2/2021				0.159
5/24/2022	0.0248			
5/25/2022		0.0494	0.0399	0.155
Mean	0.02519	0.03886	0.0237	0.1494
Std. Dev.	0.001359	0.004733	0.008373	0.007708
Upper Lim.	0.02663	0.04373	0.03257	0.1575
Lower Lim.	0.02375	0.03406	0.01483	0.1412

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-9
11/27/2018			0.143	
11/28/2018	0.0231	0.0654		0.119
5/29/2019	0.0244	0.059	0.138	
5/30/2019				0.112
9/30/2019		0.0648	0.138	0.117
10/1/2019	0.0257			
3/30/2020		0.059	0.141	
3/31/2020	0.0244			0.119
9/2/2020	0.0282	0.0745	0.151	0.124
5/11/2021			0.147	
5/17/2021	0.0305			
5/18/2021		0.07		0.125
10/26/2021			0.136	
10/27/2021		0.0664		0.117
11/2/2021	0.0286			
5/24/2022		0.0717	0.142	0.117
5/25/2022	0.0268			
Mean	0.02646	0.06635	0.142	0.1188
Std. Dev.	0.002518	0.005603	0.005014	0.004166
Upper Lim.	0.02913	0.07229	0.1473	0.1232
Lower Lim.	0.02379	0.06041	0.1367	0.1143

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-4
11/27/2018	0.00071 (J)
5/29/2019	<0.00102
10/1/2019	<0.00102
3/31/2020	<0.00102
9/1/2020	<0.00102
5/18/2021	<0.00102
11/1/2021	<0.00102
5/25/2022	0.00065 (J)
Mean	0.000935
Std. Dev.	0.0001582
Upper Lim.	0.00102
Lower Lim.	0.00065

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6
11/28/2018	<0.000203
5/29/2019	<0.000203
10/1/2019	<0.000203
3/31/2020	<0.000203
9/2/2020	<0.000203
5/17/2021	<0.000203
11/2/2021	7E-05 (J)
5/25/2022	0.00031
Mean	0.0001998
Std. Dev.	6.442E-05
Upper Lim.	0.00031
Lower Lim.	7E-05

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-12
11/28/2018	0.0036 (J)	<0.00102	0.0023 (J)	0.00353 (J)
5/29/2019	0.00223 (J)		0.00211 (J)	0.00333 (J)
5/30/2019		<0.00102		
9/30/2019		<0.00102	0.00228 (J)	
10/1/2019	0.00236 (J)			0.00325 (J)
3/30/2020	0.00415 (J)			
3/31/2020		<0.00102	0.00358 (J)	0.0056 (J)
9/1/2020	0.00242 (J)	<0.00102	0.00259 (J)	0.00332 (J)
5/11/2021		0.000685 (J)		
5/18/2021	0.00294			0.00377
5/19/2021			0.00301	
10/27/2021		0.00072 (J)		
11/1/2021	0.00244			0.00423
11/2/2021			0.00348	
5/23/2022			0.00474	0.00374
5/24/2022	0.00238	0.00052 (J)		
Mean	0.002815	0.0008781	0.003011	0.003846
Std. Dev.	0.000702	0.000204	0.0008914	0.0007782
Upper Lim.	0.00415	0.00102	0.003956	0.0056
Lower Lim.	0.00223	0.00052	0.002066	0.00325

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-14	BY-AP-MW-15	BY-AP-MW-16
11/27/2018		0.00523 (J)	<0.00102	<0.00102
11/28/2018	0.0068 (J)			
5/29/2019	0.00727 (J)	0.00455 (J)	<0.00102	<0.00102
10/1/2019	0.00764 (J)	0.00508 (J)	<0.00102	<0.00102
3/31/2020	0.00955 (J)	0.00463 (J)		<0.00102
4/1/2020			<0.00102	
9/1/2020	0.00888 (J)			
9/2/2020		0.00482 (J)	<0.00102	<0.00102
5/11/2021			0.000581 (J)	
5/19/2021	0.00692			0.00162
5/25/2021		0.00365		
10/26/2021	0.00755		0.00052 (J)	
10/27/2021		0.00401		
11/1/2021				0.0018
5/24/2022	0.00685			
5/25/2022		0.00345	0.00049 (J)	0.00135
Mean	0.007683	0.004428	0.0008364	0.001234
Std. Dev.	0.001012	0.0006562	0.0002546	0.0003189
Upper Lim.	0.008713	0.005123	0.00102	0.0018
Lower Lim.	0.006678	0.003732	0.00049	0.00102

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-2	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
5/2/2018				<0.00102
11/27/2018	<0.00102	<0.00102	<0.00102	<0.00102
5/29/2019	<0.00102	<0.00102	<0.00102	<0.00102
10/1/2019	<0.00102	<0.00102	<0.00102	<0.00102
3/31/2020	<0.00102	<0.00102	<0.00102	<0.00102
8/31/2020	<0.00102			
9/1/2020		<0.00102	<0.00102	<0.00102
5/18/2021	0.000394 (J)	0.000919 (J)	0.000544 (J)	
11/1/2021	0.00029 (J)	0.00093 (J)	0.00067 (J)	
11/2/2021				0.00101 (J)
5/24/2022	<0.00102			
5/25/2022		0.00104	0.00026 (J)	0.00103
Mean	0.0008505	0.0009986	0.0008217	0.00102
Std. Dev.	0.0003151	4.636E-05	0.0002957	5.345E-06
Upper Lim.	0.00102	0.00104	0.00102	0.00103
Lower Lim.	0.00029	0.000919	0.00026	0.00101

