2022 ANNUAL GROUNDWATER MONITORING REPORT

Plant Arkwright
Ash Pond 1 (AP-1) Landfill
Macon, Georgia

July 29, 2022

Prepared for:

Georgia Power

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CERTIFICATION STATEMENT

This 2022 Annual Groundwater Monitoring Report, Georgia Power Company – Plant Arkwright, Ash Pond 1 (AP-1) Landfill, Macon, Georgia, has been prepared in compliance with the Interim Groundwater Monitoring Plan submitted to the Georgia Environmental Protection Division (GA EPD) on September 24, 2021. Plant Arkwright AP1 Landfill was closed according to Solid Waste Management Tracking Number 011-030D(LI) since July 30, 2010. This report was prepared under the supervision of a licensed professional engineer and a licensed professional geologist with Stantec Consulting Services Inc. I hereby certify that I am a qualified groundwater scientist, in accordance with the Georgia Rules of Solid Waste Management, and 40 CFR Part 258.50(g).

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Date

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July 29, 2022
Date

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Executive Summary

This summary of the *2022 Annual Groundwater Monitoring Report* provides the status of the groundwater monitoring program from August 2021 through July 2022 at Georgia Power Company (Georgia Power) former Plant Arkwright Ash Pond 1 (AP-1) Landfill Site (the Site).

Plant Arkwright AP-1 Landfill

Plant Arkwright is located in Bibb County, Georgia approximately 6 miles northwest of the city of Macon. The plant address is 5241 Arkwright Road, Macon, Georgia 31210. When in operation, Plant Arkwright consisted of four 40-megawatt units. The Plant Arkwright coal-fired power plant was retired in 2002, decommissioned in 2003, and closed in 2010. The AP-1 Landfill received a closure certificate on July 30, 2010 under Solid Waste Permit Number 011-030D(LI). The Site is currently in post-closure care.

A coal combustion residuals (CCR) unit solid waste handling permit application dated November 2018 was submitted to the Georgia Environmental Protection Division (GA EPD) pursuant to the requirements of 391-3-4-.10. The Groundwater Monitoring Plan, Revision 1 is a minor modification to Solid Waste Permit Number 011-030D(LI) and an interim plan, as requested by GA EPD on March 23, 2021, to be used until the new CCR unit solid waste handling permit is issued and the Site establishes a permanent groundwater monitoring network. Monitoring and reporting utilizing the existing interim groundwater monitoring system will be conducted on a semi-annual basis in accordance with this plan until CCR removal activities require the interim monitoring wells to be abandoned. The current interim groundwater monitoring well network at the Site consists of two upgradient wells (AP1GWA-1 and AP1GWA-2) and 11 downgradient wells (AP1PZ-1 through AP1PZ-11). Any change to the groundwater monitoring network must be made by a minor modification to the permit pursuant to 391-3-4-.02(3)(b)6. Groundwater monitoring at AP-1 has been initiated in order to meet GA EPD requirements.

During the 2021-2022 annual reporting period, Wood Environmental & Infrastructure Solutions, Inc. conducted groundwater monitoring events in August 2021, October 2021, and February 2022. The samples were analyzed by Eurofins TestAmerica Laboratories, Inc., for the full suite of Appendix III constituents and the full suite of Appendix IV constituents.

Georgia Power will continue semi-annual groundwater monitoring and reporting at the Site. Reports will be provided to GA EPD semi-annually.

Acronyms / Abbreviations

40 CFR	Title 40 Code of Federal Regulations
AP-1	Ash Pond-1
CCR	Coal Combustion Residuals
DO	Dissolved Oxygen
GA EPD	Georgia Environmental Protection Division
mg/L	Milligrams per Liter
NELAP	National Environmental Laboratory Accreditation Program
ORP	Oxidation-Reduction Potential
PWR	Partially Weathered Rock
QA/QC	Quality Assurance/Quality Control
Site	Former Plant Arkwright Ash Pond-1 Landfill Site
US EPA	United States Environmental Protection Agency

1 Introduction

This *2022 Annual Groundwater Monitoring Report* has been prepared to document groundwater monitoring activities conducted at the Georgia Power Company (Georgia Power) former Plant Arkwright Ash Pond-1 (AP-1) Landfill Site (Site).

Groundwater monitoring and reporting for Plant Arkwright AP-1 Landfill are performed in accordance with the Groundwater Monitoring Plan, Revision 1 (Jacobs, 2021) submitted to Georgia Environmental Protection Division (GA EPD) on September 24, 2021. This interim plan is a minor modification to Solid Waste Permit Number 011-030D(LI), as requested by GA EPD on March 23, 2021. Groundwater monitoring at the Site will be conducted in accordance with this Groundwater Monitoring Plan until the new coal combustion residuals (CCR) unit solid waste handling permit is issued and the Site establishes a permanent groundwater monitoring network. This annual report documents the activities completed between August 2021 and July 2022. Three groundwater monitoring events were conducted during this monitoring period in August 2021, October 2021, and February 2022.

1.1 Site Description and Background

The Site is located in Bibb County, Georgia approximately 6 miles northwest of the city of Macon (Figure 1). The physical address of the Site is 5241 Arkwright Road, Macon, GA 31210. AP-1 Landfill is located south of the former plant area and is bordered by the Ocmulgee River, Beaverdam Creek, and a Norfolk Southern Railroad line (Figure 2). When in operation, the coal-fired powered Plant Arkwright consisted of four 40-megawatt units. In the years before retirement, the plant was used primarily to provide peaking power and operated approximately 40 to 60 days per year. Plant Arkwright was retired in 2002 and decommissioned in 2003. The AP-1 Landfill footprint covers approximately 31.22 acres.

AP-1 Landfill was constructed prior to 1958 and was closed with two feet of soil cover and vegetation in 1990. Regrading and stabilization of the riverbank and creek bank occurred in two phases in 2004 and 2007. Additionally, the slopes and top of AP1 Landfill were regraded by relocating CCR and placing additional cover soil (Jacobs, 2018).

AP-1 Landfill received a Closure Certificate on July 30, 2010, under Solid Waste Permit Number 011-030D(LI). The Site is currently in post-closure care. Because the unit ceased receiving waste prior to October 19, 2015, AP-1 Landfill is exempt from the requirements in Title 40 Code of Federal Regulations (40 CFR) Part 257 Subpart D – Standard for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments in accordance with 40 CFR §257.50 (d) and (e) a CCR unit solid waste handling permit application package for the Site was submitted to GA EPD in November 2018 and is currently under review.

1.2 Regional Geology & Hydrogeologic Setting

The geology and hydrogeology of Plant Arkwright is summarized below. The Site is located along the southern edge of the Washington Slope physiographic district within the Piedmont Physiographic Province (Clark and Zisa, 1976). The Washington Slope is characterized by a gently undulating surface which generally slopes to the south and southeast toward the Coastal Plain Physiographic Province located approximately 3.8 miles to the southeast of the Site.

Topography of the Washington Slope ranges from approximately 700 feet above sea level in the areas of southern Atlanta and Athens to approximately 300 feet above sea level at its southern limit along the Georgia Fall Line. Streams follow the structure of underlying crystalline rocks eastward toward the Ocmulgee River. Relief throughout the district is between 50 and 100 feet with the greatest relief being along the Ocmulgee River with steep walled valleys with elevation changes between 150 – 200 feet (Clark and Zisa, 1976). Ultimately, the area surface water flow is directed toward the Ocmulgee River.

Bedrock in the region is composed of moderate- to high-grade metamorphic rocks, consisting of biotite-granite gneiss, schist, and amphibolite, and igneous rocks like granite. In the southernmost Piedmont, in the area of the Site, bedrock is predominantly composed of biotite gneiss. Major geologic structures in the region include the Ocmulgee fault, located approximately 7 miles to the northwest of the Site which strikes mostly northeast – southwest. The top of bedrock surface is highly weathered and where exposed is generally soft and friable (LeGrand, 1962).

1.2.1 SITE GEOLOGY

The Site is generally underlain by alluvial sands of varying grain sizes, with minor lenses of clay. More consolidated sediments include fine to medium sandy silt to silty sand, which is underlain by silty sand saprolite. Borehole drilling performed at the Site indicate overburden thickness ranging from 22 feet to 62 feet, overlying a thin layer (5 to 10 feet) of partially weathered rock. The underlying bedrock consist of quartzofeldspathic gneiss, hornblende gneiss, and schist (Jacobs, 2021).

1.2.2 SITE HYDROGEOLOGY

The uppermost aquifer at the Site consists of two hydrostratigraphic units: the water table (overburden) hydrostratigraphic unit and the underlying shallow fractured bedrock hydrostratigraphic unit. The water table unit is composed of the unconsolidated silty sands and sandy silts with clays and variable thicknesses of partially weathered rock (PWR) mantling the bedrock surface.

The unconsolidated sands, silts, and PWR are also referred to as overburden. The bedrock unit is the zone of weathered and fractured bedrock. The water table unit is hydraulically connected to the underlying bedrock through fractures in the partially weathered and fractured bedrock (Southern Company Services, 2005) and is considered to be under unconfined conditions. Based on recently installed interim monitoring wells, the potentiometric surface ranges from approximately 323 to 290 feet referenced to North American Vertical Datum of 1988 (18 to 58 feet below ground surface) respectively in

the northern and southern portions of the Site. The interim wells were installed to evaluate the uppermost occurrence of groundwater at the Site and form the monitoring network for AP-1 Landfill (Figure 2).

Slug testing data from the Site reflect a range of hydraulic conductivities from 10^{-6} to 10^{-3} centimeters per second in the water table hydrostratigraphic unit (Jacobs, 2021). Groundwater level monitoring data from the Site show stable water level trends and the potentiometric maps reflect groundwater flowing to the southwest, southeast, and northeast, in the direction of the Ocmulgee River and Beaverdam Creek (Figure 3).

1.3 Groundwater Monitoring System

Georgia Power installed a temporary groundwater monitoring system within the uppermost aquifer at the Site. Wells were located to serve as upgradient or downgradient monitoring points based on groundwater flow direction (Table 1). The monitoring well locations are shown on Figure 2. Due to site access constraints and safety concerns, downgradient wells at AP-1 Landfill are installed through CCR and will be removed during the closure by removal of the unit. A final groundwater monitoring network will be installed following closure as noted in the 2018 CCR permit application.

2 Groundwater Monitoring Activities

The following describes monitoring-related activities performed between August 2021 and July 2022. Samples were collected from each of the wells in the monitoring system shown on Figure 2. Table 2 presents a summary of the CCR groundwater sampling events completed for AP-1 Landfill during this monitoring period.

2.1 Monitoring Well Installation and Maintenance

Monitoring wells are inspected semi-annually to determine if repairs or corrective actions are necessary. In August 2021, October 2021, and February 2022, monitoring wells were inspected, necessary corrective actions were identified and subsequently completed, as documented in Appendix A.

2.2 Additional Surface Water Sampling

Due to the close proximity of Beaverdam Creak and the Ocmulgee River in the downgradient direction, Georgia Power proactively collected surface water samples. Surface water samples were collected along the Ocmulgee River from five locations in September 2021 and February 2022, and along Beaverdam Creek from two locations in September 2021 and February 2022, as shown on Figure 2. Surface water samples were collected in accordance with Region 4 U.S. Environmental Protection Agency (US EPA) Science and Ecosystem Support Division Operating Procedures for Surface Water Sampling (SESDPROC-201-R4, December 16, 2016). Surface water samples were analyzed for the full suites of Appendix III and Appendix IV constituents. Analysis for mercury was inadvertently removed from sampling for the September 2021 and February 2022 sampling events. Based on previous sampling, mercury was not detected in groundwater sampling in the 2021/2022 sampling events. Sampling of mercury will be added to the August 2022 surface water sampling event. Due to the lack of a safe and accessible way to collect the necessary volume (1-2 gallons) of surface water samples to sample radium, such sampling was discontinued in the February 2022 sampling event and will not be sampled in surface water moving forward. In previous sampling for surface water of radium, all samples were below the method detection limit. Surface water samples were also submitted for analysis of total alkalinity, bicarbonate alkalinity, magnesium, potassium, and sodium. The laboratory reports associated with the 2022 sampling event are provided in Appendix B. Georgia Power will continue collecting the surface water samples semi-annually during interim groundwater monitoring.

3 Sample Methodology & Analyses

The sampling events completed during this reporting period for AP-1 Landfill represent the August 2021, October 2021, and February 2022 Appendix III and Appendix IV groundwater monitoring events. Groundwater analytical data and chain-of-custody records are presented in Appendix B. The following sections describe methods used to conduct groundwater monitoring at the Site.

3.1 Groundwater Elevation Measurements and Flow Direction

Prior to each sampling event, groundwater levels were recorded at each piezometer at AP-1 Landfill. Groundwater elevations are summarized in Table 3. The recorded groundwater levels were used to develop potentiometric surface elevation contour maps (Figures 3 through 5). Review of Figures 3 through 5 shows that the general direction of groundwater flow in the uppermost aquifer is to the southwest, southeast, and northeast, in the direction of the Ocmulgee River and Beaverdam Creek. The groundwater flow patterns observed during the August 16, 2021, October 25, 2021, and January 31, 2022, measurement events are consistent, with only minor variation between events.

3.2 Groundwater Gradient and Flow Velocity

The groundwater flow velocity at AP-1 Landfill was calculated using a derivation of Darcy's Law. Specifically,

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

Where:

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

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

$i =$ Horizontal hydraulic gradient $\left(\frac{feet}{foot}\right)$

$n_e =$ Effective porosity

The general groundwater flow velocity was calculated for AP-1 Landfill based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and Cherry, 1979). The general groundwater flow velocity calculation is presented in Table 4. Results for groundwater flow velocities ranged from 0.004 feet/day in the southern portion of the Site to 0.226 feet/day in the northeastern portion of the Site (1.4 to 82.6 feet/year) on August 16, 2021, October 25, 2021, and January 31, 2022.

3.3 Groundwater Sampling

Groundwater samples were collected in August 2021, October 2021, and February 2022. Sampling procedures were conducted in accordance with US EPA Region 4 Laboratory Services and Applied Science Division operating procedures. Monitoring wells were purged and sampled using low-flow sampling procedures. Dedicated and/or non-dedicated low-flow pneumatic bladder or peristaltic pumps were used to purge and sample the wells. A SmartTroll® or AquaTroll® (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, dissolved oxygen [DO], temperature, and oxidation-reduction potential [ORP]) and a Hach 2100Q was used to measure turbidity during well purging to verify stabilization prior to sampling.

Groundwater samples were collected when the following stabilization criteria were met:

- pH ± 0.1 Standard Units.
- Specific conductance ± 5%.
- ± 10% for DO where DO > 0.5 milligrams per liter (mg/L). No criterion applies if DO < 0.5 mg/L.
- Turbidity measurements less than 5 Nephelometric Turbidity Units.
- Temperature – Record only, not used for stabilization criteria.
- ORP – Record only, not used for stabilization criteria.

Once stabilization was achieved, samples were collected into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Eurofins TestAmerica Laboratories, Inc. (Eurofins TestAmerica) of Pittsburgh, Pennsylvania, and St. Louis, Missouri following chain-of-custody protocol. Stabilization logs and Equipment Calibration forms are included in Appendix B.

3.4 Laboratory Analyses

The groundwater samples were analyzed for the full suites of Appendix III and IV constituents. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in Appendix B.

Laboratory analyses were performed by Eurofins TestAmerica. Eurofins TestAmerica is accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for the constituents analyzed for this project. In addition, Eurofins TestAmerica is certified to perform analysis by the State of Georgia. Tables 5A through 5C provide concentrations from the August 2021, October 2021, and February 2022 groundwater sampling, respectively. Tables 6A and 6B provide concentrations from the September 2021 and February 2022 surface water sampling events as reported by the laboratory.

3.5 Quality Assurance & Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples are collected. Equipment blanks (where non-dedicated sampling equipment is used) are collected at a rate of one QA/QC sample per 10 groundwater samples. Blind field duplicate samples were collected by filling additional containers at the same location during the sampling event and were collected at a rate of one QA/QC sample per 10 groundwater samples. Field blanks were also collected to evaluate ambient conditions at the sampling locations at a rate of one QA/QC sample per 10 groundwater samples.

QA/QC of the groundwater data were assessed by performing a data quality evaluation of the laboratory results reported. A data quality evaluation was conducted on the data using laboratory precision and accuracy, and analytical method requirements (US EPA, 2002). The data quality evaluations are included in Appendix B.

The analytical results provided in Tables 5A through 5C provide concentrations from the August 2021, October 2021, and February 2022 groundwater sampling events as reported by the laboratory. When values are followed by a ”J” flag, this indicates that the value is an estimated analyte concentration detected between the method detection limit and the laboratory reporting limit. The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions. Radium values followed by a “U” flag indicate that the constituent was not detected above the analytical minimum detectable concentration. The data are considered usable for meeting project objectives and the results are considered valid.

4 Groundwater and Surface Water Results

The analytical data for the Appendix III and IV constituents for the August 2021, October 2021, and February 2022 groundwater monitoring events and September 2021 and February 2022 surface water sampling events, are summarized in Tables 5A through 5C and Tables 6A and 6B. The complete laboratory and field data sheets are included in Appendix B.

5 Monitoring Program Status

The AP-1 Landfill is currently in post-closure care. Groundwater monitoring has been initiated at the request of GA EPD. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be provided to GA EPD semi-annually.

6 Conclusions & Future Actions

This *2022 Annual Groundwater Monitoring Report* was prepared to fulfill the requirements of the Interim Groundwater Monitoring Plan (Jacobs, 2021). The next semi-annual sampling event is planned for August 2022. The August 2022 semi-annual monitoring event will include sampling and analysis of the full suites of Appendix III and IV constituents.

7 References

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US EPA, 1989. US EPA 530/SW-89-031 Interim Final RCRA Investigation (RFI) Guidance, Volume I and II.

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TABLES

Table 1
Summary of Piezometer Construction

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

Well	Installation Date	Northing [1]	Easting [1]	Top of Casing Elevation (feet NAVD88)[2]	Ground Surface Elevation (feet NAVD88)[2]	Top of Screen Elevation (feet NAVD88)[3]	Bottom of Screen Elevation (feet NAVD88)[3]	Screen Length (feet)	Groundwater Zone Screened	Location
AP1GWA-1	4/20/2018	1066048.91	2439462.98	345.44	342.28	318.6	308.6	10.0	Overburden/ Bedrock	Upgradient
AP1GWA-2	4/20/2018	1065095.10	2439623.37	341.42	338.55	320.9	310.9	10.0	Overburden/ Bedrock	Upgradient
AP1PZ-1	5/1/2021	1062799.79	2440164.34	338.97	335.92	261.9	251.9	10.0	Overburden/ Bedrock	Downgradient
AP1PZ-2	5/2/2021	1062573.21	2440300.14	339.58	336.64	287.5	277.5	10.0	Bedrock	Downgradient
AP1PZ-3	5/4/2021	1062286.28	2440387.36	338.57	335.50	281.7	271.7	10.0	Overburden/ Bedrock	Downgradient
AP1PZ-4	5/11/2021	1061989.86	2440520.65	338.36	334.98	281.4	271.4	10.0	Overburden	Downgradient
AP1PZ-5	5/13/2021	1061645.61	2440599.18	339.81	336.61	283.1	273.1	10.0	Overburden	Downgradient
AP1PZ-6	5/13/2021	1061273.40	2440714.78	347.56	344.25	285.4	275.4	10.0	Overburden/PWR	Downgradient
AP1PZ-7	5/15/2021	1061483.62	2440573.47	340.91	337.56	273.7	263.7	10.0	Overburden	Downgradient
AP1PZ-8	5/16/2021	1061721.72	2440362.39	338.31	334.94	282.7	272.7	10.0	Overburden/PWR	Downgradient
AP1PZ-9	5/17/2021	1062083.33	2440187.59	337.62	334.14	291.4	281.4	10.0	Bedrock	Downgradient
AP1PZ-10	5/19/2021	1062334.74	2440116.05	338.38	335.07	292.4	282.4	10.0	Bedrock	Downgradient
AP1PZ-11	5/26/2021	1062615.94	2440044.48	338.98	335.78	276.2	266.2	10.0	Overburden	Downgradient

Notes:

1. Horizontal locations were referenced to Georgia State Plane West, North American Datum of 1983 (NAD 83).
2. Elevations are feet referenced to North American Vertical Datum of 1988 (NAVD 88).
3. Screen elevations were calculated using total depth and length of bottom sump.
4. PWR indicates Partially Weathered Rock.