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-9
11/27/2018			<0.00102	
11/28/2018	<0.00102	<0.00102		<0.00102
5/29/2019	<0.00102	<0.00102	<0.00102	
5/30/2019				<0.00102
9/30/2019		<0.00102	<0.00102	<0.00102
10/1/2019	<0.00102			
3/30/2020		<0.00102	<0.00102	
3/31/2020	<0.00102			<0.00102
9/2/2020	<0.00102	<0.00102	<0.00102	<0.00102
5/11/2021			0.00156	
5/17/2021	0.000313 (J)			
5/18/2021		0.00709		0.00078 (J)
10/26/2021			0.00165	
10/27/2021		0.00309		0.00087 (J)
11/2/2021	0.00023 (J)			
5/24/2022		0.00058 (J)	0.00128	0.0007 (J)
5/25/2022	0.00029 (J)			
Mean	0.0007416	0.001982	0.001199	0.0009312
Std. Dev.	0.0003849	0.002201	0.0002674	0.0001307
Upper Lim.	0.00102	0.00709	0.00165	0.00102
Lower Lim.	0.00023	0.00058	0.00102	0.0007

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-12
11/28/2018	<0.005	<0.005	<0.005	0.00274 (J)
5/29/2019	<0.005		<0.005	0.00358 (J)
5/30/2019		<0.005		
9/30/2019		<0.005	<0.005	
10/1/2019	<0.005			0.00303 (J)
3/30/2020	<0.005			
3/31/2020		<0.005	<0.005	0.00364 (J)
9/1/2020	<0.005	<0.005	<0.005	0.0031 (J)
5/11/2021		0.000636		
5/18/2021	0.000996			0.00336
5/19/2021			0.00257	
10/27/2021		0.00065		
11/1/2021	0.00091			0.0037
11/2/2021			0.00118	
5/23/2022			0.00118	0.00428
5/24/2022	0.00091	0.00054		
Mean	0.003477	0.003353	0.003741	0.003429
Std. Dev.	0.002102	0.002273	0.001789	0.0004799
Upper Lim.	0.005	0.005	0.005	0.003937
Lower Lim.	0.00091	0.00054	0.00118	0.00292

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-14	BY-AP-MW-15	BY-AP-MW-16
11/27/2018		<0.005	0.0311	0.0182
11/28/2018	<0.005			
5/29/2019	<0.005	<0.005	0.0343	0.0206
10/1/2019	<0.005	<0.005	0.0336	0.0107
3/31/2020	<0.005	<0.005		0.0199
4/1/2020			0.0344	
9/1/2020	<0.005			
9/2/2020		<0.005	0.0385	0.0192
5/11/2021			0.0349	
5/19/2021	0.00113			0.0182
5/25/2021		0.00124		
10/26/2021	0.00122		0.0347	
10/27/2021		0.00125		
11/1/2021				0.0139
5/24/2022	0.00189			
5/25/2022		0.00125	0.0364	0.0155
Mean	0.003655	0.003592	0.03474	0.01703
Std. Dev.	0.001869	0.001943	0.002131	0.003394
Upper Lim.	0.005	0.005	0.037	0.02062
Lower Lim.	0.00113	0.00124	0.03248	0.01343

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-2	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
5/1/2018			0.0126 (O)	
5/2/2018				<0.005
11/27/2018	0.0066	<0.005	0.00363 (J)	<0.005
5/29/2019	0.00745	<0.005	0.00549	<0.005
10/1/2019	0.00696	<0.005	<0.005	<0.005
3/31/2020	0.00716	<0.005	0.0205	<0.005
8/31/2020	0.00751			
9/1/2020		<0.005	0.00657	<0.005
5/18/2021	0.00746	0.000196 (J)	0.018	
11/1/2021	0.00706	0.00016 (J)	0.00478	
11/2/2021				0.00197
5/24/2022	0.00582			
5/25/2022		0.00028	0.00455	0.00184
Mean	0.007003	0.003204	0.008565	0.004226
Std. Dev.	0.0005679	0.002478	0.006681	0.001433
Upper Lim.	0.007575	0.005	0.0205	0.005
Lower Lim.	0.006423	0.00016	0.00363	0.00184

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-9
11/27/2018			<0.005	
11/28/2018	<0.005	0.0178		<0.005
5/29/2019	<0.005	0.0197	<0.005	
5/30/2019				<0.005
9/30/2019		0.0186	<0.005	<0.005
10/1/2019	<0.005			
3/30/2020		0.0172	<0.005	
3/31/2020	<0.005			<0.005
9/2/2020	<0.005	0.0197	<0.005	<0.005
5/11/2021			0.000778	
5/17/2021	0.000678			
5/18/2021		0.0189		0.000725
10/26/2021			0.00079	
10/27/2021		0.0206		0.0007
11/2/2021	0.0006			
5/24/2022		0.023	0.00067	0.00069
5/25/2022	0.00098			
Mean	0.003407	0.01944	0.003405	0.003389
Std. Dev.	0.002201	0.001807	0.002202	0.002223
Upper Lim.	0.005	0.02135	0.005	0.005
Lower Lim.	0.0006	0.01752	0.00067	0.00069

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2022 3:37 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-12
5/1/2018	1.6			
5/2/2018		0.405	0.505	1.11
11/28/2018	1.48	0.609	0.232 (U)	0.846
5/29/2019	2.25		0.726	2.06
5/30/2019		0.0949 (U)		
9/30/2019		0.965	0.489 (U)	
10/1/2019	2.84			0.984
3/30/2020	2.31			
3/31/2020		1.14	0.462 (U)	1.26
5/11/2021		1.12 (U)		
5/18/2021	2.99			1.11
5/19/2021			1.15	
10/27/2021		1.2 (U)		
11/1/2021	2.22			1.79
11/2/2021			0.504 (U)	
5/23/2022			0.452 (U)	1.4
5/24/2022	2.12	1.36 (U)		
Mean	2.226	0.8617	0.565	1.32
Std. Dev.	0.5248	0.4437	0.2714	0.4148
Upper Lim.	2.783	1.332	0.8362	1.76
Lower Lim.	1.67	0.3915	0.3081	0.8804