Table 2
Groundwater Sampling
Events Summary

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

Well ID	Hydraulic Location	Summary of Sampling Events			Status of Monitoring Well
		August 17-23, 2021	October 26-29, 2021	February 7-9, 2022	
Purpose of Sampling Event		Monitoring	Monitoring	Monitoring	
AP1 LANDFILL INTERIM MONITORING WELL NETWORK					
AP1GWA-1	Upgradient	X	X	X	Monitoring
AP1GWA-2	Upgradient	X	X	X	Monitoring
AP1PZ-1	Downgradient	X	X	X	Monitoring
AP1PZ-2	Downgradient	X	X	X	Monitoring
AP1PZ-3	Downgradient	X	X	X	Monitoring
AP1PZ-4	Downgradient	X	X	X	Monitoring
AP1PZ-5	Downgradient	X	X	X	Monitoring
AP1PZ-6	Downgradient	X	X	X	Monitoring
AP1PZ-7	Downgradient	X	X	X	Monitoring
AP1PZ-8	Downgradient	X	X	X	Monitoring
AP1PZ-9	Downgradient	X	X	X	Monitoring
AP1PZ-10	Downgradient	X	X	X	Monitoring
AP1PZ-11	Downgradient	X	X	X	Monitoring

Notes:

X - indicates well sampled during event

Table 3
Summary of Groundwater Elevations

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Depth to Water (feet below TOC)[2]	Groundwater Elevation (feet NAVD88)[2]	Depth to Water (feet below TOC)[2]	Groundwater Elevation (feet NAVD88)[2]	Depth to Water (feet below TOC)[2]	Groundwater Elevation (feet NAVD88)[2]
Measurement Date		8/16/2021		10/25/2021		1/31/2022	
AP1GWA-1	345.44	24.84	320.60	22.87	322.57	24.27	321.17
AP1GWA-2	341.42	18.49	322.93	17.35	324.07	18.38	323.04
AP1PZ-1	338.97	44.94	294.03	44.73	294.24	44.85	294.12
AP1PZ-2	339.58	41.82	297.76	40.92	298.66	41.39	298.19
AP1PZ-3	338.57	42.82	295.75	42.06	296.51	42.49	296.08
AP1PZ-4	338.36	46.92	291.44	46.68	291.68	46.69	291.67
AP1PZ-5	339.81	48.81	291.00	48.56	291.25	48.48	291.33
AP1PZ-6	347.56	57.21	290.35	56.94	290.62	56.86	290.70
AP1PZ-7	340.91	50.30	290.61	50.25	290.66	50.15	290.76
AP1PZ-8	338.31	46.62	291.69	46.15	292.16	46.23	292.08
AP1PZ-9	337.62	40.79	296.83	39.76	297.86	40.62	297.00
AP1PZ-10	338.38	37.94	300.44	36.80	301.58	37.84	300.54
AP1PZ-11	338.98	38.48	300.50	36.38	302.60	38.29	300.69

Notes:

1. Groundwater elevations are feet referenced to North American Vertical Datum of 1988 (NAVD88)
2. Groundwater elevations were measured as depth to water from the top of casing (TOC).

Table 4
Groundwater Flow Velocity Calculations

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

Potentiometric Map Date	Location	Groundwater Elevations in Well Pairs (h_1, h_2) (feet)		Change in Elevation (Δh) (feet)	Distance Measured (L) (feet)	Hydraulic Gradient (i) (feet/foot)	Average Hydraulic Conductivity (K) (feet/day)	Estimated Effective Porosity (n_e)	Calculated Groundwater Flow Velocity (V) (feet/day)	Calculated Groundwater Flow Velocity (V) (feet/year)
August 16, 2021	AP1PZ-8 to AP1PZ-6	291.69	290.35	1.34	575	0.002	0.31	0.2	0.004	1.3
	AP1PZ-11 to AP1PZ-1	300.50	294.03	6.47	222	0.029	1.20	0.2	0.175	63.9
October 25, 2021	AP1PZ-8 to AP1PZ-6	292.16	290.62	1.54	575	0.003	0.31	0.2	0.004	1.5
	AP1PZ-11 to AP1PZ-1	302.60	294.24	8.36	222	0.038	1.20	0.2	0.226	82.6
January 31, 2022	AP1PZ-8 to AP1PZ-6	292.08	290.70	1.38	575	0.002	0.31	0.2	0.004	1.4
	AP1PZ-11 to AP1PZ-1	300.69	294.12	6.57	222	0.030	1.20	0.2	0.178	64.9

Notes:

1. The geometric mean of the in-situ hydraulic conductivity (K) slug test values for AP1PZ-8 and AP1PZ-6 used for AP1PZ-8 to AP1PZ-6 calculation; the slug test K value for AP1PZ-11 used for the AP1PZ-11 to AP1PZ-1 calculation.
2. Effective porosity of 20% was selected for the silty sands/sandy silts overburden based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and Cherry, 1979.

Table 5A
Analytical Data Summary - Groundwater
August 2021

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

	Substance	Well ID													
		AP1GWA-1	AP1GWA-2	AP1PZ-1	AP1PZ-2	AP1PZ-3	AP1PZ-4	AP1PZ-5	AP1PZ-6	AP1PZ-7	AP1PZ-8	AP1PZ-9	AP1PZ-9 Dissolved	AP1PZ-10	AP1PZ-11
		8/17/2021	8/18/2021	8/18/2021	8/19/2021	8/19/2021	8/20/2021	8/20/2021	8/23/2021	8/18/2021	8/18/2021	8/19/2021	8/19/2021	8/20/2021	8/20/2021
APPENDIX III	Boron	0.14	0.066 J	0.4	0.57	1.5	3.5	4.7	6.9	2.1	2.4	0.8	0.8	0.4	0.2
	Calcium	18	6.4	35	240	400	380	450	470	330	250	76	75	99	28
	Chloride	1.9	2	3	4.3	5	6.4	8.8	10	7.2	4.6	7.2	NA	5	3.1
	Fluoride	0.27	0.071 J	0.13	0.13	0.063 J	0.35	0.4	0.25	0.18	0.33	0.45	NA	0.48	0.12
	Sulfate	62	1.4	100	930	1300	1400	1300	2200	1300	580	310	NA	230	57
	TDS	170	82	280	1500	1900	2000	2200	3000	2000	840	550	NA	520	200
	pH	5.23	6.03	6.59	5.84	5.6	6.56	6.6	5.5	6.41	6.74	5.77	NA	6.53	6.71
APPENDIX IV	Antimony	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	0.00040 J	< 0.00038	0.00041 J	< 0.00038	0.00070 J	< 0.00038	< 0.00038	< 0.00038
	Arsenic	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	0.00055 J	0.0013	0.0015	0.002	0.0016	0.00041 J	0.00036 J	0.0032	< 0.00031
	Barium	0.059	0.044	0.059	0.035	0.036	0.09	0.1	0.035	0.097	0.085	0.047	0.047	0.045	0.021
	Beryllium	0.0019 J	< 0.00018	< 0.00018	0.00071 J	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	0.00028 J	0.00023 J	< 0.00018	< 0.00018
	Cadmium	0.00040 J	< 0.00022	< 0.00022	0.0014 J	0.00050 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	0.00064 J	0.00057 J	< 0.00022	< 0.00022
	Chromium	0.0038	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	0.0015 J	< 0.0015	< 0.0015	< 0.0015	0.0036	< 0.0015
	Cobalt	0.0084	0.0082	0.00065 J	0.3	0.052	0.0016 J	0.0098	0.35	0.0085	0.00090 J	0.057	0.055	0.0023 J	0.0013 J
	Lead	< 0.00013	< 0.00013	< 0.00013	0.00035 J	< 0.00013	< 0.00013	0.00023 J	< 0.00013	0.00013 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	0.00023 J
	Lithium	0.011	< 0.0034	< 0.0034	0.028	0.053	0.0059	0.067	0.0064	0.0038 J	< 0.0034	0.073	0.07	0.012	< 0.0034
	Mercury	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
	Molybdenum	< 0.00061	< 0.00061	0.0015 J	< 0.00061	0.0014 J	0.022	0.044	0.0013 J	0.011 J	0.41	0.0021 J	0.0022 J	0.0050 J	0.0023 J
	Radium	0.552	0.333 U	-0.198 U	0.589	0.906	0.251 U	1.03	0.517	0.713	1.45	0.777	NA	0.774 U	0.321 U
	Selenium	0.0030 J	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
	Thallium	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
2. Radium results are reported in picocuries per liter (pCi/L).
3. < indicates the constituent was not detected above the analytical method detection limit (MDL)
4. J indicates the constituent was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.

Table 5B
Analytical Data Summary - Groundwater
October 2021

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

	Substance	Well ID													
		AP1GWA-1	AP1GWA-2	AP1PZ-1	AP1PZ-2	AP1PZ-3	AP1PZ-4	AP1PZ-4 Dissolved	AP1PZ-5	AP1PZ-6	AP1PZ-7	AP1PZ-8	AP1PZ-9	AP1PZ-10	AP1PZ-11
		10/26/2021	10/26/2021	10/28/2021	10/28/2021	10/29/2021	10/27/2021	10/27/2021	10/29/2021	10/26/2021	10/26/2021	10/27/2021	10/28/2021	10/27/2021	10/28/2021
APPENDIX III	Boron	0.12	<0.039	0.41	0.48	1.6	3.7	3.7	6.5	6.5	2	2.5	0.75	0.36	0.16
	Calcium	22	4.5	33	190	370	400	360	590	420	310	300	69	94	25
	Chloride	1.6	2.1	2.9	4.0	5.7	5.9	NA	7.9	10	6.8	3.9	7.2	4.5	3.0
	Fluoride	0.29	0.074 J	0.076 J	0.13	0.088 J	0.2	NA	0.32	0.13 J	0.15	0.25	0.45	0.4	0.15
	Sulfate	69	1.5	100	820	1300	1300	NA	1900	2200	1300	660	300	300	60
	TDS	160	65	250	1200	1900	2000	NA	2800	3100	2000	1300	510	520	190
	pH	4.76	5.98	6.44	5.86	5.6	6.47	NA	6.36	5.66	6.45	6.67	5.49	6.58	6.78
APPENDIX IV	Antimony	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	0.00057 J	0.00038 J	0.00058 J
	Arsenic	0.00074 J	< 0.00031	< 0.00031	< 0.00031	< 0.00031	<0.00031	<0.00031	0.0011	0.0014	0.0017	0.00066 J	<0.00031	0.003	< 0.00031
	Barium	0.082	0.027	0.058	0.024	0.028	0.07	0.062	0.08	0.031	0.077	0.076	0.035	0.039	0.02
	Beryllium	0.0041	< 0.00018	< 0.00018	0.00047 J	< 0.00018	< 0.00018	< 0.00018	< 0.00018	0.00021 J	< 0.00018	< 0.00018	0.00029 J	< 0.00018	< 0.00018
	Cadmium	0.00065 J	< 0.00022	< 0.00022	0.00084 J	0.00077 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	0.00055 J	< 0.00022	< 0.00022
	Chromium	0.0036	0.0072	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	<0.0015	< 0.0015
	Cobalt	0.015	0.00029 J	0.00073 J	0.19	0.056	0.0013 J	0.0013 J	0.018	0.4	0.0036	0.00068 J	0.079	0.0018 J	0.00044 J
	Lead	0.00013 J	< 0.00013	0.00013 J	0.00043 J	< 0.00013	0.00026 J	< 0.00013	< 0.00013	< 0.00013	0.00051 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013
	Lithium	0.019	< 0.0034	0.0038 J	0.021	0.058	0.0073	0.0066	0.13	0.0057	< 0.0034	< 0.0034	0.099	0.013	< 0.0034
	Mercury	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
	Molybdenum	< 0.00061	< 0.00061	0.00096 J	< 0.00061	0.00086 J	0.0085 J	0.0073 J	0.031	0.00076 J	0.0030 J	0.47	0.00068 J	0.0045 J	0.0022 J
	Radium	1.08	0.935	0.405 U	1.02	1.13	1.11	NA	0.826	0.534	0.444	1.55	0.728	1.05	0.00478 U
	Selenium	0.0023 J	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
	Thallium	0.00017 J	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
2. Radium results are reported in picocuries per liter (pCi/L).
3. < indicates the constituent was not detected above the analytical method detection limit (MDL)
4. J indicates the constituent was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.

Table 5C
Analytical Data Summary - Groundwater
February 2022

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

	Substance	Well ID												
		AP1GWA-1	AP1GWA-2	AP1PZ-1	AP1PZ-2	AP1PZ-3	AP1PZ-4	AP1PZ-5	AP1PZ-6	AP1PZ-7	AP1PZ-8	AP1PZ-9	AP1PZ-10	AP1PZ-11
		2/07/2022	2/07/2022	2/8/2022	2/7/2022	2/08/2022	2/08/2022	2/08/2022	2/08/2022	2/7/2022	2/08/2022	2/08/2022	2/9/2022	2/8/2022
APPENDIX III	Boron	0.13	<0.060	0.33	0.44	1.5	3.6	6.8	6.5	2.4	2.6	0.73	0.33	0.24
	Calcium	20	5.6	32	180	400	380	630	440	350	300	65	84	23
	Chloride	1.8	2.2	2.7	3.7	5.2	5.6	6.9	8	9	3.1	5.8	7.9	1.5
	Fluoride	0.27	0.075 J	0.079 J	0.09 J	0.059 J	0.2	0.34	0.089 J	0.14	0.25	0.48	0.47	0.094 J
	Sulfate	58	1.8	110	630	1300	1400	1900	<1.9	1500	680	300	220	51
	TDS	160	64	250	1000	2100	2200	3000	3200	2100	1400	600	490	220
	pH	5.27	5.98	6.57	6.1	5.63	6.48	6.43	5.59	6.42	6.42	4.63	6.19	6.75
APPENDIX IV	Antimony	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	0.00051 J	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051
	Arsenic	<0.00028	<0.00028	<0.00028	0.00031 J	<0.00028	<0.00028	0.0011	0.00081 J	0.00037 J	<0.00028	<0.00028	0.0021	<0.00028
	Barium	0.053	0.035	0.053	0.024	0.026	0.056	0.069	0.023	0.074	0.067	0.03	0.036	0.021
	Beryllium	0.0023 J	<0.00027	<0.00027	0.0003 J	<0.00027	<0.00027	<0.00027	0.00036 J	<0.00027	<0.00027	0.00036 J	<0.00027	<0.00027
	Cadmium	0.00046 J	<0.00022	<0.00022	0.00062 J	0.0012 J	<0.00022	<0.00022	<0.00022	0.00043 J	<0.00022	0.00091 J	<0.00022	<0.00022
	Chromium	0.004	0.0044	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.01	0.0042	0.00054 J	0.11	0.058	0.0012 J	0.019	0.41	0.0013 J	0.00047 J	0.088	0.0021 J	<0.00026
	Lead	<0.00017	<0.00017	<0.00017	0.00025 J	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017
	Lithium	0.011	0.0017 J	0.0043 J	0.016	0.059	0.006	0.16	0.011	0.0031 J	0.003 J	0.12	0.015	0.002 J
	Mercury	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Molybdenum	<0.00061	<0.00061	0.001 J	<0.00061	0.00065 J	0.0023 J	0.029	<0.00061	0.0025 J	0.35	<0.00061	0.0037 J	0.00069 J
	Radium	0.335 U	0.262 U	0.346 U	-0.0696 U	0.85	0.337 U	1.17	0.99	0.913	1.22	0.83	0.564	0.214 U
	Selenium	0.0025 J	<0.00074	0.00096 J	0.0008 J	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074	<0.00074
	Thallium	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	0.00052 J	<0.00047	<0.00047	<0.00047	<0.00047

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
2. Radium results are reported in picocuries per liter (pCi/L).
3. < indicates the constituent was not detected above the analytical method detection limit (MDL)
4. J indicates the constituent was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.

Table 6A
Analytical Data Summary - Surface Water
September 2021

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

	Substance	Surface Water Sample Location						
		OR-0.8	OR-0.3	OR-0.1	OR+0.25	OR+1.0	BC-0.3	BC-0.1
		9/30/2021	9/30/2021	9/30/2021	9/30/2021	9/30/2021	9/30/2021	9/30/2021
APPENDIX III	Boron	0.039 J	0.042 J	0.041 J	0.044 J	0.041 J	<0.039	0.045 J
	Calcium	7.3	7.5	7.1	7.4	7.2	10	10
	Chloride	7.7	7.9	7.5	7.7	8.2	9.3	8.7
	Fluoride	0.13	0.11	0.12	0.12	0.16	0.12	0.098 J
	Sulfate	5.8	6.0	5.7	6.0	6.4	6.3	9.2
	TDS	65	62	61	66	73	96	93
	pH	8.03	7.96	7.83	7.79	7.81	7.39	7.55
APPENDIX IV	Antimony	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	NA	< 0.00038
	Arsenic	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	NA	< 0.00031
	Barium	0.021	0.023	0.022	0.023	0.021	NA	0.038
	Beryllium	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	NA	< 0.00018
	Cadmium	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	NA	< 0.00022
	Chromium	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	NA	< 0.0015
	Cobalt	0.00015 J	0.00018 J	0.00016 J	0.00013 J	0.00015 J	0.00029 J	0.00071 J
	Lead	< 0.00013	0.00013 J	0.00016 J	< 0.00013	< 0.00013	NA	< 0.00013
	Lithium	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
	Mercury	NA	NA	NA	NA	NA	NA	NA
	Molybdenum	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	Radium	0.142 U	0.282 U	0.362 U	0.236 U	-0.0774 U	NA	0.0196 U
	Selenium	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	NA	< 0.0015
	Thallium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	NA	<0.00015
GEOCHEMISTRY	Total Alkalinity	34	34	33	35	34	54	52
	Bicarbonate Alkalinity	34	34	33	35	34	54	52
	Total Hardness	NA	NA	NA	NA	NA	NA	NA
	Magnesium	2.3	2.3	2.3	2.3	2.2	4.9	4.9
	Potassium	3.1	3.0	3.0	3.0	2.9	2.4	2.4
	Sodium	8.3	8.3	8.1	8.2	8.1	9.4	9.1

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
2. Radium results are reported in picocuries per liter (pCi/L).
3. < indicates the constituent was not detected above the analytical method detection limit (MDL)
4. J indicates the constituent was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
5. TDS indicates total dissolved solids.
6. U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. NA indicates constituent was not analyzed

Table 6B
Analytical Data Summary - Surface Water
February 2022

Georgia Power Company - Plant Arkwright
AP-1 Landfill
Macon, Georgia

	Substance	Surface Water Sample Location						
		OR-0.8	OR-0.3	OR-0.1	OR+0.25	OR+1.0	BC-0.3	BC-0.1
		2/2/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022
APPENDIX III	Boron	0.065 J	0.060 J	<0.060	<0.060	<0.060	0.066 J	<0.060
	Calcium	6.3	6.1	6.1	6.2	6.3	8.8	9.3
	Chloride	7.3	7.7	7.7	7.8	7.6	9.0	8.8
	Fluoride	0.066 J	0.057 J	0.055 J	0.055 J	0.056 J	0.086 J	0.048 J
	Sulfate	6.4	6.6	6.6	6.6	6.6	8.1	9.1
	TDS	61	54	60	62	67	74	86
	pH	7.12	7.04	7.04	6.87	6.40	6.88	6.86
APPENDIX IV	Antimony	< 0.00051	< 0.00051	< 0.00051	< 0.00051	< 0.00051	NA	< 0.00051
	Arsenic	<0.00028	<0.00028	<0.00028	<0.00028	<0.00028	NA	0.00049 J
	Barium	0.027	0.027	0.026	0.027	0.027	NA	0.036
	Beryllium	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	NA	< 0.00027
	Cadmium	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	NA	< 0.00022
	Chromium	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	NA	< 0.0015
	Cobalt	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	0.00058 J	0.00078 J
	Lead	0.00024 J	0.00023 J	0.00023 J	0.00028 J	0.00022 J	NA	<0.00017
	Lithium	0.0010 J	0.0012 J	0.0010 J	0.00085 J	0.00094 J	0.0011 J	0.0011 J
	Mercury	NA	NA	NA	NA	NA	NA	NA
	Molybdenum	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	Radium	NA	NA	NA	NA	NA	NA	NA
	Selenium	< 0.00074	< 0.00074	< 0.00074	< 0.00074	< 0.00074	NA	< 0.00074
	Thallium	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	NA	<0.00047
GEOCHEMISTRY	Total Alkalinity	26	24	25	25	25	41	44
	Bicarbonate Alkalinity	26	24	25	25	25	41	44
	Total Hardness	NA	NA	NA	NA	NA	NA	NA
	Magnesium	2.1	2.0	2.0	2.1	2.0	4.1	4.2
	Potassium	2.4	2.3	2.3	2.4	2.4	1.7	1.7
	Sodium	7.6	7.3	7.4	7.7	7.6	8.7	8.8

Notes:

1. Results for constituents are reported in milligrams per liter (mg/L). pH values are reported in standard units (s.u.)
2. Radium results are reported in picocuries per liter (pCi/L).
3. < indicates the constituent was not detected above the analytical method detection limit (MDL)
4. J indicates the constituent was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
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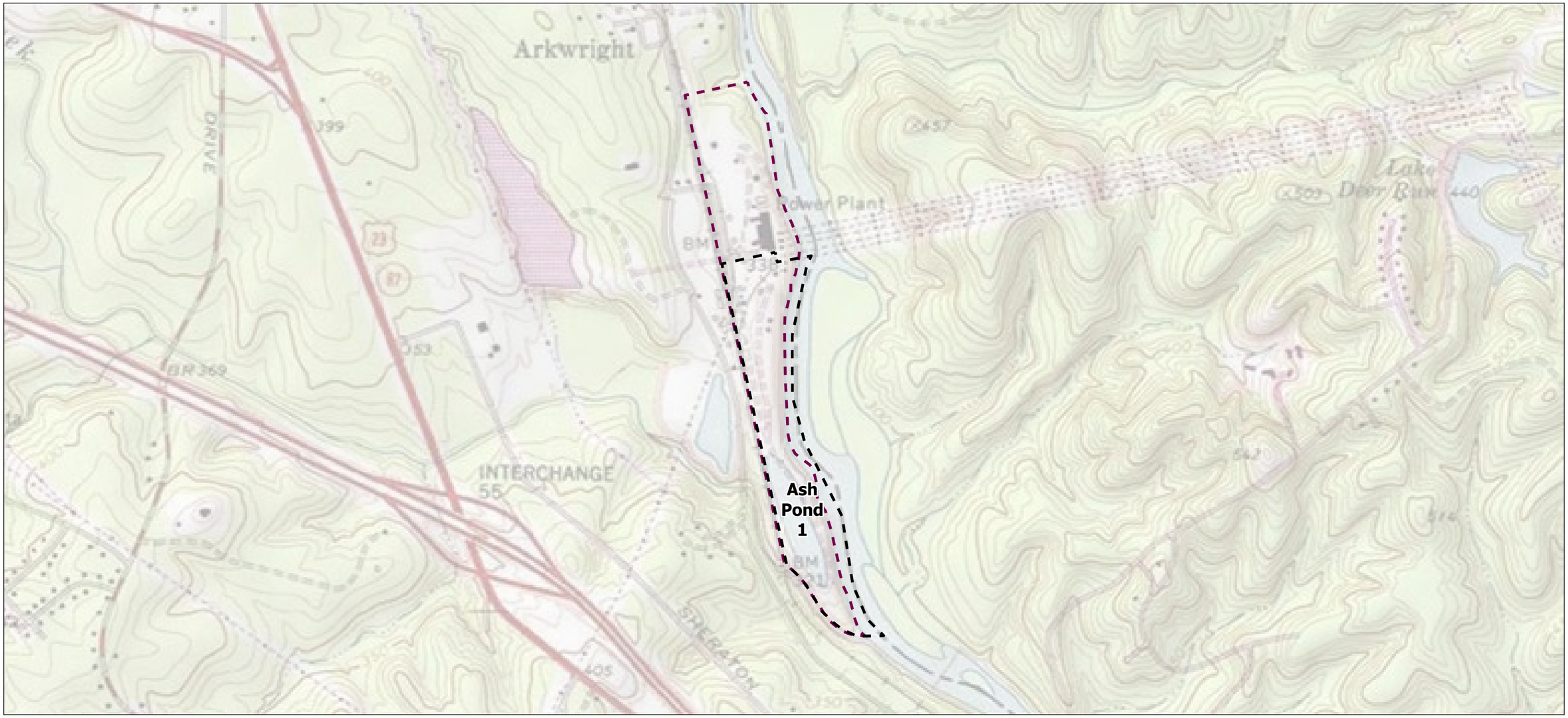
6. U indicates the constituent was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
7. NA indicates constituent was not analyzed

FIGURES



Notes
1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: Tax Parcel and AP-1 Landfill Boundary provided by Southern Company Services and Wood Environment & Infrastructure Solutions
3. Background: Copyright:© 2013 National Geographic Society, i-cubed, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS

Legend

- Ash Pond 1 Landfill Permit Boundary
- Ash Pond 1 Tax Parcel

0 — 1,000 — 2,000 Feet

(At original document size of 11x17)
1:12,000

N

Stantec

Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 7/25/2022
TR by MP on 7/25/2022
IR by MD on 7/25/2022

Client/Project 175569434
Georgia Power
2022 Semiannual Groundwater Monitoring Report
Plant Arkwright Ash Pond 1

Figure No.
1

Title
Site Location Map

Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: AP-1 Boundary, Surface Water Samples, Piezometers, and Beaverdam Creek locations provided by Southern Company Services and Wood Environment & Infrastructure Solutions
3. Background: Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- Piezometer Location
- Surface Water Sampling Location
- Beaverdam Creek
- Ash Pond 1 Landfill Permit Boundary

0 700 1,400 Feet

(At original document size of 11x17)
1:8,400

N

Stantec

Georgia Power

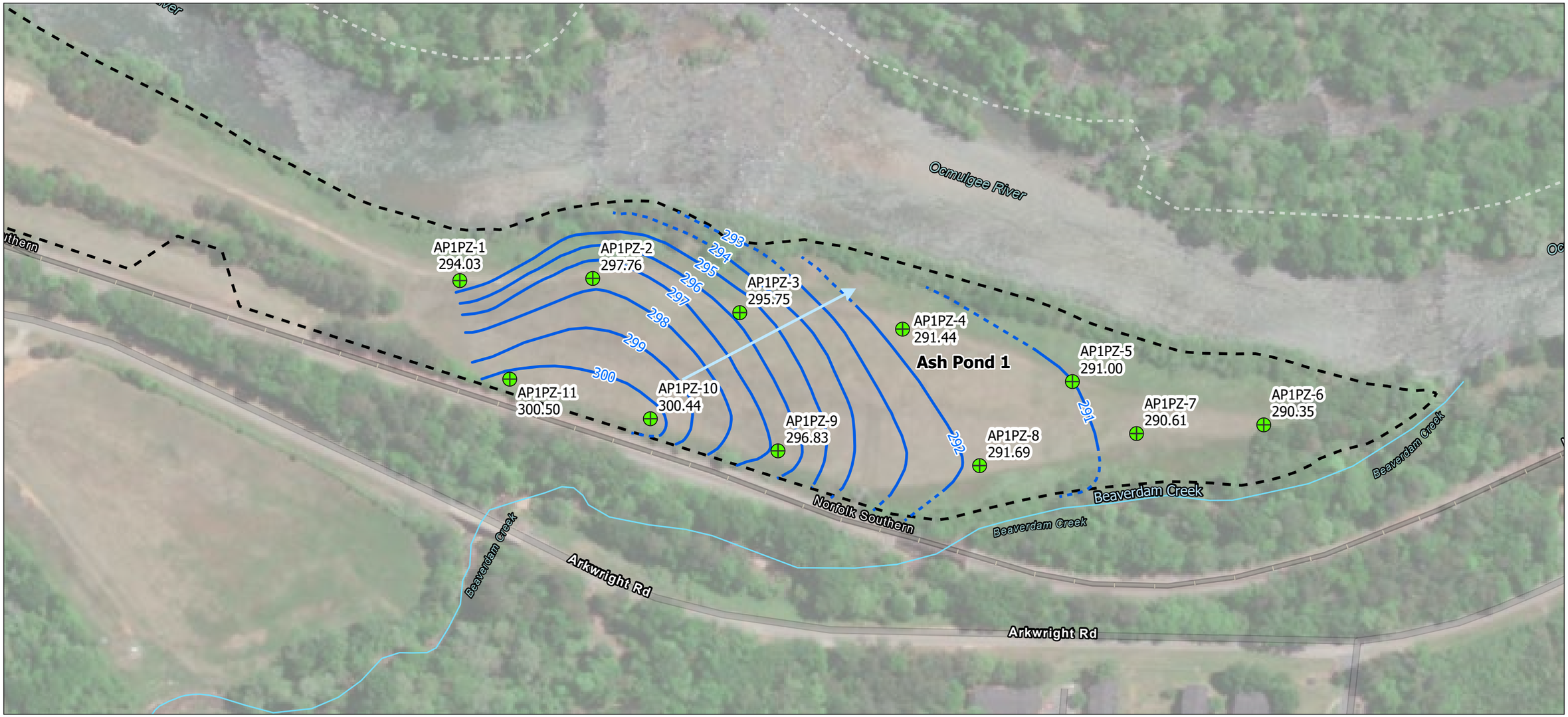
Project Location
Macon, Georgia

Prepared by DMB on 7/25/2022
TR by MP on 7/25/2022
IR by MD on 7/25/2022

Client/Project 175569434
Georgia Power
2022 Semiannual Groundwater Monitoring Report
Plant Arkwright Ash Pond 1

Figure No.
2

Title
Piezometer and Surface Water Location Map



Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: AP-1 Boundary, Piezometer, Beaverdam Creek, Contours, and Flow Direction provided by Southern Company Services and Wood Environment & Infrastructure Solutions
3. Background: Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- Piezometer Location
- Beaverdam Creek
- Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour Aug 2021 (feet (ft) NAVD88)
- Inferred Potentiometric Surface Contour Aug 2021 (ft NAVD88)
- Approximate Limits of Ash Pond 1 Landfill

294.03 Groundwater Elevation (ft NAVD88)

BRIAN STEELE
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
7.26.22
No. PG002171

0 200 400 Feet

(At original document size of 11x17)
1:2,400

N

Stantec

Georgia Power

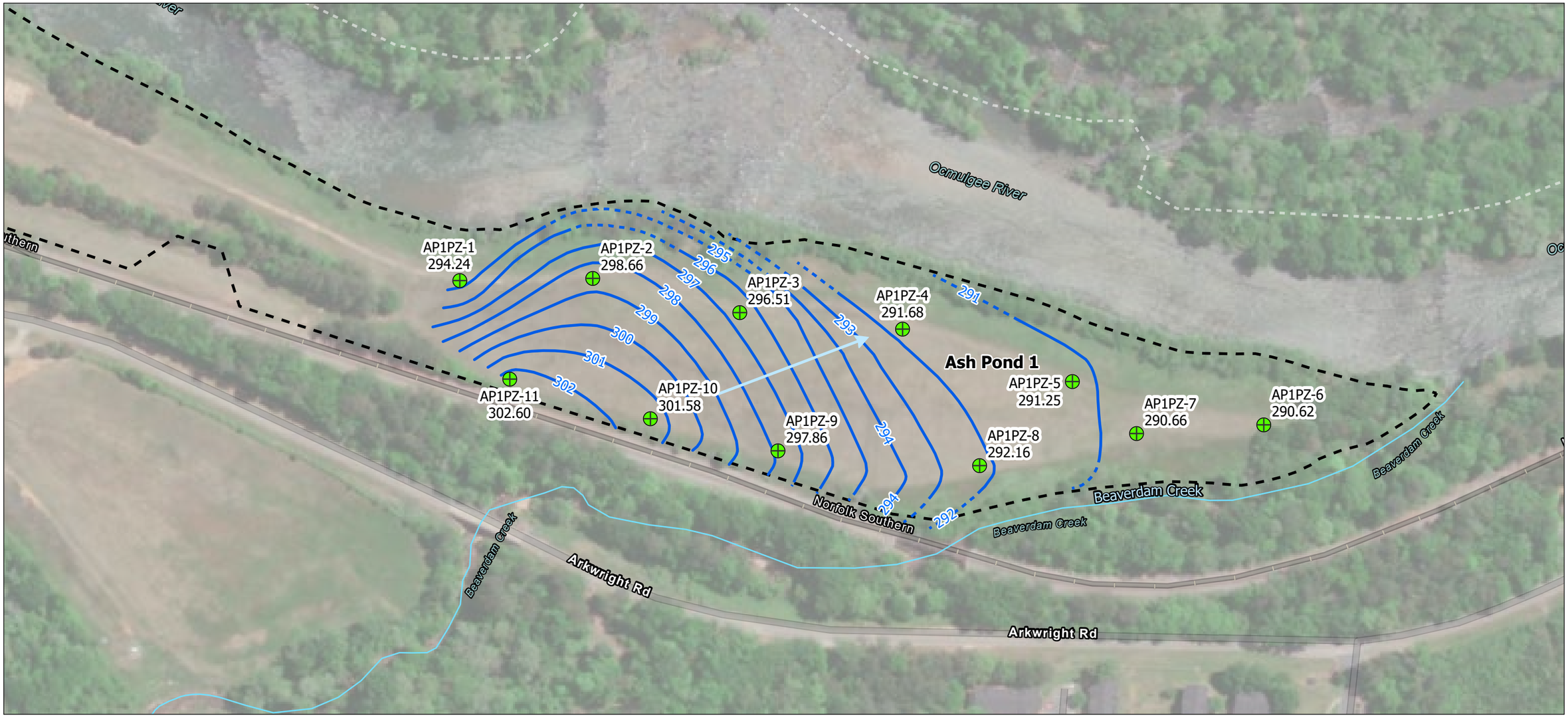
Project Location
Macon, Georgia

Prepared by DMB on 7/25/2022
TR by MP on 7/25/2022
IR by MD on 7/25/2022

Client/Project 175569434
Georgia Power
2022 Semiannual Groundwater Monitoring Report
Plant Arkwright Ash Pond 1

Figure No.
3

Title
Potentiometric Surface Contour Map AP-1 Landfill August 2021



Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: AP-1 Boundary, Piezometer, Beaverdam Creek, Contours, and Flow Direction provided by Southern Company Services and Wood Environment & Infrastructure Solutions
3. Background: Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- Piezometer Location
- Beaverdam Creek
- Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour Oct 2021 (feet (ft) NAVD88)
- Inferred Potentiometric Surface Contour Oct 2021 (ft NAVD88)
- Approximate Limits of Ash Pond 1 Landfill
- 294.24 Groundwater Elevation (ft NAVD88)

BRIAN STEELE
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
7.26.22
No. PG002171

0 200 400 Feet
(At original document size of 11x17)
1:2,400

N

Stantec

Georgia Power

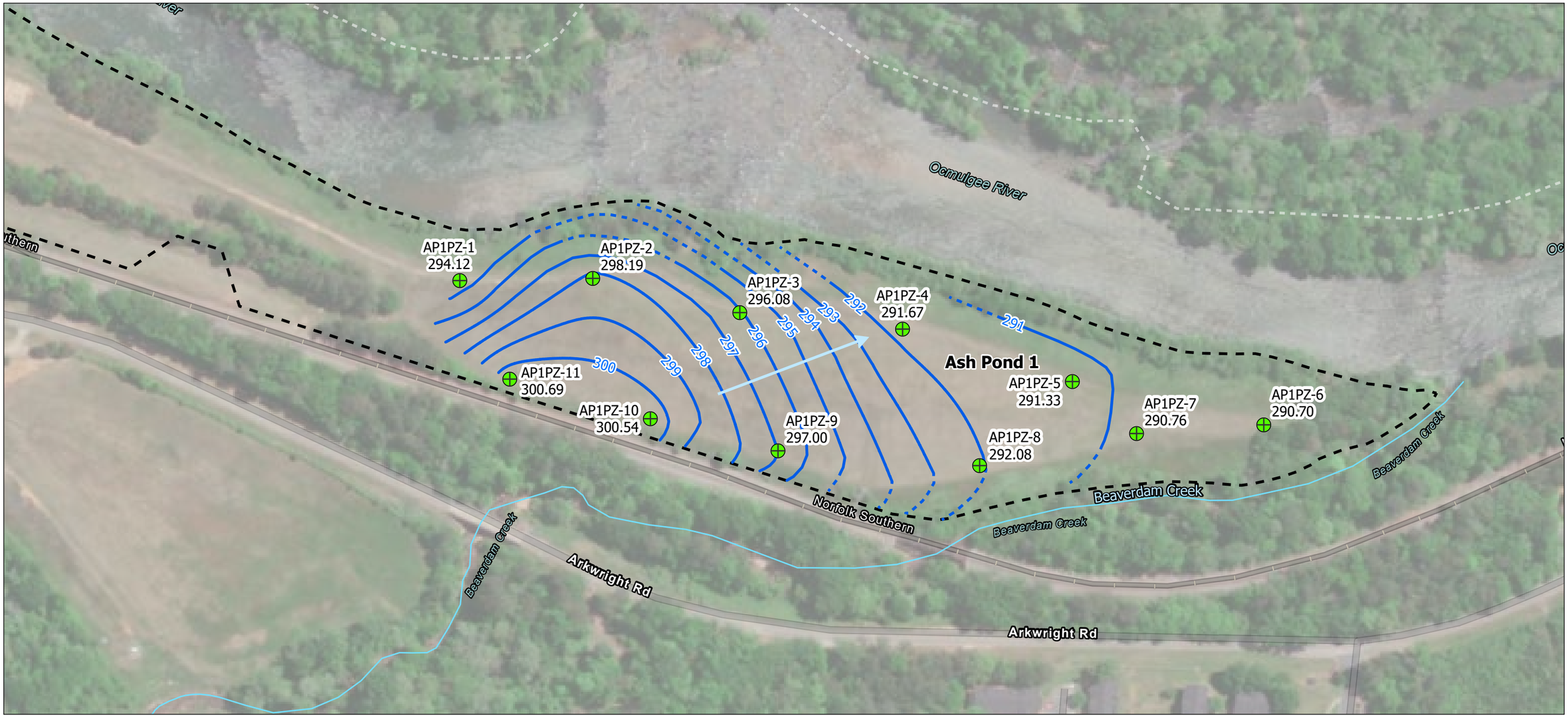
Project Location
Macon, Georgia

Prepared by DMB on 7/25/2022
TR by MP on 7/25/2022
IR by MD on 7/25/2022

Client/Project 175569434
Georgia Power
2022 Semiannual Groundwater Monitoring Report
Plant Arkwright Ash Pond 1

Figure No.
4

Title
Potentiometric Surface Contour Map AP-1 Landfill October 2021



Notes

1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
2. Data Sources: AP-1 Boundary, Piezometer, Beaverdam Creek, Contours, and Flow Direction provided by Southern Company Services and Wood Environment & Infrastructure Solutions
3. Background: Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- Piezometer Location
- Beaverdam Creek
- Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour Jan 2022 (feet (ft) NAVD88)
- Inferred Potentiometric Surface Contour Jan 2022 (ft NAVD88)
- Approximate Limits of Ash Pond 1 Landfill

300.69 Groundwater Elevation (ft NAVD88)

BRIAN STEELE
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
7.26.22
No. PG002171

0 200 400 Feet
(At original document size of 11x17)
1:2,400

N

Stantec

Georgia Power

Project Location
Macon, Georgia

Prepared by DMB on 7/25/2022
TR by MP on 7/25/2022
IR by MD on 7/25/2022

Client/Project 175569434
Georgia Power
2022 Semiannual Groundwater Monitoring Report
Plant Arkwright Ash Pond 1

Figure No.
5

Title
Potentiometric Surface Contour Map AP-1 Landfill January 2022

APPENDIX A
WELL INSPECTIONS

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP1 6WA-1
Date: 8-12-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Eric Guillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number: AP164VA-2
Well ID:
Date: 4-11-23

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Gallen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIPE-1
Date: 8-12-21

		yes	no	n/a
1	Location/identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Gallen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP1PZ-5
Date: 8-14-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Gallen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP1PZ-3
Date: 8-16-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Gallen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIP-4
Date: 8-14-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Guillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP2-P2-5
Date: 8-14-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Ever Guillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APLF2-6
Date: 8-14-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Gillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP1 PZ-7
Date: 8-14-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Guillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP1FX-E
Date: 6-14-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Guillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: MW-AUFZ-9
Date: 8-16-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Guillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP1PZ-10
Date: 8-14-24

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Gillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP1 PZ-11
Date: 8-16-21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			N/A
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?			N/A
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			N/A
c	Does the well require redevelopment (low flow, turbid)?			N/A
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		
7	Corrective actions as needed, by date:			

Signature and Seal of PE/PG responsible for inspection

Evan Guillen

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIGWA-1
Date: 10/23/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

David Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIGWA-2
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Daniel Hamel

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP/PZ-1
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

David Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APID 2-2
Date: 10/25/21

		yes	no	n/a
1	Location/identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

David Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APW2-3
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

David Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: API PZ-4
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Daniel Howell

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APPZ-5
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Daniel Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIPZ-6
Date: 10/25/21

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

David Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APPZ-7
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

David Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIPZ-3
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Daniel Hood

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIPZ-9
Date: 10/25/21

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling Groundwater Wells Only**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Daniel Howard

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: API PZ-10
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

Daniel Hamel

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: APIPZ-11
Date: 10/25/21

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?			✓
c	Does the well require redevelopment (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature and Seal of PE/PG responsible for inspection

David Harwood

Groundwater Monitoring Well Integrity Form

Site Name: Point Mallard Golf

Permit Number:

Well ID: EPGWM-1

Date: 4/21/21

		yes	no	n/a
1	Locking cap installed			
a	Is the well cap present?	✓		
b	Is the well cap properly labeled?	✓		
c	Is the well cap damaged? (Cracked, broken, missing pieces, etc.)		✓	
d	Is the well cap functioning properly? (Does it lock and is the key available?)	✓		
2	Protective Casing			
a	Is the protective casing present? (Flush mount: Is the lid present and in good condition? Above ground: Is the casing present?)	✓		
b	Is the casing damaged? (Cracked, broken, missing pieces, etc.)	✓		
c	Does the casing have a weep hole?	✓		
d	Is the well identification clearly labeled on the protective casing?	✓		
e	Is the annular space between the well and the protective casing filled with sand?	✓		
f	Is the protective casing in good condition? (Not bent, rusted, etc.)	✓		
3	Surface Seal			
a	Is the surface seal present? (Concrete collar or bentonite)	✓		
b	Is the surface seal in good condition? (No cracks or gaps)	✓		
c	Is the surface seal sloped to direct water away from the well?	✓		
d	Is the surface seal free of standing water? (Water should drain away from the well)	✓		
e	Is the surface seal in good condition? (No cracks or gaps)	✓		
4	Well Casing			
a	Does the well casing appear to be in good condition? (No cracks, holes, or damage)	✓		
b	Is the casing free of rust or corrosion? (If applicable)	✓		
c	Is the casing plumb? (Vertical)	✓		
d	Is the casing damaged? (Bent, broken, etc.)	✓		
e	Is the well casing at the correct height? (Not too high or too low)	✓		
f	Is the well casing properly labeled? (Well ID, date, etc.)	✓		
g	Is the well casing free of debris? (Leaves, dirt, etc.)	✓		
5	Sampling Connections			
a	Does the well have a sampling port?	✓		
b	Is the sampling port in good condition? (No leaks or damage)	✓		
c	Does the well have a pump?		✓	
6	Based on your observations, is the well in compliance with the Groundwater Monitoring Well Permit? (If no, explain in the comments section)	✓		