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2022 3:37 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-14	BY-AP-MW-15	BY-AP-MW-16
5/1/2018			0.651	0.623
5/2/2018	0.752	0.522		
11/27/2018		0.576	0.764	0.744
11/28/2018	0.523			
5/29/2019	1.01	0.437 (U)	0.433	2.51
10/1/2019	1.07	1.11	0.988	0.443 (U)
3/31/2020	0.725	0.941		0.341 (U)
4/1/2020			0.527	
5/11/2021			0.684 (U)	
5/19/2021	1.15			0.321 (U)
5/25/2021		0.978 (U)		
10/26/2021	1.74		1.95	
10/27/2021		0.587 (U)		
11/1/2021				1.28
5/24/2022	0.915 (U)			
5/25/2022		1.25	1.3	0.927 (U)
Mean	0.9856	0.8001	0.9121	0.8986
Std. Dev.	0.3675	0.3058	0.5005	0.7265
Upper Lim.	1.375	1.124	1.443	1.569
Lower Lim.	0.5961	0.476	0.3816	0.285

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2022 3:37 PM View: AIV
Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-2	BY-AP-MW-3	BY-AP-MW-4	BY-AP-MW-5
1/24/2018				1.74 (U)
5/1/2018	0.457	0.372 (U)	0.0917 (U)	
5/2/2018				0.58
11/27/2018	0.359 (U)	0.591	0.695	1.43
5/29/2019	1.18	2.31	0.947	2.16
10/1/2019	0.284 (U)	1.52	0.7	2.14
3/31/2020	0.699	0.478 (U)	0.323 (U)	0.754
5/18/2021	0.72 (U)	0.749 (U)	0.734 (U)	
11/1/2021	0.523 (U)	0.688 (U)	0.888 (U)	
11/2/2021				2.06
5/24/2022	0.732 (U)			
5/25/2022		1.72	0.821 (U)	1.71
Mean	0.6193	1.054	0.65	1.572
Std. Dev.	0.2827	0.7047	0.2938	0.6126
Upper Lim.	0.9189	1.8	0.9614	2.221
Lower Lim.	0.3196	0.3065	0.3385	0.9224

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-9
5/2/2018	0.187 (U)	0.535	0.572	0.983
11/27/2018			0.687	
11/28/2018	0.478 (U)	0.62		0.747
5/29/2019	-0.276 (U)	0.244 (U)	0.627 (U)	
5/30/2019				1.08
9/30/2019		0.388 (U)	0.321 (U)	0.58
10/1/2019	0.742			
3/30/2020		0.744	0.6	
3/31/2020	0.291 (U)			0.82
5/11/2021			0.648 (U)	
5/17/2021	1.84			
5/18/2021		0.597 (U)		0.98 (U)
10/26/2021			1.61	
10/27/2021		1.46 (U)		1.07 (U)
11/2/2021	0.773 (U)			
5/24/2022		1.05 (U)	0.733 (U)	2.11
5/25/2022	1.06 (U)			
Mean	0.6369	0.7048	0.7248	1.046
Std. Dev.	0.6366	0.3876	0.3784	0.4629
Upper Lim.	1.312	1.116	1.054	1.478
Lower Lim.	-0.03787	0.294	0.4141	0.636

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-10	BY-AP-MW-11	BY-AP-MW-12
11/28/2018	<0.125	<0.125	0.05 (J)	0.04 (J)
5/29/2019	0.0858 (J)		0.0759 (J)	0.0677 (J)
5/30/2019		0.0573 (J)		
9/30/2019		<0.125	0.0733 (J)	
10/1/2019	0.0744 (J)			0.0682 (J)
3/30/2020	0.0726 (J)			
3/31/2020		<0.125	0.078 (J)	0.0755 (J)
9/1/2020	0.194	0.0794 (J)	0.0841 (J)	0.0845 (J)
5/11/2021		0.105		
5/18/2021	0.0884 (J)			0.0614 (J)
5/19/2021			0.0994 (J)	
10/27/2021		<0.125		
11/1/2021	0.181			0.0928 (J)
11/2/2021			0.101	
5/23/2022			0.0709 (J)	0.0873 (J)
5/24/2022	0.0801 (J)	<0.125 (D)		
Mean	0.1049	0.06928	0.07908	0.07218
Std. Dev.	0.05176	0.01582	0.01637	0.01692
Upper Lim.	0.194	0.105	0.09643	0.09011
Lower Lim.	0.0625	0.0573	0.06172	0.05424

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-13	BY-AP-MW-14	BY-AP-MW-15	BY-AP-MW-16
11/27/2018		0.06 (J)	0.18	<0.125
11/28/2018	0.05 (J)			
5/29/2019	0.0679 (J)	0.0781 (J)	0.168	0.0683 (J)
10/1/2019	0.0703 (J)	0.0885 (J)	0.185	0.0774 (J)
3/31/2020	0.0665 (J)	0.0867 (J)		0.0602 (J)
4/1/2020			0.187	
9/1/2020	0.0757 (J)			
9/2/2020		0.0957 (J)	0.18	<0.125
5/11/2021			0.214	
5/19/2021	0.0748 (J)			0.0793 (J)
5/25/2021		0.0957 (J)		
10/26/2021	0.0641 (J)		0.171	
10/27/2021		0.0651 (J)		
11/1/2021				0.0887 (J)
5/24/2022	0.0769 (J)			
5/25/2022		0.0733 (J)	0.214	<0.125
Mean	0.06828	0.08039	0.1874	0.07018
Std. Dev.	0.008709	0.01352	0.01763	0.01041
Upper Lim.	0.07751	0.09472	0.2059	0.08512
Lower Lim.	0.05904	0.06606	0.1691	0.06444

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-5	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-9
5/2/2018	0.05 (J)			
11/27/2018	<0.125		<0.125	
11/28/2018		0.07 (J)		0.04 (J)
5/29/2019	0.0923 (J)	0.0937 (J)	0.0958 (J)	
5/30/2019				0.0763 (J)
9/30/2019		0.0925 (J)	0.0559 (J)	0.0679 (J)
10/1/2019	0.0557 (J)			
3/30/2020		0.0933 (J)	0.0701 (J)	
3/31/2020	0.0735 (J)			0.0655 (J)
9/1/2020	0.0921 (J)			
9/2/2020		0.109	<0.125	0.0804 (J)
5/11/2021			0.094 (J)	
5/18/2021		0.11		0.0709 (J)
10/26/2021			<0.125	
10/27/2021		0.0823 (J)		0.0803 (J)
11/2/2021	0.0964 (J)			
5/24/2022		0.0724 (J)	0.0713 (J)	<0.125
5/25/2022	<0.125			
Mean	0.07313	0.0904	0.07183	0.06798
Std. Dev.	0.01826	0.01493	0.01504	0.01311
Upper Lim.	0.09618	0.1062	0.09399	0.08187
Lower Lim.	0.05716	0.07458	0.06127	0.05408

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-13	BY-AP-MW-14
11/27/2018				<0.0002
11/28/2018	<0.0002	<0.0002	<0.0002	
5/29/2019	<0.0002	<0.0002	<0.0002	<0.0002
9/30/2019	<0.0002			
10/1/2019		<0.0002	<0.0002	<0.0002
3/31/2020	<0.0002	<0.0002	<0.0002	<0.0002
9/1/2020	<0.0002	<0.0002	<0.0002	
9/2/2020				<0.0002
5/18/2021		0.000326		
5/19/2021	0.000102 (J)		<0.0002	
5/25/2021				7.64E-05 (J)
10/26/2021			<0.0002	
10/27/2021				9E-05 (J)
11/1/2021		0.00029		
11/2/2021	0.00013 (J)			
5/23/2022	9E-05 (J)	0.00018 (J)		
5/24/2022			0.00015 (J)	
5/25/2022				0.0001 (J)
Mean	0.0001652	0.0002245	0.0001937	0.0001583
Std. Dev.	4.92E-05	5.288E-05	1.768E-05	5.79E-05
Upper Lim.	0.0002	0.000326	0.0002	0.0002
Lower Lim.	9E-05	0.00018	0.00015	7.64E-05

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-16	BY-AP-MW-4	BY-AP-MW-6	BY-AP-MW-9
11/27/2018	<0.0002	<0.0002		
11/28/2018			<0.0002	<0.0002
5/29/2019	<0.0002	<0.0002	0.00185 (J)	
5/30/2019				0.00108 (J)
9/30/2019				<0.0002
10/1/2019	<0.0002	<0.0002	0.00545	
3/31/2020	<0.0002	<0.0002	0.00276 (J)	<0.0002
9/1/2020		<0.0002		
9/2/2020	<0.0002		0.00171 (J)	<0.0002
5/17/2021			0.00162	
5/18/2021		0.00013 (J)		<0.0002
5/19/2021	0.000191 (J)			
10/27/2021				<0.0002
11/1/2021	<0.0002	7E-05 (J)		
11/2/2021			0.00336	
5/24/2022				<0.0002
5/25/2022	<0.0002	0.00018 (J)	0.0112	
Mean	0.0001989	0.0001725	0.003519	0.00031
Std. Dev.	3.182E-06	4.803E-05	0.003464	0.0003111
Upper Lim.	0.0002	0.0002	0.006786	0.00108
Lower Lim.	0.000191	7E-05	0.0006176	0.0002

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-11	BY-AP-MW-15	BY-AP-MW-7
11/27/2018		0.0169 (J)	
11/28/2018	0.0262		<0.02
5/29/2019	0.0321	0.0254	<0.02
9/30/2019	0.0228		<0.02
10/1/2019		0.0248	
3/30/2020			0.0102 (J)
3/31/2020	0.022		
4/1/2020		0.0174 (J)	
9/1/2020	<0.02		
9/2/2020		<0.02	<0.02
5/11/2021		0.00788 (J)	
5/18/2021			0.0882
5/19/2021	0.00754 (J)		
10/26/2021		0.0117 (J)	
10/27/2021			<0.02
11/2/2021	<0.02		
5/23/2022	0.0269		
5/24/2022			<0.02
5/25/2022		0.0118 (J)	
Mean	0.02219	0.01698	0.0273
Std. Dev.	0.007182	0.006312	0.02485
Upper Lim.	0.02902	0.02368	0.0882
Lower Lim.	0.00914	0.01029	0.0102

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-1	BY-AP-MW-11	BY-AP-MW-12	BY-AP-MW-13
11/28/2018	<0.0002	<0.0002	<0.0002	<0.0002
5/29/2019	<0.0002	<0.0002	<0.0002	<0.0002
9/30/2019		<0.0002		
10/1/2019	<0.0002		<0.0002	<0.0002
3/30/2020	<0.0002			
3/31/2020		<0.0002	<0.0002	<0.0002
9/1/2020	<0.0002	<0.0002	<0.0002	<0.0002
5/18/2021	0.000106 (J)		0.000947	
5/19/2021		0.00652		0.000437
10/26/2021				0.00043
11/1/2021	8E-05 (J)		0.00099	
11/2/2021		0.00161		
5/23/2022		0.00141	0.00109	
5/24/2022	<0.0002			0.00356
Mean	0.0001732	0.001317	0.0005034	0.0006784
Std. Dev.	5.002E-05	0.002184	0.0004205	0.001169
Upper Lim.	0.0002	0.00652	0.00109	0.00356
Lower Lim.	8E-05	0.0002	0.0002	0.0002

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-14	BY-AP-MW-15	BY-AP-MW-16	BY-AP-MW-5
5/2/2018				<0.0002
11/27/2018	<0.0002	<0.0002	<0.0002	<0.0002
5/29/2019	<0.0002	<0.0002	<0.0002	<0.0002
10/1/2019	<0.0002	<0.0002	<0.0002	<0.0002
3/31/2020	<0.0002		<0.0002	<0.0002
4/1/2020		<0.0002		
9/1/2020				<0.0002
9/2/2020	<0.0002	0.00209 (J)	<0.0002	
5/11/2021		0.00171		
5/19/2021			0.000136 (J)	
5/25/2021	0.000701			
10/26/2021		0.00206		
10/27/2021	0.00053			
11/1/2021			<0.0002	
11/2/2021				0.00012 (J)
5/25/2022	0.00052	0.0018	<0.0002	0.00011 (J)
Mean	0.0003439	0.001057	0.000192	0.0001787
Std. Dev.	0.0002059	0.000925	2.263E-05	3.944E-05
Upper Lim.	0.000701	0.00209	0.0002	0.0002
Lower Lim.	0.0002	0.0002	0.000136	0.00011