7 Comments:

Signature and Date: 4/21/21

Groundwater Monitoring Well Integrity Form

Site Name: [illegible]
Inspector: [illegible]
Well ID: AP GWA-2
Date: 1/31/22

		yes	no	n/a
1	[illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]		✓	
	[illegible]	✓		
2	Protective Casing			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]	✓		
d	[illegible]	✓		
e	[illegible]	✓		
3	[illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]			
d	[illegible]	✓		
e	[illegible]	✓		
4	[illegible]			
a	[illegible]	✓		
b	[illegible]			
c	[illegible]	✓		
d	[illegible]	✓		
e	[illegible]	✓		
f	[illegible]	✓		
g	[illegible]	✓		
5	Sampling Groundwater [illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]		✓	
6	[illegible]	✓		

7 Comments / Corrective Actions Required by Date

Signature of Person Responsible for Inspection:

[illegible]

Groundwater Monitoring Well Integrity Form

Site Name: Point ASRJ-1 Grid

Project Number:

Well ID: AP1PZ-1

Date: 11/21/22

		yes	no	n/a
1	**Location and Protection**			
a	Is the well in a visible and accessible location?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well visible and free of vegetation that may impair access for sampling?		✓	
d	Is the well clear of debris and free from standing water? (Note if standing water is present)	✓		
2	**Integrity of Casing**			
a	Is the protective casing free of damage, rust, or other defects?	✓		
b	Is the casing firmly attached to the well pad?	✓		
c	Does the well cap fit tightly and lock properly?	✓		
d	Is the well pad around the casing intact and sloped to prevent water pooling?	✓		
e	Is the casing free of cracks or holes?	✓		
3	**Well Pad**			
a	Is the well pad in good condition (no cracks, heaving, or settling)?	✓		
b	Is the well pad large enough to allow for safe sampling activities?	✓		
c	Is the well pad free of standing water or debris?	✓		
d	Is the well pad labeled with the correct well ID?	✓		
4	**Identification and Labeling**			
a	Does the well have a clearly visible and legible identification number?	✓		
b	Is the labeling durable and resistant to weathering and tampering?	✓		
c	Is the well ID consistent with the site's well numbering system?	✓		
d	Is the well ID recorded in the site's monitoring records?	✓		
e	Is the well ID clearly marked on the well pad and casing?	✓		
f	Is the well ID visible from a distance to prevent accidental damage during site activities?	✓		
5	**Sampling Considerations**			
a	Is the well accessible for sampling personnel and equipment?	✓		
b	Is the well free of obstructions that could interfere with sampling (e.g., debris, vegetation)?	✓		
c	Does the well require any special tools or keys for access?		✓	
6	Based on your observations, is the well in compliance with the Groundwater Monitoring Program and Project Quality Assurance Plan?	✓		

7 Comments or Recommendations for Repairs:

Signature of Person Completing Inspection:

Groundwater Monitoring Well Integrity Form

Site Name: [illegible]
Project Number:
Well ID: MW-2
Date: 1/31/22

		yes	no	n/a
1	[illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]		✓	
d	[illegible]	✓		
2	[illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]	✓		
d	[illegible]	✓		
e	[illegible]	✓		
3	[illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]	✓		
d	[illegible]	✓		
e	[illegible]	✓		
4	[illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]	✓		
d	[illegible]	✓		
e	[illegible]	✓		
f	[illegible]	✓		
5	[illegible]			
a	[illegible]	✓		
b	[illegible]	✓		
c	[illegible]	✓		
6	[illegible]	✓		

7 [illegible]

[illegible]

Signature of [illegible]

Groundwater Monitoring Well Integrity Form

Site Name: Plant Arkwright

Permit Number:

Well ID: AP-2

Date: 1/31/22

		yes	no	n/a
1	**Location Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, well is well located in elevation drainage flow point)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and show no signs?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casing clear of debris and water or filled with (no) gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, material be moved, and does not move when stepped on)?	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or debris or any obstructions from foreign objects (such as bonnets)?	✓		
c	Is the well properly vented for equalization of air pressure?	✓		
d	Is the locking pin functioning and in the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the riser move easily when touched or can it be taken apart by hand due to lack of glue or rust of the couplings or construction)	✓		
5	**Surface Expansion Well Cap**			
a	Does well recharge adequately after purged?	✓		
b	If dedicated sampling equipment is installed is it in good condition and located in the approved groundwater sampling location?	✓		
c	Does the well require redevelopment (low flow indicator)?	N/A	✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the (1) network monitoring program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date

Signature and Seal of PE (if employed) for inspection:

Groundwater Monitoring Well Integrity Form

Site Name: Plant Wilkinson

Permit Number:

Well ID: MW-21

Date: 1/31/24

		yes	no	n/a
1	**Locate well and locate:**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water or well located at elevation drainage flow path)	✓		
2	**Protective Casing:**			
a	Is the protective casing free from apparent damage and does it appear vertical?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casing pair of cable and water or filled with grout/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface Pad:**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion or soil settling, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Integrity Casing:**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of cracks or breaks, or any obstructions from foreign objects (such as bolts)?	✓		
c	Is the well properly vented for equalization of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing plumb? (or does the pipe move easily when touched or can it be driven down by hand due to lack of grout or use of a improper construction)	✓		
5	**Complete Requirements Wells Only:**			
a	Does well recharge adequately after purged?	✓		
b	If stickup, is the inner casing (riser pipe) in good condition and extend 1 to 2 inches above the outer casing?	✓		
c	Does the well require redevelopment (low flow rate)?		✓	
6	Based on your professional judgement is the well construction / location appropriate to achieve the objectives of the Groundwater Monitoring Program and is it comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by Date:

Signature and Seal of PE/PG responsible for inspection:

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT

Permit Number:

Well ID: APZ-5

Date: 1/31/22

		yes	no	n/a
1	**Locked and Identified**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	In an urban or high traffic area, does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water or is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casing clear of debris and water or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends or any obstructions from foreign objects (such as debris)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing sunken? (or does the pad move away when moved or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling, Groundwater Purging Only**			
a	Does well recharge adequately when purged?	✓		
b	If pump and sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (new flow tube)?		✓	
6	Based on your personal judgement, is the well construction / location appropriate to (1) achieve the objectives of the Groundwater Monitoring Program and (2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed by Date

Signature and Seal of PE/PG responsible for inspection

David Hamrick

Groundwater Monitoring Well Integrity Form

Site Name: Point Richmond
Permit Number:
Well ID: AP1P2-6
Date: 1/21/2016

		yes	no	n/a
1	**Location Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? Are standing water or wet ground conditions around the well likely?	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface Seal**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well cap in complete contact with the protective casing?	✓		
d	Is the well pad completely sealed with the ground surface and stable? (not undermined by erosion around perimeter, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal Casing**			
a	Does the cap prevent entry of foreign matter into the well?	✓		
b	Is the casing free of cracks or breaks or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equalization of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing visible? (or does the pad merely easily when touched or can it be taken apart by hand due to lack of grout or other proper engineered seal)	✓		
5	**Sampling Pump/Bailer/Well Body**			
a	Does the well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed is it in good condition and located in the approved ground water path for the facility?	✓		
c	Does the well require redevelopment (low flow turbid)?		✓	
6	Based on your professional judgement, is the well construction location appropriate to the achieve the objectives of the Groundwater Monitoring Program and to comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed by date

Signature of Staff / PEPG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Hunt Brothers Grill
Permit Number:
Well ID: MW-2
Date: 4/3/17

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water and is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casing and borehole and water to start with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Inner Casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of rust or cracks, or any obstructions from foreign objects (such as tools)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (not easily flex or move easily when touched or can't be taken apart by hand due to lack of grout or use of the casing is compromised)	✓		
5	**Sampling Groundwater When Likely**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and secured in the designated groundwater path for the facility?	✓		
c	Does the well require redevelopment (low flow turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to effectively meet the objectives of the Groundwater Monitoring Program and to comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed by date

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant McKay(GW)
Permit Number:
Well ID: MW-3
Date: 1/31/22

		yes	no	n/a
1	**Locate well and obtain access**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well adequate? (no standing water near as well head or directs drainage flow properly)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casing and well or debris and water or filled with granulates?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, frost heave, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of holes or fissures, or any obstructions from foreign objects (such as animals)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (not deteriorated, moves easily when touched or can't be taken apart by hand due to lack of grout or use of excessive force in construction)	✓		
5	**Sampling (groundwater Wells Only)**			
a	Does well recharge adequately when purged?	✓		
b	Is the dedicated sampling equipment in good condition and operational or the approved groundwater pump in the facility?	✓		
c	Does the well require redevelopment (low flow turbidity)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to achieve the objectives of the Groundwater Monitoring Program and it comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed by date

Signature and Seal of PE/PG responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT
Permit Number:
Well ID: AP12-4
Date: 1/11/22

		yes	no	n/a
1	**Location Identification**			
a	Is the well visible and accessible?	✓		
c	Is the well properly identified with the correct well ID?	✓		
e	Is the well in a high traffic area and does the well require protection from traffic?		✓	
c	Is the drainage around the well acceptable? (no standing water now and will outlet in several drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casing clear of debris and water or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface Pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion or rodent burrows, not heaving when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Visibility**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends or any obstructions from foreign objects (such as baler)?	✓		
c	Is the well properly vented for equalization of air pressure?	✓		
d	Is the survey point clearly marked on the main casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does it move easily when touched or can it be taken apart by hand due to lack of proper seal or other damage or deterioration)	✓		
5	**Sampling Groundwater Wells Only**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (new flow, turbid)?		✓	
6	Based on your professional judgment, is the well construction/location appropriate to 1. achieve the objectives of the Groundwater Monitoring Program and 2. comply with the applicable regulatory requirements?	✓		

7 Corrective actions to be taken (if any):

Signature and Seal of PE/PG responsible for inspection:

Groundwater Monitoring Well Integrity Form

Site Name: Plant PARKWAY
Permit Number:
Well ID: MW-2-10
Date: 1/31/22

		yes	no	n/a
1	**Locate/identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water near to well, located at elevation drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weephole?			
d	Is the annular space between casings clear of debris and water or filled with pea gravel sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in completion contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with vegetation or debris)?	✓		
4	**Integrity casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or breaks, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equalization of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (for those that may move easily when touched or can be taken apart by hand due to lack of grout or use of pea gravel in construction)	✓		
5	**Surging/ Groundwater Well Flow**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed, is in good condition and appropriate for the approved groundwater sampling for the facility?	✓		
c	Does the well require redevelopment/ low flow rates?		✓	
6	Based on your professional judgement is the well construction / location appropriate to: 1. achieve the objectives of the Groundwater Monitoring Program and 2. comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by who

Signature and Seal of PE/PG inspecting for certification

David Hamel

Groundwater Monitoring Well Integrity Form

Site Name: Plant ARKWRIGHT

Permit Number:

Well ID: [illegible]

Date: 1/31/25

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or contamination?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casing (apron) and water-proofed with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface Seal**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface (no visible void underneath by presence of small burrows and does not move when stepped on)			
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends or any obstructions from foreign objects (such as bolts)?	✓		
c	Is the well properly vented for the elimination of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pad move noticeably when loaded or can it be seen/heard apart by hand due to lack of grout or use of a soft material in construction)	✓		
5	**Sampling Groundwater Wells Only**			
a	Does well recharge adequately when purged?	✓		
b	If dedicated sampling equipment installed is it a good match for and specified in the approved groundwater plan for the facility?	✓		
c	Does the well require redevelopment (low flow turbidity)?		✓	
6	Based on your professional judgement is this well construction/location appropriate to help achieve the objectives of the Groundwater Monitoring Program and to comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed by date

Signature and Title of PLPG responsible for inspection

APPENDIX B
FIELD SAMPLING DATA AND ANALYTICAL DATA REPORTS

B.1 Field Sampling Data

Low-Flow Test Report:

Test Date / Time: 8/17/2021 2:38:32 PM
Project: Plant Arkwright
Operator Name: Ever Guillen

Location Name: AP1GWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.5 ft** **Total Depth: 37.5 ft** **Initial Depth to Water: 25.28 ft**	**Pump Type: Peristaltic** **Tubing Type: PE** **Pump Intake From TOC: 36 ft** **Estimated Total Volume Pumped: 4306.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: SmarTROLL MP** **Serial Number: 642531**

Test Notes:
AP1GWA-1
Sample time = 1510

Weather Conditions:
Hot, humid, rain

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.5	+/- 10	+/- 10	+/- 5	
8/17/2021 2:38 PM	00:00	5.29 pH	22.54 °C	204.43 µS/cm	2.90 mg/L	10.20 NTU	183.1 mV	770.53 cm	200.00 ml/min
8/17/2021 2:43 PM	05:00	5.27 pH	22.73 °C	204.70 µS/cm	2.90 mg/L	9.16 NTU	139.1 mV	770.53 cm	200.00 ml/min
8/17/2021 2:48 PM	10:00	5.18 pH	22.55 °C	208.69 µS/cm	2.92 mg/L	7.11 NTU	129.8 mV	770.53 cm	200.00 ml/min
8/17/2021 2:53 PM	15:00	5.27 pH	22.43 °C	204.48 µS/cm	2.90 mg/L	5.69 NTU	126.1 mV	770.53 cm	200.00 ml/min
8/17/2021 2:58 PM	20:00	5.24 pH	22.14 °C	206.57 µS/cm	2.86 mg/L	5.16 NTU	124.2 mV	770.53 cm	200.00 ml/min
8/17/2021 3:00 PM	21:32	5.23 pH	22.13 °C	207.17 µS/cm	2.93 mg/L	3.71 NTU	129.7 mV	770.53 cm	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/18/2021 11:21:38 AM
Project: Plant Arkwright
Operator Name: Ever Guillen

Location Name: AP1GWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.1 ft** **Total Depth: 31.1 ft**	**Pump Type: Peristaltic** **Tubing Type: PE** **Pump Intake From TOC: 30 ft** **Estimated Total Volume Pumped: 6000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min**	**Instrument Used: SmarTROLL MP** **Serial Number: 642531**

Test Notes:
Sample time = 1155

Weather Conditions:
Hot, clear, dry

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/18/2021 11:21 AM	00:00	6.02 pH	23.10 °C	85.46 µS/cm	0.50 mg/L	15.70 NTU	-64.0 mV	18.60 ft	200.00 ml/min
8/18/2021 11:26 AM	05:00	6.02 pH	23.30 °C	84.92 µS/cm	0.48 mg/L	13.80 NTU	-39.9 mV	18.60 ft	200.00 ml/min
8/18/2021 11:31 AM	10:00	6.03 pH	22.73 °C	85.78 µS/cm	0.48 mg/L	11.10 NTU	-38.4 mV	18.60 ft	200.00 ml/min
8/18/2021 11:36 AM	15:00	6.03 pH	22.44 °C	85.90 µS/cm	0.47 mg/L	8.36 NTU	-38.3 mV	18.60 ft	200.00 ml/min
8/18/2021 11:41 AM	20:00	6.03 pH	22.26 °C	86.01 µS/cm	0.47 mg/L	6.13 NTU	-38.4 mV	18.60 ft	200.00 ml/min
8/18/2021 11:46 AM	25:00	6.03 pH	22.13 °C	86.16 µS/cm	0.46 mg/L	5.31 NTU	-38.1 mV	18.60 ft	200.00 ml/min
8/18/2021 11:51 AM	30:00	6.03 pH	22.70 °C	86.38 µS/cm	0.44 mg/L	4.54 NTU	-41.6 mV	18.60 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/18/2021 2:38:26 PM
Project: Plant Arkwright (2)
Operator Name: Ever Guillen

Location Name: AP1PZ-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 77.62 ft** **Total Depth: 87.62 ft** **Initial Depth to Water: 41.15 ft**	**Pump Type: Peristaltic** **Tubing Type: PE** **Pump Intake From TOC: 84 ft** **Estimated Total Volume Pumped: 41206.668 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 3.54 ft**	**Instrument Used: SmarTROLL MP** **Serial Number: 642531**

Test Notes:
Sample time = 1815

Weather Conditions:
Hot, clear, humid

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/18/2021 2:38 PM	00:00	6.44 pH	32.74 °C	367.37 µS/cm	7.32 mg/L	158.00 NTU	-41.6 mV	42.57 ft	200.00 ml/min
8/18/2021 2:43 PM	05:00	6.50 pH	30.01 °C	372.10 µS/cm	2.06 mg/L	136.00 NTU	-75.3 mV	42.72 ft	200.00 ml/min
8/18/2021 2:48 PM	10:00	6.53 pH	30.05 °C	374.43 µS/cm	1.31 mg/L	113.00 NTU	-85.4 mV	42.96 ft	200.00 ml/min
8/18/2021 2:53 PM	15:00	6.57 pH	24.60 °C	365.81 µS/cm	0.50 mg/L	92.00 NTU	-84.7 mV	43.28 ft	200.00 ml/min
8/18/2021 2:58 PM	20:00	6.60 pH	24.51 °C	365.99 µS/cm	0.39 mg/L	104.00 NTU	-87.4 mV	43.57 ft	200.00 ml/min
8/18/2021 3:03 PM	25:00	6.59 pH	25.23 °C	367.09 µS/cm	0.59 mg/L	90.00 NTU	-82.5 mV	44.22 ft	200.00 ml/min
8/18/2021 3:04 PM	26:02	6.59 pH	25.25 °C	366.08 µS/cm	0.47 mg/L	77.80 NTU	-80.4 mV	44.42 ft	200.00 ml/min
8/18/2021 3:14 PM	36:02	6.56 pH	28.31 °C	365.41 µS/cm	0.53 mg/L	49.80 NTU	-80.1 mV	44.68 ft	200.00 ml/min
8/18/2021 3:24 PM	46:02	6.52 pH	28.94 °C	365.81 µS/cm	0.51 mg/L	29.60 NTU	-68.1 mV	44.69 ft	200.00 ml/min
8/18/2021 3:34 PM	56:02	6.51 pH	30.25 °C	364.21 µS/cm	0.46 mg/L	30.60 NTU	-66.1 mV	44.69 ft	200.00 ml/min
8/18/2021 3:44 PM	01:06:02	6.52 pH	28.41 °C	364.81 µS/cm	0.45 mg/L	23.50 NTU	-62.4 mV	44.69 ft	200.00 ml/min
8/18/2021 3:54 PM	01:16:02	6.55 pH	27.40 °C	363.65 µS/cm	0.44 mg/L	25.80 NTU	-58.8 mV	44.69 ft	200.00 ml/min
8/18/2021 4:04 PM	01:26:02	6.56 pH	25.23 °C	359.97 µS/cm	0.32 mg/L	23.20 NTU	-55.9 mV	44.69 ft	200.00 ml/min

8/18/2021 4:14 PM	01:36:02	6.59 pH	25.86 °C	366.21 µS/cm	0.33 mg/L	17.40 NTU	-69.9 mV	44.69 ft	200.00 ml/min
8/18/2021 4:24 PM	01:46:02	6.56 pH	26.88 °C	363.18 µS/cm	0.32 mg/L	11.30 NTU	-60.1 mV	44.69 ft	200.00 ml/min
8/18/2021 4:34 PM	01:56:02	6.57 pH	25.86 °C	359.94 µS/cm	0.32 mg/L	10.70 NTU	-55.8 mV	44.69 ft	200.00 ml/min
8/18/2021 4:44 PM	02:06:02	6.57 pH	24.60 °C	359.44 µS/cm	0.32 mg/L	9.47 NTU	-54.4 mV	44.69 ft	200.00 ml/min
8/18/2021 4:54 PM	02:16:02	6.58 pH	24.81 °C	359.27 µS/cm	0.31 mg/L	8.65 NTU	-54.5 mV	44.69 ft	200.00 ml/min
8/18/2021 5:04 PM	02:26:02	6.59 pH	24.11 °C	358.06 µS/cm	0.31 mg/L	7.35 NTU	-53.6 mV	44.69 ft	200.00 ml/min
8/18/2021 5:14 PM	02:36:02	6.59 pH	23.79 °C	357.11 µS/cm	0.30 mg/L	7.03 NTU	-51.7 mV	44.69 ft	200.00 ml/min
8/18/2021 5:24 PM	02:46:02	6.59 pH	24.69 °C	359.07 µS/cm	0.30 mg/L	6.32 NTU	-52.8 mV	44.69 ft	200.00 ml/min
8/18/2021 5:34 PM	02:56:02	6.59 pH	24.24 °C	358.27 µS/cm	0.30 mg/L	5.99 NTU	-52.2 mV	44.69 ft	200.00 ml/min
8/18/2021 5:44 PM	03:06:02	6.60 pH	24.55 °C	358.42 µS/cm	0.29 mg/L	5.50 NTU	-52.0 mV	44.69 ft	200.00 ml/min
8/18/2021 5:54 PM	03:16:02	6.59 pH	25.30 °C	359.84 µS/cm	0.29 mg/L	5.02 NTU	-52.7 mV	44.69 ft	200.00 ml/min
8/18/2021 6:04 PM	03:26:02	6.59 pH	25.34 °C	360.46 µS/cm	0.29 mg/L	4.92 NTU	-51.9 mV	44.69 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/19/2021 10:14:09 AM
Project: Plant Arkwright (3)
Operator Name: Ever Guillen

Location Name: AP1PZ-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.67 ft** **Total Depth: 62.67 ft** **Initial Depth to Water: 41.68 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 59 ft** **Estimated Total Volume Pumped: 41000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.34 ft**	**Instrument Used: SmarTROLL MP** **Serial Number: 642531**

Test Notes:
AP1PZ-2
Sample time = 1345

Weather Conditions:
Hot, clear, humid

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/19/2021 10:14 AM	00:00	5.90 pH	23.67 °C	1,140.4 µS/cm	1.32 mg/L	155.00 NTU	63.5 mV	42.02 ft	200.00 ml/min
8/19/2021 10:19 AM	05:00	5.98 pH	22.18 °C	1,175.4 µS/cm	2.61 mg/L	106.00 NTU	66.2 mV	42.02 ft	200.00 ml/min
8/19/2021 10:24 AM	10:00	6.02 pH	22.20 °C	1,184.0 µS/cm	3.65 mg/L	86.10 NTU	69.9 mV	42.02 ft	200.00 ml/min
8/19/2021 10:29 AM	15:00	6.04 pH	22.08 °C	1,191.9 µS/cm	4.32 mg/L	66.80 NTU	71.4 mV	42.02 ft	200.00 ml/min
8/19/2021 10:34 AM	20:00	6.04 pH	22.09 °C	1,203.8 µS/cm	4.51 mg/L	60.70 NTU	74.8 mV	42.02 ft	200.00 ml/min
8/19/2021 10:39 AM	25:00	6.04 pH	22.09 °C	1,209.7 µS/cm	4.56 mg/L	52.10 NTU	75.4 mV	42.02 ft	200.00 ml/min
8/19/2021 10:44 AM	30:00	6.04 pH	22.22 °C	1,228.7 µS/cm	4.70 mg/L	37.20 NTU	76.6 mV	42.02 ft	200.00 ml/min
8/19/2021 10:49 AM	35:00	6.04 pH	22.39 °C	1,236.5 µS/cm	4.79 mg/L	33.90 NTU	77.5 mV	42.02 ft	200.00 ml/min
8/19/2021 10:54 AM	40:00	6.04 pH	22.32 °C	1,246.8 µS/cm	4.71 mg/L	29.10 NTU	78.4 mV	42.02 ft	200.00 ml/min
8/19/2021 10:59 AM	45:00	6.04 pH	22.24 °C	1,255.3 µS/cm	4.69 mg/L	27.20 NTU	80.0 mV	42.02 ft	200.00 ml/min
8/19/2021 11:04 AM	50:00	6.03 pH	22.48 °C	1,267.0 µS/cm	4.67 mg/L	24.90 NTU	82.3 mV	42.02 ft	200.00 ml/min
8/19/2021 11:09 AM	55:00	6.02 pH	22.58 °C	1,282.0 µS/cm	4.86 mg/L	20.70 NTU	82.8 mV	42.02 ft	200.00 ml/min
8/19/2021 11:14 AM	01:00:00	6.03 pH	22.22 °C	1,287.5 µS/cm	4.99 mg/L	18.70 NTU	83.4 mV	42.02 ft	200.00 ml/min

8/19/2021 11:19 AM	01:05:00	6.02 pH	22.50 °C	1,294.3 µS/cm	4.94 mg/L	16.50 NTU	83.4 mV	42.02 ft	200.00 ml/min
8/19/2021 11:24 AM	01:10:00	6.02 pH	22.49 °C	1,302.4 µS/cm	4.99 mg/L	14.80 NTU	84.9 mV	42.02 ft	200.00 ml/min
8/19/2021 11:29 AM	01:15:00	6.02 pH	22.55 °C	1,307.1 µS/cm	4.93 mg/L	15.50 NTU	85.1 mV	42.02 ft	200.00 ml/min
8/19/2021 11:34 AM	01:20:00	6.02 pH	22.21 °C	1,306.3 µS/cm	4.85 mg/L	15.00 NTU	85.7 mV	42.02 ft	200.00 ml/min
8/19/2021 11:39 AM	01:25:00	6.01 pH	22.20 °C	1,327.9 µS/cm	5.08 mg/L	13.10 NTU	85.6 mV	42.02 ft	200.00 ml/min
8/19/2021 11:44 AM	01:30:00	6.00 pH	22.11 °C	1,335.1 µS/cm	5.09 mg/L	14.50 NTU	85.4 mV	42.02 ft	200.00 ml/min
8/19/2021 11:49 AM	01:35:00	6.00 pH	22.26 °C	1,344.4 µS/cm	5.05 mg/L	12.30 NTU	84.6 mV	42.02 ft	200.00 ml/min
8/19/2021 11:54 AM	01:40:00	5.99 pH	22.08 °C	1,348.3 µS/cm	5.05 mg/L	13.20 NTU	85.3 mV	42.02 ft	200.00 ml/min
8/19/2021 11:59 AM	01:45:00	5.99 pH	21.83 °C	1,355.8 µS/cm	5.05 mg/L	12.00 NTU	84.6 mV	42.02 ft	200.00 ml/min
8/19/2021 12:04 PM	01:50:00	5.99 pH	21.86 °C	1,366.2 µS/cm	5.08 mg/L	11.80 NTU	83.9 mV	42.02 ft	200.00 ml/min
8/19/2021 12:09 PM	01:55:00	5.98 pH	21.81 °C	1,370.4 µS/cm	4.76 mg/L	9.50 NTU	83.5 mV	42.02 ft	200.00 ml/min
8/19/2021 12:14 PM	02:00:00	5.96 pH	22.21 °C	1,390.4 µS/cm	4.62 mg/L	9.21 NTU	83.9 mV	42.02 ft	200.00 ml/min
8/19/2021 12:19 PM	02:05:00	5.95 pH	22.29 °C	1,402.6 µS/cm	4.68 mg/L	9.26 NTU	83.5 mV	42.02 ft	200.00 ml/min
8/19/2021 12:24 PM	02:10:00	5.95 pH	22.20 °C	1,416.8 µS/cm	4.71 mg/L	9.36 NTU	84.3 mV	42.02 ft	200.00 ml/min
8/19/2021 12:29 PM	02:15:00	5.94 pH	21.93 °C	1,431.7 µS/cm	4.83 mg/L	8.72 NTU	83.9 mV	42.02 ft	200.00 ml/min
8/19/2021 12:34 PM	02:20:00	5.93 pH	22.07 °C	1,433.1 µS/cm	4.69 mg/L	8.07 NTU	83.4 mV	42.02 ft	200.00 ml/min
8/19/2021 12:39 PM	02:25:00	5.93 pH	22.08 °C	1,441.1 µS/cm	4.81 mg/L	8.26 NTU	83.0 mV	42.02 ft	200.00 ml/min
8/19/2021 12:44 PM	02:30:00	5.92 pH	22.00 °C	1,448.3 µS/cm	4.81 mg/L	7.58 NTU	83.3 mV	42.02 ft	200.00 ml/min
8/19/2021 12:49 PM	02:35:00	5.92 pH	22.04 °C	1,459.7 µS/cm	4.91 mg/L	7.92 NTU	83.0 mV	42.02 ft	200.00 ml/min
8/19/2021 12:54 PM	02:40:00	5.92 pH	22.04 °C	1,455.2 µS/cm	4.72 mg/L	7.01 NTU	82.6 mV	42.02 ft	200.00 ml/min
8/19/2021 12:59 PM	02:45:00	5.91 pH	21.92 °C	1,464.7 µS/cm	4.71 mg/L	6.18 NTU	82.7 mV	42.02 ft	200.00 ml/min
8/19/2021 1:04 PM	02:50:00	5.89 pH	22.31 °C	1,487.6 µS/cm	5.12 mg/L	6.43 NTU	84.2 mV	42.02 ft	200.00 ml/min
8/19/2021 1:09 PM	02:55:00	5.89 pH	22.02 °C	1,484.9 µS/cm	4.59 mg/L	6.70 NTU	84.0 mV	42.02 ft	200.00 ml/min
8/19/2021 1:14 PM	03:00:00	5.88 pH	22.08 °C	1,503.8 µS/cm	4.81 mg/L	6.15 NTU	84.8 mV	42.02 ft	200.00 ml/min
8/19/2021 1:19 PM	03:05:00	5.87 pH	21.97 °C	1,503.3 µS/cm	4.77 mg/L	5.66 NTU	84.7 mV	42.02 ft	200.00 ml/min
8/19/2021 1:24 PM	03:10:00	5.87 pH	22.14 °C	1,497.5 µS/cm	4.55 mg/L	5.61 NTU	84.8 mV	42.02 ft	200.00 ml/min
8/19/2021 1:29 PM	03:15:00	5.86 pH	22.08 °C	1,505.1 µS/cm	4.55 mg/L	5.33 NTU	85.4 mV	42.02 ft	200.00 ml/min
8/19/2021 1:34 PM	03:20:00	5.85 pH	22.20 °C	1,511.3 µS/cm	4.51 mg/L	5.47 NTU	85.8 mV	42.02 ft	200.00 ml/min
8/19/2021 1:39 PM	03:25:00	5.84 pH	22.38 °C	1,511.4 µS/cm	4.44 mg/L	4.94 NTU	87.0 mV	42.02 ft	200.00 ml/min

Low-Flow Test Report:

Test Date / Time: 8/19/2021 3:30:48 PM
Project: Plant Arkwright (4)
Operator Name: Ever Guillen

Location Name: AP1PZ-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.44 ft** **Total Depth: 67.44 ft** **Initial Depth to Water: 42.38 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 14000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 1.07 ft**	**Instrument Used: SmarTROLL MP** **Serial Number: 642531**

Test Notes:
Sample time = 1645

Weather Conditions:
AP1PZ-3

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/19/2021 3:30 PM	00:00	5.75 pH	27.35 °C	1,738.1 µS/cm	3.62 mg/L	25.40 NTU	-23.8 mV	43.45 ft	200.00 ml/min
8/19/2021 3:35 PM	05:00	5.62 pH	21.74 °C	2,117.4 µS/cm	0.38 mg/L	22.10 NTU	-38.8 mV	43.45 ft	200.00 ml/min
8/19/2021 3:40 PM	10:00	5.62 pH	22.43 °C	2,125.6 µS/cm	0.36 mg/L	18.90 NTU	-45.6 mV	43.45 ft	200.00 ml/min
8/19/2021 3:45 PM	15:00	5.62 pH	22.40 °C	2,128.2 µS/cm	0.33 mg/L	16.50 NTU	-52.0 mV	43.45 ft	200.00 ml/min
8/19/2021 3:50 PM	20:00	5.62 pH	22.68 °C	2,131.5 µS/cm	0.29 mg/L	15.40 NTU	-58.4 mV	43.45 ft	200.00 ml/min
8/19/2021 3:55 PM	25:00	5.62 pH	22.90 °C	2,128.9 µS/cm	0.27 mg/L	13.20 NTU	-61.5 mV	43.45 ft	200.00 ml/min
8/19/2021 4:00 PM	30:00	5.62 pH	23.07 °C	2,125.7 µS/cm	0.25 mg/L	10.60 NTU	-65.1 mV	43.45 ft	200.00 ml/min
8/19/2021 4:05 PM	35:00	5.61 pH	23.00 °C	2,120.4 µS/cm	0.23 mg/L	9.13 NTU	-66.7 mV	43.45 ft	200.00 ml/min
8/19/2021 4:10 PM	40:00	5.61 pH	23.11 °C	2,118.0 µS/cm	0.21 mg/L	7.89 NTU	-68.9 mV	43.45 ft	200.00 ml/min
8/19/2021 4:15 PM	45:00	5.61 pH	23.25 °C	2,115.9 µS/cm	0.21 mg/L	6.71 NTU	-68.1 mV	43.45 ft	200.00 ml/min
8/19/2021 4:20 PM	50:00	5.61 pH	23.37 °C	2,120.2 µS/cm	0.21 mg/L	7.46 NTU	-70.3 mV	43.45 ft	200.00 ml/min
8/19/2021 4:25 PM	55:00	5.61 pH	23.33 °C	2,114.4 µS/cm	0.20 mg/L	6.99 NTU	-69.1 mV	43.45 ft	200.00 ml/min
8/19/2021 4:30 PM	01:00:00	5.61 pH	23.20 °C	2,117.1 µS/cm	0.20 mg/L	5.69 NTU	-71.1 mV	43.45 ft	200.00 ml/min

8/19/2021 4:35 PM	01:05:00	5.60 pH	23.09 °C	2,116.8 µS/cm	0.19 mg/L	5.07 NTU	-68.4 mV	43.45 ft	200.00 ml/min
8/19/2021 4:40 PM	01:10:00	5.60 pH	22.98 °C	2,108.7 µS/cm	0.19 mg/L	4.43 NTU	-69.9 mV	43.45 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/20/2021 9:30:58 AM
Project: Plant Arkwright (5)
Operator Name: Ever Guillen

Location Name: AP1PZ-4 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.42 ft** **Total Depth: 67.42 ft** **Initial Depth to Water: 46.92 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 23000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.2 ft**	**Instrument Used: SmarTROLL MP** **Serial Number: 642531**

Test Notes:
AP1PZ-4
Sample time = 1130

Weather Conditions:
Hot, cloudy, humid

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/20/2021 9:30 AM	00:00	6.02 pH	24.83 °C	1,958.8 µS/cm	4.41 mg/L	36.70 NTU	-34.3 mV	47.12 ft	200.00 ml/min
8/20/2021 9:35 AM	05:00	6.63 pH	21.80 °C	2,297.8 µS/cm	0.71 mg/L	31.20 NTU	-119.4 mV	47.12 ft	200.00 ml/min
8/20/2021 9:40 AM	10:00	6.75 pH	22.27 °C	2,284.0 µS/cm	0.70 mg/L	26.10 NTU	-121.2 mV	47.12 ft	200.00 ml/min
8/20/2021 9:45 AM	15:00	6.80 pH	22.11 °C	2,286.7 µS/cm	0.62 mg/L	21.40 NTU	-119.5 mV	47.12 ft	200.00 ml/min
8/20/2021 9:50 AM	20:00	6.81 pH	22.22 °C	2,272.1 µS/cm	0.59 mg/L	17.30 NTU	-118.3 mV	47.12 ft	200.00 ml/min
8/20/2021 9:55 AM	25:00	6.81 pH	22.13 °C	2,261.3 µS/cm	0.65 mg/L	13.70 NTU	-114.2 mV	47.12 ft	200.00 ml/min
8/20/2021 10:00 AM	30:00	6.81 pH	22.15 °C	2,261.3 µS/cm	0.60 mg/L	11.00 NTU	-111.5 mV	47.12 ft	200.00 ml/min
8/20/2021 10:05 AM	35:00	6.79 pH	22.21 °C	2,270.1 µS/cm	0.56 mg/L	8.92 NTU	-108.0 mV	47.12 ft	200.00 ml/min
8/20/2021 10:10 AM	40:00	6.79 pH	22.35 °C	2,264.9 µS/cm	0.52 mg/L	8.02 NTU	-107.0 mV	47.12 ft	200.00 ml/min
8/20/2021 10:15 AM	45:00	6.77 pH	22.35 °C	2,267.0 µS/cm	0.49 mg/L	7.28 NTU	-102.9 mV	47.12 ft	200.00 ml/min
8/20/2021 10:20 AM	50:00	6.76 pH	22.41 °C	2,262.5 µS/cm	0.48 mg/L	6.06 NTU	-101.4 mV	47.12 ft	200.00 ml/min
8/20/2021 10:25 AM	55:00	6.74 pH	22.40 °C	2,257.0 µS/cm	0.47 mg/L	5.88 NTU	-98.1 mV	47.12 ft	200.00 ml/min
8/20/2021 10:30 AM	01:00:00	6.72 pH	22.49 °C	2,260.3 µS/cm	0.45 mg/L	5.79 NTU	-96.2 mV	47.12 ft	200.00 ml/min

8/20/2021 10:35 AM	01:05:00	6.70 pH	22.48 °C	2,255.0 µS/cm	0.44 mg/L	5.74 NTU	-92.1 mV	47.12 ft	200.00 ml/min
8/20/2021 10:40 AM	01:10:00	6.68 pH	22.47 °C	2,249.3 µS/cm	0.43 mg/L	5.87 NTU	-91.1 mV	47.12 ft	200.00 ml/min
8/20/2021 10:45 AM	01:15:00	6.68 pH	22.44 °C	2,249.0 µS/cm	0.44 mg/L	5.97 NTU	-89.2 mV	47.12 ft	200.00 ml/min
8/20/2021 10:50 AM	01:20:00	6.65 pH	22.44 °C	2,245.7 µS/cm	0.44 mg/L	5.75 NTU	-86.9 mV	47.12 ft	200.00 ml/min
8/20/2021 10:55 AM	01:25:00	6.64 pH	22.44 °C	2,242.4 µS/cm	0.44 mg/L	5.39 NTU	-83.9 mV	47.12 ft	200.00 ml/min
8/20/2021 11:00 AM	01:30:00	6.62 pH	22.45 °C	2,243.8 µS/cm	0.45 mg/L	5.12 NTU	-83.4 mV	47.12 ft	200.00 ml/min
8/20/2021 11:05 AM	01:35:00	6.61 pH	22.55 °C	2,239.9 µS/cm	0.44 mg/L	5.42 NTU	-80.7 mV	47.12 ft	200.00 ml/min
8/20/2021 11:10 AM	01:40:00	6.60 pH	22.52 °C	2,237.4 µS/cm	0.43 mg/L	5.34 NTU	-79.9 mV	47.12 ft	200.00 ml/min
8/20/2021 11:15 AM	01:45:00	6.58 pH	22.56 °C	2,233.9 µS/cm	0.41 mg/L	5.12 NTU	-77.9 mV	47.12 ft	200.00 ml/min
8/20/2021 11:20 AM	01:50:00	6.57 pH	22.45 °C	2,237.9 µS/cm	0.39 mg/L	5.04 NTU	-78.2 mV	47.12 ft	200.00 ml/min
8/20/2021 11:25 AM	01:55:00	6.56 pH	22.58 °C	2,237.7 µS/cm	0.38 mg/L	4.96 NTU	-77.6 mV	47.12 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/20/2021 1:43:38 PM
Project: Plant Arkwright (6)
Operator Name: Ever Guillen

Location Name: AP1PZ-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.25 ft** **Total Depth: 67.25 ft** **Initial Depth to Water: 48.81 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 10000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.81 ft**	**Instrument Used: SmarTROLL MP** **Serial Number: 642531**

Test Notes:
AP1PZ-5
Sample time = 1440

Weather Conditions:
Hot, cloudy, humid

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
8/20/2021 1:43 PM	00:00	7.13 pH	26.88 °C	1,301.6 µS/cm	7.82 mg/L	11.50 NTU	-67.8 mV	48.96 ft	200.00 ml/min
8/20/2021 1:48 PM	05:00	6.60 pH	22.29 °C	2,375.1 µS/cm	0.88 mg/L	11.10 NTU	-89.0 mV	49.17 ft	200.00 ml/min
8/20/2021 1:53 PM	10:00	6.59 pH	22.71 °C	2,351.5 µS/cm	1.31 mg/L	9.82 NTU	-90.4 mV	49.29 ft	200.00 ml/min
8/20/2021 1:58 PM	15:00	6.58 pH	22.80 °C	2,336.9 µS/cm	1.53 mg/L	7.61 NTU	-88.4 mV	49.52 ft	200.00 ml/min
8/20/2021 2:03 PM	20:00	6.57 pH	23.09 °C	2,313.0 µS/cm	1.64 mg/L	6.34 NTU	-87.2 mV	49.62 ft	200.00 ml/min
8/20/2021 2:08 PM	25:00	6.57 pH	23.34 °C	2,316.1 µS/cm	1.76 mg/L	3.34 NTU	-85.9 mV	49.62 ft	200.00 ml/min
8/20/2021 2:13 PM	30:00	6.57 pH	23.61 °C	2,299.5 µS/cm	1.88 mg/L	4.33 NTU	-85.4 mV	49.62 ft	200.00 ml/min
8/20/2021 2:18 PM	35:00	6.58 pH	23.03 °C	2,278.1 µS/cm	1.96 mg/L	3.07 NTU	-82.1 mV	49.62 ft	200.00 ml/min
8/20/2021 2:23 PM	40:00	6.58 pH	23.19 °C	2,293.5 µS/cm	2.06 mg/L	2.54 NTU	-82.2 mV	49.62 ft	200.00 ml/min
8/20/2021 2:28 PM	45:00	6.59 pH	22.60 °C	2,263.8 µS/cm	2.08 mg/L	2.48 NTU	-78.5 mV	49.62 ft	200.00 ml/min
8/20/2021 2:33 PM	50:00	6.60 pH	22.85 °C	2,268.0 µS/cm	2.15 mg/L	2.42 NTU	-78.1 mV	49.62 ft	200.00 ml/min

Low-Flow Test Report:

Test Date / Time: 8/23/2021 1:09:48 PM
Project: Plant Arkwright CCR (6)
Operator Name: Daniel Howard

Location Name: AP1PZ-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 62.7 ft** **Total Depth: 72.7 ft** **Initial Depth to Water: 56.39 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 67.7 ft** **Estimated Total Volume Pumped: 12036.667 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.42 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
AP1PZ-6 sample time 1412.