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

	BY-AP-MW-6	BY-AP-MW-7	BY-AP-MW-8	BY-AP-MW-9
11/27/2018			<0.0002	
11/28/2018	<0.0002	<0.0002		<0.0002
5/29/2019	<0.0002	<0.0002	<0.0002	
5/30/2019				<0.0002
9/30/2019		<0.0002	<0.0002	<0.0002
10/1/2019	<0.0002			
3/30/2020		<0.0002	<0.0002	
3/31/2020	<0.0002			<0.0002
9/2/2020	<0.0002	<0.0002	<0.0002	<0.0002
5/11/2021			0.000321	
5/17/2021	0.000117 (J)			
5/18/2021		0.000214		0.00022
10/26/2021			0.00019 (J)	
10/27/2021		0.00018 (J)		0.00021
11/2/2021	0.00011 (J)			
5/24/2022		0.00018 (J)	0.00023	0.00024
5/25/2022	0.00033			
Mean	0.0001946	0.0001967	0.0002176	0.0002087
Std. Dev.	6.725E-05	1.141E-05	4.335E-05	1.458E-05
Upper Lim.	0.00033	0.000214	0.000321	0.00024
Lower Lim.	0.00011	0.00018	0.00019	0.0002

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 7/20/2022 3:37 PM View: AIV

Plant Barry Client: Southern Company Data: Barry Ash Pond

BY-AP-MW-13

11/28/2018	<0.00102
5/29/2019	<0.00102
10/1/2019	<0.00102
3/31/2020	<0.00102
9/1/2020	<0.00102
5/19/2021	<0.00102
10/26/2021	<0.00102
5/24/2022	0.00056 (J)
Mean	0.0009625
Std. Dev.	0.0001626
Upper Lim.	0.00102
Lower Lim.	0.00056

Appendix F



April 2022
Plant Barry



Laboratory Treatability Study Work Plan

Prepared for Alabama Power Company

April 2022
Plant Barry

Laboratory Treatability Study Work Plan

Prepared for
Alabama Power Company
600 18th Street North
Birmingham, Alabama 35203

Prepared by
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TABLES

Table 1	Groundwater Characterization Parameters and Laboratory Analytical Methods
Table 2	Constituents and Analytical Methods
Table 3	Sequential Extraction Procedure

FIGURE

Figure 1	Proposed Pilot Test Boring Locations
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ABBREVIATIONS

µm	micrometers
ADEM	Alabama Department of Environmental Management
APC	Alabama Power Company
CCR	coal combustion residuals
COI	constituent of interest
DO	dissolved oxygen
EGL	Anchor QEA Environmental Geochemistry Laboratory
MNA	monitored natural attenuation
ORP	oxidation-reduction potential
Plant Barry	James M. Barry Electric Generating Plan
SC	specific conductivity
SCS	Southern Company Services
Site	Plant Barry Ash Pond
SSE	selective sequential extraction
USEPA	U.S. Environmental Protection Agency
ZVI	zero-valent iron

1 Introduction

This work plan describes laboratory treatability studies for arsenic and cobalt in groundwater at the James M. Barry Electric Generating Plant (Plant Barry) Ash Pond (Site), located in Mobile County, Alabama. Plant Barry is owned and operated by Alabama Power Company (APC). This work builds on work previously performed for the Site by Anchor QEA.

As of April 15, 2019, the Site ceased receipt of all coal combustion residuals (CCR) and non-CCR waste streams. APC has been monitoring groundwater at the Site in accordance with the U.S. Environmental Protection Agency (USEPA) CCR Rule and the Alabama Department of Environmental Management (ADEM) rule since 2016. Constituents of interest (COIs) for the Site include arsenic and cobalt.

In 2020 and 2021, corrective measures for groundwater were evaluated for the Site. In situ groundwater treatment via injection was selected as one viable option, particularly for areas with higher concentrations of COIs in groundwater (hot spots). Therefore, pilot tests at three locations were proposed in the *Groundwater Remedy Selection Report* (Anchor QEA 2021a). The necessary steps to implement an injection treatment pilot test include laboratory treatability studies, selection of the most effective treatment reagent(s), and preparation of an underground injection control application.

The treatability studies proposed herein will evaluate reagent selection, dosing, and injection sequencing for in situ groundwater treatment as described in the following subsections. Background information, including Site-specific findings from monitored natural attenuation (MNA) studies and reagents to be tested in the treatability studies, is summarized in Section 2. Initial characterization of groundwater and aquifer solids (i.e., soil) is discussed in Section 3 followed by an overview of the treatability study approach including batch testing (Section 4), column studies (Section 5), and selective sequential extraction (SSE; Section 6). Analysis of the treatability study data and reporting are discussed in Section 7 and the project schedule is presented in Section 8.

2 Selection of Reagents

Selection and formulation of reagent solutions that can be injected to sequester Site-specific COIs will be based on Site-specific soil and groundwater geochemistry, previous Site work, and experience from successful treatability studies performed by Anchor QEA for the same COIs at other sites. The MNA demonstration (Anchor QEA 2021a) documented key geochemical attenuation mechanisms occurring at the Site, including:

- Sorption on amorphous iron oxides (arsenic and cobalt)
- Cation exchange on clays (cobalt)
- Coprecipitation in crystalline iron oxides (arsenic and cobalt)
- Precipitation in barium arsenate (arsenic)

Iron oxides are strong sorbents for many metals and metalloids including arsenic and cobalt, and Eh-pH conditions in the subsurface at the Site are generally favorable for formation of iron oxides. Therefore, the treatability studies are focused on reagents (or mixtures) with the potential to increase the abundance and the stability of iron hydroxides and iron oxides in the subsurface. Barium chloride was added to the reagent list as geochemical modeling predicted that barium arsenate could precipitate from groundwater if sufficient barium were present in the system. Based on Site conditions and previous treatability studies for other CCR sites (e.g., EPRI 2021), the following reagents were selected for treatability testing:

1. Ferrous sulfate
2. Ferric chloride
3. CleanER (injectable zero-valent iron [ZVI])
4. Ferroblack (injectable iron sulfide)
5. Permanganate
6. Ferrous sulfate with permanganate
7. Ferric chloride with permanganate and manganese chloride
8. Barium chloride
9. Aeration (due to the relatively high iron content of Site groundwater)
10. Hydrotalcite

These 10 potential treatments (or mixtures thereof) will be screened and evaluated through batch testing as described in Section 4. The most promising reagents (or mixtures) will be selected for column studies (see Section 5).