Weather Conditions:
Hot and humid. Temp 87.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
8/23/2021 1:09 PM	00:00	5.55 pH	23.25 °C	3,316.3 µS/cm	0.78 mg/L	63.30 NTU	13.2 mV	56.39 ft	200.00 ml/min
8/23/2021 1:14 PM	05:00	5.59 pH	21.73 °C	3,420.5 µS/cm	0.43 mg/L	50.40 NTU	-5.3 mV	56.81 ft	200.00 ml/min
8/23/2021 1:19 PM	10:00	5.59 pH	21.92 °C	3,440.6 µS/cm	0.36 mg/L	34.70 NTU	-11.2 mV	56.81 ft	200.00 ml/min
8/23/2021 1:24 PM	15:00	5.59 pH	21.99 °C	3,431.0 µS/cm	0.31 mg/L	27.50 NTU	-14.2 mV	56.81 ft	200.00 ml/min
8/23/2021 1:29 PM	20:00	5.59 pH	21.95 °C	3,427.8 µS/cm	0.28 mg/L	22.80 NTU	-15.9 mV	56.81 ft	200.00 ml/min
8/23/2021 1:34 PM	25:00	5.59 pH	21.64 °C	3,418.6 µS/cm	0.26 mg/L	17.70 NTU	-16.4 mV	56.81 ft	200.00 ml/min
8/23/2021 1:39 PM	30:00	5.58 pH	21.61 °C	3,428.3 µS/cm	0.24 mg/L	11.90 NTU	-15.9 mV	56.81 ft	200.00 ml/min
8/23/2021 1:44 PM	35:00	5.54 pH	21.73 °C	3,419.5 µS/cm	0.21 mg/L	8.38 NTU	-12.4 mV	56.81 ft	200.00 ml/min
8/23/2021 1:49 PM	40:00	5.52 pH	21.55 °C	3,400.6 µS/cm	0.20 mg/L	6.69 NTU	-10.1 mV	56.81 ft	200.00 ml/min
8/23/2021 1:54 PM	45:00	5.52 pH	21.50 °C	3,410.1 µS/cm	0.19 mg/L	5.74 NTU	-12.7 mV	56.81 ft	200.00 ml/min
8/23/2021 1:59 PM	50:00	5.51 pH	21.51 °C	3,412.0 µS/cm	0.19 mg/L	5.16 NTU	-10.9 mV	56.81 ft	200.00 ml/min
8/23/2021 2:04 PM	55:00	5.50 pH	21.84 °C	3,428.8 µS/cm	0.18 mg/L	4.65 NTU	-10.5 mV	56.81 ft	200.00 ml/min
8/23/2021 2:09 PM	01:00:11	5.50 pH	21.64 °C	3,402.3 µS/cm	0.17 mg/L	4.51 NTU	-10.7 mV	56.81 ft	200.00 ml/min

Low-Flow Test Report:

Test Date / Time: 8/18/2021 12:03:53 PM
Project: Plant Arkwright CCR
Operator Name: Daniel Howard

Location Name: AP1PZ-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 67.75 ft** **Total Depth: 77.75 ft** **Initial Depth to Water: 50.3 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 72.75 ft** **Estimated Total Volume Pumped: 6500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
AP1PZ-7 sample time 1310.

Weather Conditions:
Partly sunny, temp 82

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
8/18/2021 12:03 PM	00:00	6.45 pH	23.88 °C	2,329.1 µS/cm	0.58 mg/L	10.40 NTU	-54.8 mV	50.30 ft	100.00 ml/min
8/18/2021 12:08 PM	05:00	6.43 pH	24.98 °C	2,326.7 µS/cm	0.60 mg/L	11.70 NTU	-56.5 mV	50.35 ft	100.00 ml/min
8/18/2021 12:13 PM	10:00	6.40 pH	25.24 °C	2,321.2 µS/cm	0.59 mg/L	9.07 NTU	-55.6 mV	50.35 ft	100.00 ml/min
8/18/2021 12:18 PM	15:00	6.40 pH	25.09 °C	2,322.1 µS/cm	0.58 mg/L	8.43 NTU	-56.0 mV	50.32 ft	100.00 ml/min
8/18/2021 12:23 PM	20:00	6.40 pH	25.15 °C	2,322.7 µS/cm	0.55 mg/L	8.10 NTU	-56.4 mV	50.30 ft	100.00 ml/min
8/18/2021 12:28 PM	25:00	6.40 pH	24.96 °C	2,316.6 µS/cm	0.54 mg/L	6.80 NTU	-55.7 mV	50.29 ft	100.00 ml/min
8/18/2021 12:33 PM	30:00	6.40 pH	24.69 °C	2,323.2 µS/cm	0.51 mg/L	6.75 NTU	-56.2 mV	50.29 ft	100.00 ml/min
8/18/2021 12:38 PM	35:00	6.40 pH	24.85 °C	2,325.8 µS/cm	0.48 mg/L	6.61 NTU	-56.5 mV	50.29 ft	100.00 ml/min
8/18/2021 12:43 PM	40:00	6.40 pH	24.84 °C	2,316.7 µS/cm	0.47 mg/L	5.98 NTU	-56.1 mV	50.29 ft	100.00 ml/min
8/18/2021 12:48 PM	45:00	6.40 pH	24.74 °C	2,324.6 µS/cm	0.43 mg/L	6.03 NTU	-56.4 mV	50.29 ft	100.00 ml/min
8/18/2021 12:53 PM	50:00	6.41 pH	24.72 °C	2,316.2 µS/cm	0.43 mg/L	5.71 NTU	-55.8 mV	50.29 ft	100.00 ml/min
8/18/2021 12:58 PM	55:00	6.41 pH	24.80 °C	2,303.9 µS/cm	0.37 mg/L	5.52 NTU	-56.0 mV	50.29 ft	100.00 ml/min
8/18/2021 1:03 PM	01:00:00	6.41 pH	24.26 °C	2,314.4 µS/cm	0.36 mg/L	4.83 NTU	-55.7 mV	50.29 ft	100.00 ml/min

8/18/2021 1:08 PM	01:05:00	6.41 pH	24.24 °C	2,319.2 µS/cm	0.35 mg/L	4.39 NTU	-56.0 mV	50.30 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/18/2021 3:32:42 PM
Project: Plant Arkwright CCR (2)
Operator Name: Daniel Howard

Location Name: AP1PZ-8 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 56.09 ft** **Total Depth: 66.09 ft** **Initial Depth to Water: 46.62 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 61.09 ft** **Estimated Total Volume Pumped: 8.05 liter** **Flow Cell Volume: 90 ml** **Final Flow Rate: 125 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
AP1PZ-8 sample time 1638. Also collected DUP-1.

Weather Conditions:
Hot and humid, temp 91.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
8/18/2021 3:32 PM	00:00	6.75 pH	24.44 °C	1,561.2 µS/cm	0.46 mg/L	31.30 NTU	-86.9 mV	46.62 ft	200.00 ml/min
8/18/2021 3:37 PM	05:00	6.75 pH	25.46 °C	1,575.3 µS/cm	0.47 mg/L	25.10 NTU	-97.3 mV	46.62 ft	200.00 ml/min
8/18/2021 3:42 PM	10:00	6.75 pH	24.83 °C	1,573.6 µS/cm	0.47 mg/L	17.00 NTU	-102.9 mV	46.77 ft	200.00 ml/min
8/18/2021 3:47 PM	15:00	6.75 pH	25.73 °C	1,557.2 µS/cm	0.46 mg/L	13.10 NTU	-97.9 mV	46.73 ft	200.00 ml/min
8/18/2021 3:52 PM	20:00	6.75 pH	25.08 °C	1,558.1 µS/cm	0.39 mg/L	11.30 NTU	-98.0 mV	46.71 ft	200.00 ml/min
8/18/2021 3:57 PM	25:00	6.76 pH	25.14 °C	1,557.1 µS/cm	0.34 mg/L	12.00 NTU	-98.5 mV	46.70 ft	200.00 ml/min
8/18/2021 4:02 PM	30:00	6.75 pH	25.33 °C	1,554.3 µS/cm	0.32 mg/L	8.50 NTU	-98.2 mV	46.70 ft	200.00 ml/min
8/18/2021 4:07 PM	35:00	6.75 pH	25.83 °C	1,548.4 µS/cm	0.30 mg/L	8.24 NTU	-98.0 mV	46.70 ft	200.00 ml/min
8/18/2021 4:12 PM	40:00	6.75 pH	26.05 °C	1,544.6 µS/cm	0.28 mg/L	7.50 NTU	-97.5 mV	46.70 ft	200.00 ml/min
8/18/2021 4:17 PM	45:00	6.74 pH	26.03 °C	1,555.1 µS/cm	0.27 mg/L	5.87 NTU	-97.4 mV	46.70 ft	200.00 ml/min
8/18/2021 4:22 PM	50:00	6.74 pH	25.89 °C	1,554.1 µS/cm	0.26 mg/L	5.70 NTU	-96.2 mV	46.70 ft	200.00 ml/min
8/18/2021 4:27 PM	55:00	6.75 pH	25.33 °C	1,549.4 µS/cm	0.25 mg/L	5.18 NTU	-94.5 mV	46.70 ft	200.00 ml/min
8/18/2021 4:32 PM	01:00:00	6.74 pH	25.73 °C	1,556.0 µS/cm	0.24 mg/L	4.05 NTU	-94.6 mV	46.70 ft	200.00 ml/min

8/18/2021 4:37 PM	01:05:00	6.74 pH	24.92 °C	1,557.5 µS/cm	0.24 mg/L	4.12 NTU	-92.5 mV	46.70 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/19/2021 11:42:44 AM
Project: Plant Arkwright CCR (3)
Operator Name: Daniel Howard

Location Name: AP1PZ-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 m** **Top of Screen: 47.35 m** **Total Depth: 57.35 ft** **Initial Depth to Water: 40.41 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 52.35 ft** **Estimated Total Volume Pumped: 15205.833 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 50 ml/min** **Final Draw Down: 7.63 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
AP1PZ-9 sample collected at 1650. Total and dissolved metals were collected due to turbidity >5 but < 10NTU after 5 hours of Purging well low flow.

Weather Conditions:
Hot and humid, temp 87.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
8/19/2021 11:42 AM	00:00	6.35 pH	29.22 °C	725.63 µS/cm	4.86 mg/L	37.20 NTU	39.4 mV	40.41 ft	50.00 ml/min
8/19/2021 11:47 AM	05:00	6.00 pH	28.15 °C	751.41 µS/cm	2.72 mg/L	40.00 NTU	30.3 mV	40.90 ft	50.00 ml/min
8/19/2021 11:52 AM	10:00	6.00 pH	27.87 °C	747.49 µS/cm	2.37 mg/L	38.70 NTU	29.0 mV	41.11 ft	50.00 ml/min
8/19/2021 11:57 AM	15:00	6.00 pH	27.02 °C	743.63 µS/cm	2.20 mg/L	38.30 NTU	30.2 mV	41.27 ft	50.00 ml/min
8/19/2021 12:02 PM	20:00	6.00 pH	26.47 °C	745.82 µS/cm	2.09 mg/L	40.50 NTU	30.7 mV	41.58 ft	50.00 ml/min
8/19/2021 12:07 PM	25:00	6.00 pH	26.42 °C	749.13 µS/cm	1.99 mg/L	40.30 NTU	30.5 mV	41.84 ft	50.00 ml/min
8/19/2021 12:12 PM	30:00	5.99 pH	26.61 °C	753.04 µS/cm	1.95 mg/L	39.10 NTU	30.2 mV	42.03 ft	50.00 ml/min
8/19/2021 12:17 PM	35:00	5.99 pH	27.41 °C	751.26 µS/cm	1.89 mg/L	39.00 NTU	29.1 mV	42.29 ft	50.00 ml/min
8/19/2021 12:22 PM	40:00	5.98 pH	27.40 °C	745.85 µS/cm	1.86 mg/L	40.90 NTU	30.1 mV	42.53 ft	50.00 ml/min
8/19/2021 12:27 PM	45:00	5.99 pH	26.55 °C	745.97 µS/cm	1.83 mg/L	38.40 NTU	31.3 mV	42.75 ft	50.00 ml/min
8/19/2021 12:32 PM	50:00	5.99 pH	26.15 °C	746.83 µS/cm	1.81 mg/L	35.60 NTU	32.0 mV	43.01 ft	50.00 ml/min
8/19/2021 12:37 PM	55:00	5.99 pH	26.08 °C	746.07 µS/cm	1.81 mg/L	36.80 NTU	32.7 mV	43.18 ft	50.00 ml/min
8/19/2021 12:42 PM	01:00:00	5.99 pH	25.95 °C	748.69 µS/cm	1.79 mg/L	35.10 NTU	33.0 mV	43.43 ft	50.00 ml/min

8/19/2021 12:47 PM	01:05:00	5.98 pH	26.01 °C	748.08 µS/cm	1.78 mg/L	33.10 NTU	33.9 mV	43.67 ft	50.00 ml/min
8/19/2021 12:52 PM	01:10:00	5.97 pH	26.24 °C	747.15 µS/cm	1.79 mg/L	32.60 NTU	34.9 mV	43.87 ft	50.00 ml/min
8/19/2021 12:57 PM	01:15:00	5.95 pH	26.36 °C	748.28 µS/cm	1.84 mg/L	32.00 NTU	37.5 mV	44.01 ft	50.00 ml/min
8/19/2021 1:02 PM	01:20:00	5.93 pH	26.79 °C	745.49 µS/cm	1.95 mg/L	31.70 NTU	40.8 mV	44.27 ft	50.00 ml/min
8/19/2021 1:07 PM	01:25:00	5.91 pH	26.80 °C	740.73 µS/cm	2.01 mg/L	31.60 NTU	44.0 mV	44.42 ft	50.00 ml/min
8/19/2021 1:12 PM	01:30:00	5.91 pH	26.42 °C	737.36 µS/cm	2.06 mg/L	30.50 NTU	46.6 mV	44.59 ft	50.00 ml/min
8/19/2021 1:17 PM	01:35:00	5.90 pH	26.37 °C	735.69 µS/cm	2.08 mg/L	29.30 NTU	48.7 mV	44.75 ft	50.00 ml/min
8/19/2021 1:22 PM	01:40:00	5.89 pH	26.05 °C	734.38 µS/cm	2.18 mg/L	26.40 NTU	51.9 mV	44.93 ft	50.00 ml/min
8/19/2021 1:27 PM	01:45:00	5.88 pH	26.15 °C	734.55 µS/cm	2.21 mg/L	25.60 NTU	52.0 mV	45.08 ft	50.00 ml/min
8/19/2021 1:32 PM	01:50:00	5.88 pH	26.23 °C	735.48 µS/cm	2.23 mg/L	24.20 NTU	53.0 mV	45.25 ft	50.00 ml/min
8/19/2021 1:37 PM	01:55:00	5.87 pH	26.35 °C	729.64 µS/cm	2.22 mg/L	24.10 NTU	54.8 mV	45.38 ft	50.00 ml/min
8/19/2021 1:42 PM	02:00:00	5.87 pH	26.34 °C	728.27 µS/cm	2.22 mg/L	23.10 NTU	55.6 mV	45.56 ft	50.00 ml/min
8/19/2021 1:47 PM	02:05:00	5.86 pH	26.15 °C	725.32 µS/cm	2.23 mg/L	23.20 NTU	57.3 mV	45.65 ft	50.00 ml/min
8/19/2021 1:52 PM	02:10:00	5.86 pH	26.15 °C	725.89 µS/cm	2.25 mg/L	22.50 NTU	58.0 mV	45.84 ft	50.00 ml/min
8/19/2021 1:57 PM	02:15:00	5.86 pH	26.12 °C	725.37 µS/cm	2.24 mg/L	22.30 NTU	59.3 mV	46.00 ft	50.00 ml/min
8/19/2021 2:02 PM	02:20:00	5.85 pH	26.17 °C	724.92 µS/cm	2.24 mg/L	22.00 NTU	61.2 mV	46.13 ft	50.00 ml/min
8/19/2021 2:07 PM	02:25:00	5.85 pH	25.75 °C	724.68 µS/cm	2.27 mg/L	21.30 NTU	62.8 mV	46.30 ft	50.00 ml/min
8/19/2021 2:12 PM	02:30:00	5.85 pH	25.46 °C	724.28 µS/cm	2.26 mg/L	21.40 NTU	64.2 mV	46.42 ft	50.00 ml/min
8/19/2021 2:17 PM	02:35:00	5.85 pH	25.17 °C	722.62 µS/cm	2.26 mg/L	20.20 NTU	66.0 mV	46.57 ft	50.00 ml/min
8/19/2021 2:22 PM	02:40:00	5.86 pH	24.60 °C	723.82 µS/cm	2.24 mg/L	20.90 NTU	66.3 mV	46.68 ft	50.00 ml/min
8/19/2021 2:27 PM	02:45:00	5.86 pH	24.35 °C	723.71 µS/cm	2.28 mg/L	20.30 NTU	67.2 mV	46.84 ft	50.00 ml/min
8/19/2021 2:32 PM	02:50:00	5.86 pH	24.24 °C	726.94 µS/cm	2.30 mg/L	19.30 NTU	67.3 mV	46.98 ft	50.00 ml/min
8/19/2021 2:37 PM	02:55:00	5.85 pH	24.22 °C	724.40 µS/cm	2.30 mg/L	19.00 NTU	67.8 mV	47.09 ft	50.00 ml/min
8/19/2021 2:42 PM	03:00:00	5.86 pH	24.02 °C	725.52 µS/cm	2.26 mg/L	19.30 NTU	66.7 mV	47.15 ft	50.00 ml/min
8/19/2021 2:47 PM	03:05:00	5.85 pH	23.86 °C	726.30 µS/cm	2.32 mg/L	19.20 NTU	67.3 mV	47.11 ft	50.00 ml/min
8/19/2021 2:52 PM	03:10:00	5.84 pH	23.95 °C	726.64 µS/cm	2.33 mg/L	18.60 NTU	68.0 mV	47.16 ft	50.00 ml/min
8/19/2021 2:57 PM	03:15:00	5.84 pH	24.02 °C	725.76 µS/cm	2.30 mg/L	18.20 NTU	67.3 mV	47.16 ft	50.00 ml/min
8/19/2021 3:06 PM	03:23:40	5.84 pH	23.88 °C	724.65 µS/cm	2.32 mg/L		67.4 mV	47.16 ft	50.00 ml/min
8/19/2021 3:06 PM	03:23:54	5.84 pH	23.88 °C	724.83 µS/cm	2.31 mg/L		68.6 mV	47.16 ft	50.00 ml/min

8/19/2021 3:06 PM	03:24:07	5.84 pH	23.88 °C	725.23 µS/cm	2.32 mg/L		68.9 mV	47.16 ft	50.00 ml/min
8/19/2021 3:11 PM	03:29:07	5.84 pH	24.07 °C	727.48 µS/cm	2.38 mg/L	18.60 NTU	68.8 mV	47.33 ft	50.00 ml/min
8/19/2021 3:16 PM	03:34:07	5.83 pH	24.42 °C	732.02 µS/cm	2.56 mg/L	19.50 NTU	72.4 mV	47.39 ft	50.00 ml/min
8/19/2021 3:21 PM	03:39:07	5.81 pH	24.87 °C	739.22 µS/cm	2.60 mg/L	17.90 NTU	73.1 mV	47.41 ft	50.00 ml/min
8/19/2021 3:26 PM	03:44:07	5.80 pH	25.28 °C	740.86 µS/cm	2.63 mg/L	16.50 NTU	76.3 mV	47.48 ft	50.00 ml/min
8/19/2021 3:31 PM	03:49:07	5.78 pH	25.65 °C	743.62 µS/cm	2.65 mg/L	14.90 NTU	81.2 mV	47.50 ft	50.00 ml/min
8/19/2021 3:36 PM	03:54:07	5.78 pH	25.85 °C	744.45 µS/cm	2.63 mg/L	14.20 NTU	80.3 mV	47.54 ft	50.00 ml/min
8/19/2021 3:41 PM	03:59:07	5.78 pH	25.83 °C	753.80 µS/cm	2.62 mg/L	12.90 NTU	81.1 mV	47.54 ft	50.00 ml/min
8/19/2021 3:46 PM	04:04:07	5.77 pH	26.06 °C	758.45 µS/cm	2.65 mg/L	13.20 NTU	86.4 mV	47.62 ft	50.00 ml/min
8/19/2021 3:51 PM	04:09:07	5.78 pH	26.33 °C	759.40 µS/cm	2.59 mg/L	12.30 NTU	82.8 mV	47.68 ft	50.00 ml/min
8/19/2021 3:56 PM	04:14:07	5.75 pH	26.58 °C	760.79 µS/cm	2.58 mg/L	10.90 NTU	87.8 mV	47.70 ft	50.00 ml/min
8/19/2021 4:01 PM	04:19:07	5.76 pH	26.44 °C	761.04 µS/cm	2.61 mg/L	10.40 NTU	88.2 mV	47.73 ft	50.00 ml/min
8/19/2021 4:06 PM	04:24:07	5.77 pH	26.64 °C	760.76 µS/cm	2.57 mg/L	10.70 NTU	87.6 mV	47.79 ft	50.00 ml/min
8/19/2021 4:11 PM	04:29:07	5.76 pH	26.59 °C	760.56 µS/cm	2.56 mg/L	10.50 NTU	88.9 mV	47.82 ft	50.00 ml/min
8/19/2021 4:16 PM	04:34:07	5.77 pH	26.37 °C	763.62 µS/cm	2.54 mg/L	10.50 NTU	92.1 mV	47.86 ft	50.00 ml/min
8/19/2021 4:21 PM	04:39:07	5.76 pH	26.70 °C	764.41 µS/cm	2.51 mg/L	10.10 NTU	92.8 mV	47.87 ft	50.00 ml/min
8/19/2021 4:26 PM	04:44:07	5.76 pH	26.79 °C	763.44 µS/cm	2.48 mg/L	9.95 NTU	89.4 mV	47.90 ft	50.00 ml/min
8/19/2021 4:31 PM	04:49:07	5.77 pH	26.60 °C	763.65 µS/cm	2.46 mg/L	8.96 NTU	88.6 mV	47.93 ft	50.00 ml/min
8/19/2021 4:36 PM	04:54:07	5.77 pH	26.76 °C	763.21 µS/cm	2.44 mg/L	9.22 NTU	89.1 mV	47.93 ft	50.00 ml/min
8/19/2021 4:41 PM	04:59:07	5.77 pH	26.69 °C	761.92 µS/cm	2.44 mg/L	9.08 NTU	88.2 mV	48.00 ft	50.00 ml/min
8/19/2021 4:46 PM	05:04:07	5.77 pH	26.48 °C	759.17 µS/cm	2.42 mg/L	8.60 NTU	93.4 mV	48.04 ft	50.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/20/2021 10:52:46 AM
Project: Plant Arkwright CCR (4)
Operator Name: Daniel Howard

Location Name: AP1PZ-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 46.48 ft** **Total Depth: 56.48 ft** **Initial Depth to Water: 38.04 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 51.48 ft** **Estimated Total Volume Pumped: 5250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 75 ml/min** **Final Draw Down: 1.19 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
AP1PZ-10 sample time 1130.

Weather Conditions:
Partly cloudy, temp 80

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
8/20/2021 10:52 AM	00:00	6.36 pH	22.72 °C	744.47 µS/cm	0.86 mg/L	10.10 NTU	-22.0 mV	38.04 ft	150.00 ml/min
8/20/2021 10:57 AM	05:00	6.37 pH	23.03 °C	744.49 µS/cm	0.82 mg/L	10.60 NTU	-37.6 mV	38.97 ft	150.00 ml/min
8/20/2021 11:02 AM	10:00	6.39 pH	23.72 °C	746.14 µS/cm	0.80 mg/L	6.90 NTU	-47.6 mV	39.02 ft	150.00 ml/min
8/20/2021 11:07 AM	15:00	6.43 pH	24.01 °C	751.86 µS/cm	0.79 mg/L	6.08 NTU	-57.0 mV	39.08 ft	150.00 ml/min
8/20/2021 11:12 AM	20:00	6.47 pH	24.04 °C	759.31 µS/cm	0.74 mg/L	4.57 NTU	-67.2 mV	39.13 ft	150.00 ml/min
8/20/2021 11:17 AM	25:00	6.50 pH	24.15 °C	762.30 µS/cm	0.71 mg/L	3.48 NTU	-71.8 mV	39.16 ft	150.00 ml/min
8/20/2021 11:22 AM	30:00	6.53 pH	24.10 °C	764.88 µS/cm	0.65 mg/L	3.06 NTU	-75.6 mV	39.20 ft	150.00 ml/min
8/20/2021 11:27 AM	35:00	6.53 pH	24.16 °C	763.88 µS/cm	0.59 mg/L	2.74 NTU	-76.0 mV	39.23 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 8/20/2021 1:58:38 PM
Project: Plant Arkwright CCR (5)
Operator Name: Daniel Howard

Location Name: AP1PZ-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 63.3 ft** **Total Depth: 73.3 ft** **Initial Depth to Water: 37.9 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 68.3 ft** **Estimated Total Volume Pumped: 34000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.2 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728566**

Test Notes:
AP1PZ-11 sample time 1650.

Weather Conditions:
Partly sunny. Temp 83

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
8/20/2021 1:58 PM	00:00	6.76 pH	22.31 °C	395.67 µS/cm	1.92 mg/L	86.20 NTU	16.9 mV	37.90 ft	200.00 ml/min
8/20/2021 2:03 PM	05:00	6.73 pH	21.93 °C	401.06 µS/cm	1.81 mg/L	115.00 NTU	20.0 mV	38.16 ft	200.00 ml/min
8/20/2021 2:08 PM	10:00	6.72 pH	22.00 °C	399.26 µS/cm	1.69 mg/L	85.60 NTU	24.3 mV	38.16 ft	200.00 ml/min
8/20/2021 2:13 PM	15:00	6.71 pH	22.09 °C	397.97 µS/cm	1.58 mg/L	78.70 NTU	27.6 mV	38.16 ft	200.00 ml/min
8/20/2021 2:18 PM	20:00	6.71 pH	21.91 °C	396.69 µS/cm	1.49 mg/L	56.50 NTU	30.1 mV	38.16 ft	200.00 ml/min
8/20/2021 2:23 PM	25:00	6.71 pH	22.00 °C	394.04 µS/cm	1.43 mg/L	49.50 NTU	32.8 mV	38.16 ft	200.00 ml/min
8/20/2021 2:28 PM	30:00	6.71 pH	21.66 °C	388.96 µS/cm	1.32 mg/L	44.30 NTU	34.8 mV	38.16 ft	200.00 ml/min
8/20/2021 2:33 PM	35:00	6.72 pH	21.60 °C	383.09 µS/cm	1.27 mg/L	40.80 NTU	35.7 mV	38.16 ft	200.00 ml/min
8/20/2021 2:38 PM	40:00	6.71 pH	21.77 °C	377.61 µS/cm	1.29 mg/L	33.10 NTU	36.4 mV	38.16 ft	200.00 ml/min
8/20/2021 2:43 PM	45:00	6.72 pH	21.79 °C	368.75 µS/cm	1.31 mg/L	28.30 NTU	36.9 mV	38.16 ft	200.00 ml/min
8/20/2021 2:48 PM	50:00	6.73 pH	21.64 °C	361.96 µS/cm	1.46 mg/L	26.50 NTU	37.5 mV	38.16 ft	200.00 ml/min
8/20/2021 2:53 PM	55:00	6.73 pH	21.60 °C	358.18 µS/cm	1.42 mg/L	22.40 NTU	38.2 mV	38.16 ft	200.00 ml/min
8/20/2021 2:58 PM	01:00:00	6.72 pH	21.82 °C	354.92 µS/cm	1.46 mg/L	20.80 NTU	39.2 mV	38.16 ft	200.00 ml/min

8/20/2021 3:03 PM	01:05:00	6.72 pH	21.82 °C	349.46 µS/cm	1.45 mg/L	17.60 NTU	40.3 mV	38.16 ft	200.00 ml/min
8/20/2021 3:08 PM	01:10:00	6.73 pH	21.55 °C	345.70 µS/cm	1.48 mg/L	15.30 NTU	41.2 mV	38.16 ft	200.00 ml/min
8/20/2021 3:13 PM	01:15:00	6.73 pH	21.46 °C	342.48 µS/cm	1.49 mg/L	14.90 NTU	41.7 mV	38.16 ft	200.00 ml/min
8/20/2021 3:18 PM	01:20:00	6.72 pH	21.51 °C	340.70 µS/cm	1.55 mg/L	13.00 NTU	42.3 mV	38.16 ft	200.00 ml/min
8/20/2021 3:23 PM	01:25:00	6.73 pH	21.79 °C	338.07 µS/cm	1.58 mg/L	12.80 NTU	42.1 mV	38.16 ft	200.00 ml/min
8/20/2021 3:28 PM	01:30:00	6.72 pH	22.14 °C	336.35 µS/cm	1.61 mg/L	12.10 NTU	42.5 mV	38.16 ft	200.00 ml/min
8/20/2021 3:33 PM	01:35:00	6.72 pH	22.09 °C	333.03 µS/cm	1.63 mg/L	10.90 NTU	43.2 mV	38.16 ft	200.00 ml/min
8/20/2021 3:38 PM	01:40:00	6.72 pH	22.22 °C	332.27 µS/cm	1.63 mg/L	10.90 NTU	43.8 mV	38.16 ft	200.00 ml/min
8/20/2021 3:43 PM	01:45:00	6.72 pH	22.18 °C	330.40 µS/cm	1.65 mg/L	11.20 NTU	44.1 mV	38.11 ft	200.00 ml/min
8/20/2021 3:48 PM	01:50:00	6.72 pH	22.11 °C	329.77 µS/cm	1.70 mg/L	9.89 NTU	44.3 mV	38.11 ft	200.00 ml/min
8/20/2021 3:53 PM	01:55:00	6.72 pH	22.25 °C	328.25 µS/cm	1.72 mg/L	9.76 NTU	45.5 mV	38.11 ft	200.00 ml/min
8/20/2021 3:58 PM	02:00:00	6.71 pH	22.31 °C	327.55 µS/cm	1.74 mg/L	9.51 NTU	46.0 mV	38.11 ft	200.00 ml/min
8/20/2021 4:03 PM	02:05:00	6.71 pH	22.43 °C	326.11 µS/cm	1.73 mg/L	9.41 NTU	46.5 mV	38.11 ft	200.00 ml/min
8/20/2021 4:08 PM	02:10:00	6.71 pH	22.45 °C	324.58 µS/cm	1.74 mg/L	9.18 NTU	47.2 mV	38.10 ft	200.00 ml/min
8/20/2021 4:13 PM	02:15:00	6.71 pH	22.71 °C	325.02 µS/cm	1.78 mg/L	8.32 NTU	46.9 mV	38.10 ft	200.00 ml/min
8/20/2021 4:18 PM	02:20:00	6.71 pH	22.65 °C	323.21 µS/cm	1.78 mg/L	8.31 NTU	48.3 mV	38.10 ft	200.00 ml/min
8/20/2021 4:23 PM	02:25:00	6.71 pH	22.79 °C	322.18 µS/cm	1.76 mg/L	7.76 NTU	48.3 mV	38.10 ft	200.00 ml/min
8/20/2021 4:28 PM	02:30:00	6.71 pH	22.82 °C	322.34 µS/cm	1.79 mg/L	6.06 NTU	48.4 mV	38.10 ft	200.00 ml/min
8/20/2021 4:33 PM	02:35:00	6.71 pH	22.89 °C	320.56 µS/cm	1.79 mg/L	5.64 NTU	48.8 mV	38.10 ft	200.00 ml/min
8/20/2021 4:38 PM	02:40:00	6.71 pH	22.83 °C	319.52 µS/cm	1.81 mg/L	5.11 NTU	49.2 mV	38.10 ft	200.00 ml/min
8/20/2021 4:43 PM	02:45:00	6.71 pH	22.52 °C	319.00 µS/cm	1.83 mg/L	5.10 NTU	49.9 mV	38.10 ft	200.00 ml/min
8/20/2021 4:48 PM	02:50:00	6.71 pH	22.13 °C	318.40 µS/cm	1.84 mg/L	4.24 NTU	49.8 mV	38.10 ft	200.00 ml/min

Samples

Sample ID:	Description:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 4132-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 3rd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: EB-1 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Direct Pump

DUP./REP. OF: —

Pump Intake Set at (btoc): —

or

Tubing Inlet Set at (btoc): —

WELL DIAMETER: —

DEPTH TO WATER: —

TOTAL DEPTH: —

WATER COLUMN HEIGHT: —

PURGE VOLUME: —

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial:								( )	

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs Collected Equipment Blank of QED Sample Pro Bladder Pump (ID: 21734) Used ASTM Type I Deionized Water (7732-18-5)

SAMPLE DATE: 8/18/21

SAMPLE TIME: 0945

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pHcheck	ANALYTICAL METHOD	ANALYSIS
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions (F, Cl, SO4)
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	1	HNO3 to pH <2 ✓	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Partly Cloudy, Temp 80°F
SHIPPED VIA:	FED-X
SHIPPED TO:	~~[illegible]~~ For Eurofins Test America
SAMPLER:	Daniel Howard
OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6132-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semmi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: FB-#1 MATRIX: Groundwater

WELL MATERIAL: __PVC __SS __OTHER

SAMPLE METHOD: Direct Fill

DUP./REP. OF: —

Pump Intake Set at (btoc): —

or

Tubing Inlet Set at (btoc): —

WELL DIAMETER: —

DEPTH TO WATER: —

TOTAL DEPTH: —

WATER COLUMN HEIGHT: —

PURGE VOLUME: —

GRAB (x) COMPOSITE ( )

[0.16] x water column height (ft) x 3 (well volumes) for 2" wells]
[0.65] x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

Time	VOL PURGED (gal)	DO (±0.2 mg/L or ±5% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)[1]
Initial:									

NOTES:

[1] Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs Collected Field Blank FB-1 at ASTM Type I Deionized water Type I (7732-18-5) ASTM D5196. Field Blank at Rush Pond 1

SAMPLE DATE: 8/18/21

SAMPLE TIME: 0935

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~500 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions F, Cl, SO_4
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/7470/71A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	E9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	
SHIPPED VIA:	FED-X
SHIPPED TO:	~~PACE LABORATORIES - 110 Technology Pkwy, Peachtree Corners, GA 30092 Ph: (770) 734-4200 POC: Betty Mcdonald;~~ betty.mcdonald@pacelabs.com; Eurofins Test America
SAMPLER: Daniel Howard	OBSERVER:

PROJECT NAME: Plant Arkwright, GA - GDR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1428.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semmi-Annual Event; __ OTHER

WELL ID / SAMPLE ID: EB-2 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Gravity Fed Through Tubing

DUP./SSP. OF: —

Pump Intake Set at (btoc): —

or

Tubing Inlet Set at (btoc): —

WELL DIAMETER: —

DEPTH TO WATER: —

TOTAL DEPTH: —

WATER COLUMN HEIGHT: —

PURGE VOLUME: —

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.8 mg/L) for DO < 0.8 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
INITIAL									

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs if possible. Collected Equip Blank & Tubing Used with Peristaltic pump LDPE Lot# 21580713. Used ASTM Type II Deionized water (7732-18-5)

SAMPLE DATE: 8/19/21

SAMPLE TIME: 0950

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Cl, F, SO_4 App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	EPA15/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Partly Cloudy, Temp 79°F
SHIPPED VIA:	FED-X
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4283 POC: Betsy McDaniel; betsy.mcdaniel@pacelabs.com Eurofins TestAmerica
SAMPLER: Daniel Hasten	OBSERVER:

PROJECT NAME: Plant Arkwright, GA - GCR SW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semmi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: FB-2 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Direct Pour

DUP./REP. OF: —

Pump Intake Set at (btoc): —

or

Tubing Inlet Set at (btoc): —

WELL DIAMETER: —

DEPTH TO WATER: —

TOTAL DEPTH: —

WATER COLUMN HEIGHT: —

PURGE VOLUME: —

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)[1]
Initial									

NOTES:

[1] Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs Collected Field Blank FB-2 at ASTM Type I Deionized water (7332-18-5) ASTM D5196. Field Blank at Method I

SAMPLE DATE: 8/20/21

SAMPLE TIME: 0910

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS	
~~500 mL/Poly~~	~~1~~	Cool to 6°C pH check	EPA 300.0 R2.1	Cl, F, SO_4 App. III Analytes	pH < 2
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS	
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver	✓
1 L/Poly	1	HNO3 to pH <2 ✓	EPA 903.1/904.0	Radium 226 & 228 Combined	✓

GENERAL INFORMATION	
WEATHER:	Partly Cloudy, Temp 78°F
SHIPPED VIA:	FED-X
SHIPPED TO:	~~PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 Ph: (770) 734-4200 POC: Betsy McDaniel~~ ~~betsy.mcdaniel@pacelabs.com~~ Env. & Eng Test America
SAMPLER: Daniel Howard	OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: APLGWA-1 MATRIX: Groundwater

WELL MATERIAL: X PVC ___ SS ___ OTHER

SAMPLE METHOD: Low Flow - Peristaltic

DUP./REP. OF:_____

Pump Intake Set at (bmp): 26.0 '

or

Tubing Inlet Set at (bmp):_____

WELL DIAMETER: 2"

DEPTH TO WATER: 25.28

TOTAL DEPTH: 32.50

WATER COLUMN HEIGHT: 12.22

PURGE VOLUME: 2.02 x 3 = 6.13

GRAB (x) COMPOSITE ( )

[0.16] x water column height (ft) x 3 (well volumes) for 2" wells]

[0.65] x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.8 mg/L) for DO < 0.8 mg/L record only	ORP (mV) record only	pH (+/-) 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate, ml/min, (& pump setting) (100 ml/min)	Water Level (ft BTOC)
Initial 1439 Am	0.25	2.30	183.1	5.29	204.92	22.54	10.32	200 ml	25.32
1444 s	0.5	2.90	139.1	5.27	209.70	22.68	9.16	200	25.32
1449 10	0.75	2.92	129.8	5.18	208.69	22.55	7.11	200	25.32
1454 15	1.0	2.90	126.1	5.27	214.98	22.43	5.69	200	25.32
1459 20	1.25	2.86	124.2	5.19	206.57	22.19	5.16	200	25.32
1505 25	1.5	2.93	123.7	5.23	207.17	22.13	3.71	200	25.32
1510	Collected Sample								

NOTES:

- Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
- If well is purged dry, allow to recharge and sample within 24 hrs.
- Turbidity < 5 NTUs

SAMPLE DATE: 8-17-21

SAMPLE TIME: 1510

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	EPA 9315/9320	Radium 226 & 228 Combined

pH check

GENERAL INFORMATION		
WEATHER:	Hot - Humid - Rain	
SHIPPED VIA:	FED-X	
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 Ph: (770) 734-4283 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com	
SAMPLER: Evee Gullen		OBSERVER:

PROJECT NAME: Plant Arkwright, GA - DOR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8122-20-1429.2001

Road Ed Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semmi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: APGWA-2 MATRIX: Groundwater

WELL MATERIAL: X PVC __ SS __ OTHER

SAMPLE METHOD: Level Rover - PERISTALTIC

DUP./REP. OF:_____

WELL DIAMETER: 2"

DEPTH TO WATER: 18.42 GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 31.10

Pump Intake Set at (btoc):_____

or

Tubing Inlet Set at (btoc): 30.0'

WATER COLUMN HEIGHT: 12.68 X 0.17 = 2.15 X 3 = 6.34

PURGE VOLUME: 6.34

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±3% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (us/cm) [+/- 5%]	TEMP. (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) [100 ml/min]	Water Level (ft BTOC)*
(initial) 1102	0.25'	0.50	-64.0	6.02	85.96	23.10	15.7	200 / 15	18.60
1107	0.50	0.48	-39.9	6.02	84.72	23.30	13.8	200	18.60
1112	0.75	0.48	-38.9	6.03	85.78	23.33	11.1	200	18.60
1117	1.0	0.47	-38.3	6.03	85.90	22.44	8.36	200	18.60
1122	1.25	0.47	-38.4	6.03	86.01	22.36	6.13	200	18.60
1127	1.5	0.46	-38.1	6.03	86.16	22.13	5.31	200	18.60
1132	1.75	0.44	-41.6	6.03	86.38	22.20	4.54	200	18.60
1155	Collect Sample								

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-18-20

SAMPLE TIME: 1155

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020/SW7471A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	E9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION		
WEATHER:	Hot - Clear - Dry	
SHIPPED VIA:	FED-X	
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4213 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com	
SAMPLER: Evan Gullett		OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 2nd Semiannual Event; __ OTHER

WELL ID / SAMPLE ID: AP1PZ-1 MATRIX: Groundwater

WELL MATERIAL: PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow - Bladder Pump

DUP./REP. OF:_____

Pump Intake Set at (feet):_____

or

Tubing Inlet Set at (feet): 89'

WELL DIAMETER: 2"

DEPTH TO WATER: 42.57 GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 87.65