3 Sampling and Initial Characterization

Aquifer solids (i.e., soil) and groundwater will be collected from the Site for treatability testing to be conducted at the Anchor QEA Environmental Geochemistry Laboratory (EGL). Site aquifer solids (soil) and groundwater will be collected in accordance with the *Aquifer Solids and Groundwater Sampling Scope of Work for Treatability Studies* (Anchor QEA 2021b) memorandum.

3.1 Groundwater

Groundwater samples will be collected by Alabama Power with support from Anchor QEA from wells BY-AP-MW-1, BY-AP-MW-2,¹ BY-AP-MW-8, BY-AP-MW-10, BY-AP-MW-15V, and BY-AP-MW-24H. Five gallons of Site groundwater from each selected well will be required to complete the batch treatability tests (described in Section 4). An additional 10 gallons of Site groundwater from each selected well will be required to complete the column testing (described in Section 5) and will be collected after the batch testing is completed. As detailed in the sampling plan, the groundwater provided to the EGL will be collected, transported, and handled to minimize exposure to oxygen. Groundwater samples will be field-filtered with a 0.45-micron inline filter.

Groundwater samples will be analyzed for COIs (arsenic and cobalt), as well as other Appendix III/IV parameters, and additional MNA parameters by Alabama Power (Table 1). Supplemental analyses will be performed for COIs and select parameters including pH, oxidation-reduction potential [ORP], dissolved oxygen [DO], total and dissolved iron and manganese on as-received samples prior to commencing treatability testing. Groundwater characterization data will guide the treatability study design and the evaluation of results.

3.2 Aquifer Solids

Aquifer solids were collected from four pilot test borings (BY-AP-PT-1, -2, -3, and -5) as described in the *Aquifer Solids and Groundwater Sampling Scope of Work for Treatability Studies* (Anchor QEA 2021b) memorandum and as appear in Figure 1. Initial characterization of aquifer solids (soil) will include the analyses listed in Table 2.

3.3 Reagents

Prior to initiating the column studies (described in Section 5), a sample of each of the selected reagents will be analyzed for Appendix III/ IV parameters to characterize impurity levels of these constituents.

¹ Groundwater from BY-AP-MW-2 will be collected for column tests only.

4 Batch Tests

Screening batch tests will be performed to assess the effectiveness of injectable reagents (see list of reagents in Section 2) in reducing COI concentrations in Site groundwater and groundwater-soil slurries.

The approach for screening batch tests is as follows²:

- Step 1: Test jars will be set up with groundwater or groundwater/aquifer solid slurries.
- Step 2: Reagents or reagent mixtures will be added to the test jars at a pre-determined dose based on groundwater chemistry and prior experience. Test jars will also include controls with no reagents added. Test jars will be sealed and placed on a shaker table for 7 days.
- Step 3: Samples of the treated groundwater solutions will be collected and analyzed for dissolved arsenic and cobalt (per the analytical laboratory methods specified in Table 1). pH, ORP, and specific conductivity (SC) will be measured in the EGL.
- Step 4: The solids from each batch reactor will be recovered and archived for possible future analysis.

Arsenic and cobalt removal efficiency will be evaluated by comparing the initial concentrations in the groundwater samples and controls to the concentrations in the treated groundwater solutions.

Following the initial screening batch tests, additional focused batch testing may be conducted to optimize COI removal. For example, these optimization batch tests may involve adjusting the dose of a reagent or adjusting the pH to increase COI removal. Following completion of the batch testing, up to two reagents (or reagent mixtures) that achieve successful removal of arsenic and cobalt will be selected for column studies.

² Batch tests will be conducted in accordance with modified versions of ASTM International Methods D2035-19 (Practice for Coagulation-Flocculation Jar Test of Water) and D4646-03 (Test Method for 24-h Batch-Type Measurement of Contaminant Sorption by Soils and Sediments).

5 Column Studies

Column studies will be conducted to simulate injection applications of the selected reagents (or reagent mixtures). The results of the column studies will be used to confirm arsenic and cobalt removal efficiency and determine uptake capacity of injection-treated aquifer soil to support pilot test design. Results from column studies will also be used to confirm that treatments will not inadvertently increase concentrations of other constituents above groundwater quality standards, for example, due to release from the aquifer matrix.

The approach for column studies is as follows (Westerhoff et al. 2005):

- Step 1: Aquifer solids will be treated with the selected reagent or reagent mixture by treating a pre-weighed homogenized mass of aquifer solids with a predetermined amount of the selected reagent(s; based on the batch test results) in solution. The soil-reagent mixture will be placed on a shaker table and allowed to react for three days.
- Step 2: The treated aquifer solids will be packed into 4.2-centimeter-diameter by 22-centimeter-length polycarbonate column assemblies. Site groundwater containing COIs will be introduced into column influents at a constant flow rate.
- Step 3: Columns will be operated for a total of 4 weeks or approximately 100 pore volumes.
- Step 4: Column influent and effluent solutions will be sampled periodically and pH, ORP, and SC will be measured. The cumulative flow volume will also be recorded at the time of sampling and used to calculate the total number of pore volumes treated.
- Step 5: Samples will be filtered (0.45 micrometers [μm]) and analyzed for dissolved arsenic and cobalt, and treatment reagent constituent concentrations. Select Appendix III and IV constituents (Table 1) may also be analyzed based on soil concentrations.
- Step 6: Following completion of this phase of the column test, the column influent will be switched to background groundwater to assess the stability of the treatment. The column will continue to run at a constant flow rate for approximately 10 pore volumes. Column influents and effluents will be sampled at approximately 5 and 10 pore volumes of flow. Samples will be analyzed for dissolved COIs, constituents of the treatment reagents used (e.g., iron, manganese, barium, chloride, sulfate), and select Appendix III/ IV constituents.

Arsenic and cobalt removal efficiency (and mass uptake from groundwater) will be evaluated by comparing the respective concentrations in the column influent to the concentrations in the effluent. COI removal capacity per unit reagent dose will be estimated from column breakthrough curves and mass balance calculations. The removal capacity will provide data to support design of pilot tests, including injection volumes and reagent mass. At the end of the column tests, column solids will be recovered for SSE to further document COI sequestration strength by the reagent-treated soil matrix and to assess the stability of the treatment.

6 Selective Sequential Extraction of Treated Soil

Following completion of the column tests, the column media will be recovered and tested using a five-step SSE procedure. The extraction procedure is designed to fractionate the COIs in a solid sample by subjecting the sample to a sequence of chemical treatments that target specific chemical forms. Concentrations and relative proportions of arsenic and cobalt present in the operationally defined fractions shown in Table 3 will be determined on a total sample dry weight basis. Sequential extraction will be performed in accordance with the EGL standard operating procedure.

SSE will provide information on the stability of COIs removed by precipitates formed in situ via reagent injection under conditions representative of Site application. These data will support a more thorough understanding of the permanence (stability) of COI removal by the treatment.

7 Data Analysis and Reporting

Anchor QEA will analyze the data from the batch tests, column tests, and SSE results and make recommendations regarding the reagents or reagent mixtures to be used for pilot testing at the Site. Results from the column tests will also be used to support pilot test design. The recommended reagent or mix will be tailored to the COIs present and geochemical conditions at each pilot location.

Anchor QEA will meet with the client to review the results of the batch tests and discuss the recommended reagent(s) prior to initiating the column studies. After the column studies and SSE are complete, Anchor QEA will present findings and recommendations to the client in advance of preparing the draft treatability study report. This report will document the treatability studies, present the data obtained through these studies, and discuss recommendations for pilot studies of the most promising treatment(s).

8 References

Anchor QEA, 2021a. *Groundwater Remedy Selection Report*. Plant Barry. Prepared for Alabama Power Company. October 2021.

Anchor QEA, 2021b. Memorandum to: Greg Dyer, Southern Company Services, Inc. Regarding: Aquifer Solids and Groundwater Sampling Scope of Work for Treatability Studies. December 23, 2021.

Westerhoff, P., D. Highfield, M. Badruzzaman, and Y. Yoon, 2005. "Rapid Small-Scale Column Tests for Arsenate Removal in Iron Oxide Packed Bed Columns." *Journal of Environmental Engineering* 131(2):262–271.

Tables

Table 1
Groundwater Characterization Parameters and Laboratory Analytical Methods

Parameter	Analytical Method	Detection Limit
Appendix III Parameters		
Boron	EPA 200.8/6020	10.0 µg/L
Calcium	EPA 200.8/6020	600 µg/L
Chloride	300.0/9056A	1.00 mg/L
Fluoride	SM 4500 F_C	0.100 mg/L
pH	None	--
Sulfate	300.0/9056A	1.00 mg/L
Total dissolved solids	SM 2540C	5.00 mg/L
Appendix IV Parameters		
Antimony	EPA 200.8/6020	1.00 µg/L
Arsenic	EPA 200.8/6020	1.00 µg/L
Barium	EPA 200.8/6020	2.00 µg/L
Beryllium	EPA 200.8/6020	0.200 µg/L
Cadmium	EPA 200.8/6020	0.200 µg/L
Chromium	EPA 200.8/6020	2.00 µg/L
Cobalt	EPA 200.8/6020	1.00 µg/L
Fluoride	SM 4500 F_C	0.100 mg/L
Lead	EPA 200.8/6020	0.200 µg/L
Lithium	EPA 200.8/6020	5.00 µg/L
Mercury	EPA 1631	0.000100 mg/L
Molybdenum	EPA 200.8/6020	1.00 µg/L
Selenium	EPA 200.8/6020	1.00 µg/L
Thallium	EPA 200.8/6020	0.200 µg/L
MNA-Specific Parameters		
Alkalinity (total as CaCO ₃)	SM 2320 B	20.0 mg/L
Aluminum (total and dissolved)	EPA 200.8/6020	50.0 µg/L
Bicarbonate alkalinity (calculated)	SM 4500CO2 D	20.0 mg/L
Carbonate alkalinity (calculated)	SM 4500CO2 D	20.0 mg/L
Iron (total and dissolved)	EPA 200.8/6020	50.0 µg/L
Magnesium (dissolved)	EPA 200.8/6020	150.0 µg/L
Manganese (total and dissolved)	EPA 200.8/6020	1.00 µg/L
Nitrogen nitrate/nitrite	EPA 353.2	0.0200 mg/L
Potassium (dissolved)	EPA 200.8/6020	100 µg/L
Silica (dissolved)	SM 4500-SiO ₂	0.500 mg/L
Sodium (dissolved)	EPA 200.8/6020	100.0 µg/L
Sulfide	SM 4500-S ₂	Subcontracted
Total organic carbon	SM 5310 C	1.00 mg/L

Notes:

The following field parameters will be measured for each monitoring well sample: depth to water, total depth, pH, temperature, ORP, DO, turbidity, and SC.

µg/L: micrograms per liter

ORP: oxidation reduction potential

DO: dissolved oxygen

SC: specific conductance

EPA: U.S. Environmental Protection Agency

SM: Standard Method

mg/L: milligrams per liter

Table 2
Constituents and Analytical Methods

Constituent	Analytical Method	Detection Limit
Arsenic	EPA Method 6020B	0.5 mg/kg
Cobalt	EPA Method 6020B	0.5 mg/kg
Lithium	EPA Method 6020B	2.5 mg/kg
Iron	EPA Method 6020B	1 mg/kg
Manganese	EPA Method 6020B	1 mg/kg
Cation exchange capacity	EGL SOP/6020B	--
Extractable iron, aluminum, and manganese oxides	EGL SOP/6020B	1 mg/kg
Sulfide	SM4500-S2	1 mg/kg
Total organic carbon	EPA Method 9060A	200 mg/kg
Appendix IV Parameters		
Antimony	EPA 200.8/6020	0.5 mg/kg
Barium	EPA 200.8/6020	0.5 mg/kg
Beryllium	EPA 200.8/6020	0.5 mg/kg
Cadmium	EPA 200.8/6020	0.5 mg/kg
Chromium	EPA 200.8/6020	0.5 mg/kg
Fluoride	SM 4500 F_C	1 mg/kg
Lead	EPA 200.8/6020	0.5 mg/kg
Mercury	EPA 1631	0.5 mg/kg
Molybdenum	EPA 200.8/6020	0.5 mg/kg
Selenium	EPA 200.8/6020	0.5 mg/kg
Thallium	EPA 200.8/6020	0.5 mg/kg

Notes:

Solids will be digested by EPA Method 3050B prior to analysis.

EPA: U.S. Environmental Protection Agency

mg/kg: milligrams per kilogram

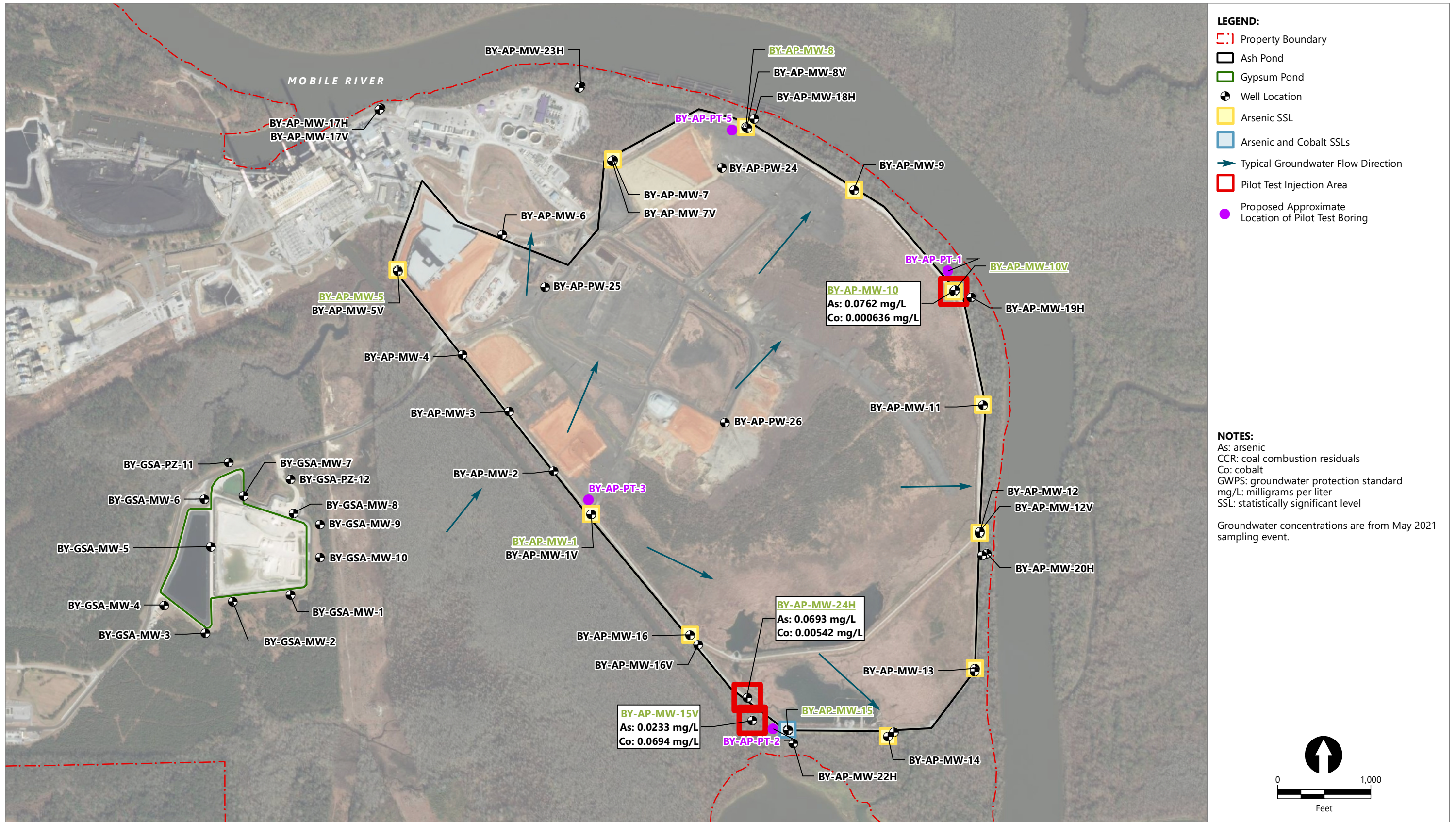
SOP: standard operating procedure

SM: Standard Method

Table 3
Sequential Extraction Procedure

Fraction	Name	Targeted COI Phase	Extraction Fluid
F1	Soluble	Dissolved and loosely bound	Magnesium chloride
F2	Exchangeable	Clay mineral exchange sites and weakly bound to oxides	Ammonium phosphate
F3	Reducible	Amorphous iron oxide bound	Hydroxylamine hydrochloride
F4	Strong Acid/Oxidizable	Crystalline oxides, sulfides and/or organic matter bound	Nitric acid
F5	Residual	Silicates and other insoluble phases	Aqua regia

Figure



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Figure 1
Proposed Pilot Test Boring Locations
 Laboratory Treatability Study Work Plan
 Plant Barry