WATER COLUMN HEIGHT: 45.08 x 0.17 = 7.66 x 3 =

PURGE VOLUME: 22.98

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (≥0.2 mg/L or ≥10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<10 NTU)	Pump Rate (ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial: 1458	0.25	7.32	-91.6	6.99	362.32	32.79	158	200 / 1	42.57
1503	0.5	2.06	-75.3	6.92	372.10	30.61	136	200	42.76
1448	0.75	1.31	-85.4	6.53	374.93	30.05	113	200	42.96
1453	1.0	0.50	-84.7	6.57	345.81	29.60	93	200	43.28
1458	1.25	0.39	-87.4	6.60	345.72	29.51	104	200	43.57
1503	1.375	0.39	-82.5	6.59	361.09	25.03	90	100	44.22
1504	1.40	0.47	-80.9	6.59	366.06	25.75	77.8	100	44.42
1514	1.5	0.53	-80.1	6.56	365.91	28.31	79.8	100	44.68
1524	1.75	0.51	-68.1	6.52	365.81	28.94	29.4	100	44.69
1534	2.0	0.46	-66.1	6.51	369.51	30.25	30.4	100	44.69
1544	2.25	0.45	-64.4	6.52	369.81	28.41	53.5	100	44.69
1554	2.50	0.44	-58.8	6.45	363.65	27.40	25.8	100	44.69
1604	2.75	0.36	-58.7	6.52	359.77	25.23	[illegible]	100	44.69
1614	3.0	0.33	-62.9	6.59	366.21	25.86	17.4	100	44.69

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-18-20

SAMPLE TIME: 1615

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	ANI: III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	EPA 903.0/9320	Radium 226 & 228 Combined

GENERAL INFORMATION			
WEATHER:	Hot - Clear - Humid		
SHIPPED VIA:	FEDX		
SHIPPED TO:	FACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4200 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com		
SAMPLER:	Erek Sullen	OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8123-20-1429.2001

Wood Env Solutions, Inc.
1670 BIG SHANTY ROAD NW SUITE 100, KENNESAW, GA 30144
PHONE: (770) 421-3450 / FAX: (770) 421-3499

SAMPLING EVENT: X 2020 3rd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: Ark-PZ-1 MATRIX: Groundwater

WELL MATERIAL: X PVC ___ SS ___ OTHER

SAMPLE METHOD: Geo Pump - Bladder Pump

DUP./REP. OF:_____

Pump Intake Set at (btoc):_____

or

Tubing Inlet Set at (btoc): 89.0'

WELL DIAMETER: 2"

DEPTH TO WATER: 42.52

TOTAL DEPTH: 82.62

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.650 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (+5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft. BTOC)*
Initial 1619	3.25	0.32	-64.1	6.56	363.18	25.88	11.3	100	49.69
1634	3.5	0.32	-55.8	6.57	359.39	25.86	10.7	100	49.69
1644	3.75	0.32	-54.9	6.57	359.44	25.60	9.47	100	49.69
1654	4.0	0.31	-54.5	6.58	359.27	25.81	8.65	100	49.69
1704	4.25	0.31	-53.6	6.59	358.08	25.11	7.35	100	49.69
1714	4.5	0.30	-51.7	6.59	357.11	25.79	7.03	100	49.69
1724	4.75	0.30	-52.8	6.59	357.07	24.69	6.32	100	49.69
1734	5.0	0.30	-52.2	6.59	358.67	24.84	5.99	100	49.69
1744	5.25	0.29	-52.0	6.60	358.42	24.55	5.50	100	49.69
1754	5.5	0.29	-52.7	6.59	359.89	25.30	5.02	100	49.69
1804	5.75	0.29	-51.9	6.59	360.26	25.34	4.92	100	49.69
1815	Collect Sample								

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-18-20

SAMPLE TIME: 1815

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	EPA13/9320	Radium 226 & 228 Combined

GENERAL INFORMATION		
WEATHER:	Hot - Clear - Humid	
SHIPPED VIA:	FEDEX	
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com	
SAMPLER:	Evelyn Guillen	OBSERVER:

PROJECT NAME: Plant Arkwright, GA - GDR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8123-20-1429.3001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semmi-Annual Event; __ OTHER

WELL ID / SAMPLE ID: AW2-2 MATRIX: Groundwater

WELL MATERIAL: PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow - Bladder Pump

DUP./REP. OF: DUP-2

WELL DIAMETER: 2"

DEPTH TO WATER: 41.68 GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 62.67

WATER COLUMN HEIGHT: 20.99 ft / 7 = 3.57 x 3 = 10.71

PURGE VOLUME: 10.7

Pump Intake Set at (blue): _____

or

Tubing Inlet Set at (blue): 59.0'

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP. (°C) Record only	TURB. (NTU) (+/- 5 NTU)	Pump Rate (ml/min.) (& pump setting) [100 ml/min]	Water Level (ft BTOC)[1]
Initial 10:13	0.25	1.32	63.5	5.90	1140.7	22.47	155	200 / 1	41.82
10:19	0.5	2.61	66.6	5.98	1125.4	22.18	106	200	41.89
10:24	0.75	3.65	69.9	6.02	1189.0	22.20	86.1	200	42.02
10:29	1.0	4.52	71.4	6.04	1191.9	22.08	66.8	200	42.02
10:34	1.25	4.51	74.8	6.09	1203.0	22.09	60.7	200	42.02
10:39	1.5	4.56	75.9	6.04	1209.2	22.09	52.1	200	42.02
10:44	1.75	4.70	76.6	6.04	1218.2	22.12	37.2	200	42.02
10:49	2.0	4.79	77.5	6.04	1236.5	22.39	33.8	200	42.02
10:54	2.25	4.71	78.4	6.04	1246.8	22.32	29.1	200	42.02
10:59	2.5	4.69	80.0	6.04	1295.3	22.24	27.2	200	42.02
11:04	2.75	4.63	82.3	6.03	1262.0	22.48	24.9	200	42.02
11:09	3.0	4.66	82.9	6.02	1262.0	22.58	20.2	200	42.02
11:14	3.25	4.79	83.4	6.03	1282.5	22.33	18.7	200	42.02
11:19	3.5	4.94	83.9	6.02	1299.3	22.50	16.5	200	42.02

NOTES:

[1] Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-19-21

SAMPLE TIME: 1345

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION			
WEATHER:	Hot - Clear - Humid		
SHIPPED VIA:	FEDEX		
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betty McDaniel betsy.mcdaniel@pacelabs.com		
SAMPLER:	Erik Bullen	OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - GDR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 3 2020 3rd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: AP1FZ-E MATRIX: Groundwater

WELL MATERIAL: 4" PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow - Bladder

DUP./REP. OF: Dup-2

Pump Intake Set at (bmp): _____

or

Tubing Inlet Set at (bmp): 59.0

WELL DIAMETER: 6

DEPTH TO WATER: 40.68

TOTAL DEPTH: 62.67

WATER COLUMN HEIGHT: 20.99

PURGE VOLUME: 10.20

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±5% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 3%]	TEMP. (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial 1124	3.25	4.59	89.9	6.02	1302.4	23.49	14.8	200	42.05
1129	4.0	4.93	85.1	6.02	1307.1	22.85	15.3	200	42.02
1134	4.25	4.85	85.7	6.02	1306.3	22.21	15.0	200	42.02
1139	4.5	5.08	85.6	6.01	1327.9	22.20	13.1	200	42.02
1144	4.75	5.03	85.9	6.00	1335.1	22.11	14.5	200	42.02
1149	5.0	5.05	84.6	6.0	1344.4	22.26	12.3	200	42.02
1154	5.25	5.05	85.2	5.99	1348.3	22.08	13.2	200	42.02
1159	5.5	5.05	84.6	5.99	1355.8	21.83	12.0	200	42.02
1204	5.75	5.08	83.9	5.99	1366.5	21.86	11.8	200	42.02
1209	6.0	4.76	83.5	5.98	1370.4	21.81	9.50	200	42.02
1214	6.25	4.62	83.9	5.96	1390.4	22.21	9.31	200	42.02
1219	6.5	4.68	83.5	5.95	1401.6	22.59	9.26	200	42.02
1224	6.75	4.71	84.3	5.95	1416.8	22.20	9.36	200	42.02
1229	7.0	4.83	83.9	5.94	1431.7	21.93	8.72	200	42.02

NOTES:

- Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
- If well is purged dry, allow to recharge and sample within 24 hrs.
- Turbidity < 5 NTUs

SAMPLE DATE: 8-19-20

SAMPLE TIME: _____

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	E9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION			
WEATHER:	Hot - Clear - Humid		
SHIPPED VIA:	FED-X		
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com		
SAMPLER:	Evan Guiler	OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8122-20-1429.2001

Wood Env. Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: APIP2-2 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow - Bladder

DUP./REP. OF: Dup-2

WELL DIAMETER: 2"

DEPTH TO WATER: _____ GRAB (x) COMPOSITE ( )

TOTAL DEPTH: _____

Pump Intake Set at (btoc): _____

or

Tubing Inlet Set at (btoc): _____

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

Time	VOL PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (uS/cm) (+/- 3%)	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min, (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial: 1234	7.25	4.69	83.4	5.93	1433.1	23.02	8.07	200	42.00
1239	7.5	4.81	81.0	5.93	1441.1	22.68	8.26	200	42.00
1244	7.75	4.81	83.3	5.92	1448.3	22.00	7.58	200	42.02
1249	8.0	4.91	83.0	5.92	1459.7	21.64	7.93	200	42.02
1254	8.25	4.72	81.6	5.92	1455.2	22.04	7.01	200	42.02
1259	8.5	4.71	82.7	5.91	1464.7	21.92	6.18	200	42.02
1304	8.75	5.13	84.3	5.89	1482.6	22.31	6.43	200	42.02
1309	9.0	4.57	84.0	5.89	1484.9	22.42	6.70	200	42.02
1314	9.25	4.81	84.3	5.88	1501.8	22.08	6.15	200	42.02
1319	9.5	4.77	84.7	5.87	1503.3	21.97	5.66	200	42.02
1324	9.75	4.55	84.8	5.87	1493.5	22.14	5.61	200	42.02
1329	10.0	4.55	85.4	5.86	1505.1	22.08	5.33	200	42.02
1334	10.25	4.51	86.8	5.85	1511.3	22.20	5.47	200	42.02
1339	10.5	4.44	87.0	5.84	1511.4	22.38	4.94	200	42.04

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive meter level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-19-20

SAMPLE TIME: 1345

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	EM115/9320	Radium 226 & 228 Combined

pH check ✓ ✓

GENERAL INFORMATION		
WEATHER:		
SHIPPED VIA:	FED-X	
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4213 POC: Betsy McDaniel; betsy.mcdaniel@pacelabs.com	
SAMPLER: Evan Cullen		OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123-20-1420.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100, KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 3rd Semmi-Annual Event, __ OTHER

WELL ID / SAMPLE ID: AP1PZ-3 MATRIX: Groundwater

WELL MATERIAL: 2" PVC __ SS __ OTHER

SAMPLE METHOD: Grundfos - Bladder

DUP./REP. ID#:_____

Pump Intake Set at (btoc):_____

or

Tubing Inlet Set at (btoc): 63.0'

WELL DIAMETER: 2"

DEPTH TO WATER: 42.58

GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 63.44

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

[0.16] x water column height (ft) x 3 (well volumes) for 2" wells]

[0.65] x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

Time	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.3 mg/L) for DO < 0.3 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& purge setting) (100 ml/min)	Water Level (ft BTOC)
Initial 1530	0.25	3.62	-53.8	5.75	1738.1	23.35	25.94	200	43.45
1535	0.5	0.38	-38.8	5.66	2117.4	21.79	23.1	200	43.45
1540	0.75	0.36	-45.6	5.66	2135.6	22.93	18.9	200	43.45
1545	1.0	0.33	-52	5.66	2138.5	22.40	16.5	200	43.45
1550	1.25	0.29	-58.4	5.62	2131.5	22.68	15.9	200	43.45
1555	1.5	0.27	-61.5	5.65	2128.9	22.40	13.5	200	43.45
1600	1.75	0.23	-61.5	5.62	2125.7	23.07	10.6	200	43.45
1605	2.0	0.23	-66.3	5.61	2120.4	23.00	9.13	200	43.45
1610	2.25	0.21	-68.8	5.61	2118.0	23.11	7.87	200	43.45
1615	2.5	0.21	-68.1	5.61	2115.9	23.25	6.71	200	43.45
1620	2.75	0.21	-70.3	5.61	2120.5	23.37	7.46	200	43.45
1625	3.0	0.20	-69.1	5.61	2114.4	23.33	6.79	200	43.45
1630	3.25	0.20	-71.1	5.61	2117.1	23.30	5.69	200	43.45
1635	3.5	0.19	-68.4	5.60	2116.8	23.09	5.02	200	43.45

NOTES:

Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-19-21

SAMPLE TIME: 1645

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	E9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION		
WEATHER:	Hot - Thunder - Humid - Some Rain	
SHIPPED VIA:	FEDEX	
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 Ph: (770) 734-4283 POC: Betsy McDaniel betsy.mcdaniel@pacelabs.com	
SAMPLER: Evee Gulley		OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1_ 2020 2nd Semi-Annual Event; ___ OTHER
WELL ID / SAMPLE ID: AP1PZ-3 MATRIX: Groundwater
WELL MATERIAL: V PVC __ SS __ OTHER
SAMPLE METHOD: Low Flow - Bladder

DUP./REP. OF:_____

Pump Intake Set at (bloc):_____
or
Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2"
DEPTH TO WATER: 42.38
TOTAL DEPTH: 62.88
WATER COLUMN HEIGHT:_____
PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.16] x water column height (ft) x 3 (well volumes) for 2" wells]
[0.65] x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±10% for DO > 5.0 mg/L) for DO < 5.0 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial: 1440	3.75	0.19	-49.9	5.40	5102.3	22.10	4.43	Zero 1	43.95
1445	Collect Sample								

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity = 5 NTUs

SAMPLE DATE: 8-11-21
SAMPLE TIME: 1445

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE: pHstick		ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C		EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C		SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	✓	EPA 9320	Radium 226 & 228 Combined

GENERAL INFORMATION			
WEATHER:			
SHIPPED VIA:	FED-X		
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4203 POC: Betsy McDaniel betsy.mcdaniel@pacelabs.com		
SAMPLER: Ever Guillen		OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123-20-1439.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 2nd Semmi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-4 MATRIX: Groundwater

WELL MATERIAL: ✓ PVC ___ SS ___ OTHER

SAMPLE METHOD: Low Flow - Bladder

DUP./REP. OF: _____

Pump Intake Set at (btoc): _____

or

Tubing Inlet Set at (btoc): 63.0'

WELL DIAMETER: 2"

DEPTH TO WATER: 46.72

TOTAL DEPTH: 67.72

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 5.0 mg/L; for DO < 5.0 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 3%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) [100 ml/min]	Water Level (ft BTOC)'
Initial: 930	0.125	4.41	-34.3	6.02	1958.8	24.82	36.7	100 |	47.12
935	0.35	0.21	-108.4	6.63	2397.8	21.80	31.7	100	47.12
940	0.375	0.20	-112.2	6.75	2284.0	22.27	26.1	100	47.12
945	0.5	0.62	-119.5	6.80	2286.7	22.11	21.9	100	47.12
950	0.625	0.59	-118.3	6.81	2272.1	22.23	17.3	100	47.12
955	0.75	0.65	-114.2	6.81	2266.3	22.13	13.7	100	47.12
1000	0.875	0.60	-115.5	6.81	2266.3	22.15	11.0	100	47.12
1005	1.0	0.50	-108.0	6.77	2270.1	22.31	8.82	100	47.12
1010	1.125	0.52	-107.0	6.79	2264.9	22.35	8.02	100	47.12
1015	1.25	0.49	-106.9	6.77	2263.0	22.37	7.28	100	47.11
1020	1.375	0.48	-101.9	6.76	2262.5	22.41	6.68	100	47.16
1025	1.5	0.47	-98.1	6.74	2257.0	22.40	5.88	100	47.11
1030	1.625	0.45	-96.1	6.75	2260.3	22.43	5.79	100	47.12
1035	1.75	0.44	-93.1	6.78	2256.8	22.48	5.24	100	47.12

NOTES:

1 Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-12-21

SAMPLE TIME: 1130

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020B/SWT-47SA	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION			
WEATHER:	Hot - Cloudy - Humid		
SHIPPED VIA:	FED-X		
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4283 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com		
SAMPLER:	Evelyn Gunter	OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6133-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semmi-Annual Event; ___ OTHER
WELL ID / SAMPLE ID: APIPZ-4 MATRIX: Groundwater
WELL MATERIAL: PVC ___ SS ___ OTHER
SAMPLE METHOD: Low-Flow - Bladder

DUP./REP. OF:_____

Pump Intake Set at (btoc):_____
or
Tubing Inlet Set at (btoc): 63'

WELL DIAMETER: 2"
DEPTH TO WATER: 46.32
TOTAL DEPTH: 62.42
WATER COLUMN HEIGHT:_____
PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (≤5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)[1]
INITIAL									
1040	1.875	0.93	-71.1	6.68	2549.3	22.97	87.87	MED	47.13
1045	2.0	0.89	-87.5	6.68	2569.0	22.99	5.87	"	47.17
1050	2.125	0.88	-86.7	6.65	2592.7	22.99	40.25	"	47.13
1055	2.25	0.89	-85.3	6.64	2594.4	23.00	5.39	"	47.12
1100	2.375	0.87	-83.9	6.63	2602.8	23.00	5.13	"	47.12
1105	2.5	0.88	-80.7	6.61	2603.7	23.02	5.93	"	47.12
1110	2.625	0.83	-79.9	6.60	2633.4	23.02	5.39	"	47.12
1115	2.75	0.91	-77.9	6.58	2633.9	23.02	5.19	"	47.12
1120	2.875	0.89	-78.6	6.57	2653.9	23.05	5.09	"	47.12
1125	3.0	0.88	-77.6	6.56	2633.7	23.08	7.96	"	47.12
1130	Collected Sample								

NOTES:
1 Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 2020-08-31
SAMPLE TIME: 1130

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	Appx. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	Appx. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	EN315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION		
WEATHER:		
SHIPPED VIA:	FED-X	
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4200 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com	
SAMPLER: Evee Gulledge		OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR SW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8122-20-1429.2001

Wood E&I Solutions, Inc.
5075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE (770) 421-3400 / FAX (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: APLPZ-5 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Grab Pump - Bladder

DUP./REP. OF:_____

Pump Intake Set at (bloc):_____

or

Tubing Inlet Set at (bloc): 63.0'

WELL DIAMETER: 2"

DEPTH TO WATER: 48.81

TOTAL DEPTH: 62.55'

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

GRAB (X) COMPOSITE ( )

[1.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[5.163 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µS/cm) [+/- 5%]	TEMP. (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (A pump setting) (100 ml/min)	Water Level (ft BTOC)
INITIAL 1348	0.125	7.82	-63.8	7.03	1301.6	24.88	11.5	200	48.26
1358	0.35	0.88	-89.0	6.66	1335.1	22.77	11.1	200	49.17
1353	0.5	1.31	-98.4	6.59	1351.5	22.31	9.82	200	49.29
1358	0.75	1.53	-88.9	6.58	1336.9	22.80	7.61	200	49.32
1403	1.0	1.69	-85.3	6.57	1313.0	23.03	6.34	200	49.62
1408	1.25	1.76	-80.1	6.57	1310.1	23.34	5.39	200	49.62
1413	1.5	1.88	-85.8	6.57	1333.5	23.61	4.33	200	49.66
1418	1.75	1.96	-82.1	6.58	1328.1	23.03	3.07	200	49.62
1423	2.0	2.04	-81.2	6.58	1333.5	23.19	3.59	200	49.65
1428	2.25	2.08	-78.5	6.59	1343.8	23.40	2.48	200	49.62
1433	2.5	2.15	-78.1	6.60	1348.0	23.65	2.42	200	49.62
1440	Collect	Sample							

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 500 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8-12-21

SAMPLE TIME: 1440

CONTAINER SIZE/TYPE	NO.	PRESERVATION pH check	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7473A	App. III & IV Metals & Silver
1 L/Poly	1	HNO3 to pH <2 ✓	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Hot - Cloudy - Humid
SHIPPED VIA:	FEDEX
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4200 POC: Betsy McDaniel betsy.mcdaniel@pacelabs.com
SAMPLER:	Evan Bullard
OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8123-20-1429.2001

Hood ES Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 3rd Biennial Event; ___ OTHER
WELL ID / SAMPLE ID: APIPZ-6 MATRIX: Groundwater
WELL MATERIAL: X PVC ___ SS ___ OTHER
SAMPLE METHOD: QED Bladder Pump

SUP./REP. OF:

Pump Intake Set at (bgs): 67.7
or
Tubing Inlet Set at (bgs):

WELL DIAMETER: 2
DEPTH TO WATER: 56.39
TOTAL DEPTH: 72.70
WATER COLUMN HEIGHT:
PURGE VOLUME:
GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (≥0.2 mg/L or ±10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (± pump setting) (100 ml/min)	Water Level (Ft BTOC)[1]
Initial 1309	0	0.78	13.2	5.55	3316.3	23.25	63.7	200	56.39
1314	0.25	0.43	3.3	5.39	3420.3	21.73	50.4	200	56.81
1319	0.5	0.36	71.2	5.39	3446.6	21.92	34.7	200	56.81
1324	0.75	0.31	74.3	5.39	3431.0	21.89	27.5	200	56.81
1329	1.0	0.28	75.9	5.39	3422.8	21.93	22.8	200	56.81
1334	1.25	0.26	76.9	5.39	3413.6	21.84	17.7	200	56.81
1339	1.5	0.24	75.9	5.38	3428.5	21.61	11.9	200	56.81
1344	1.75	0.21	72.7	5.54	3419.5	21.73	8.38	200	56.81
1349	2.0	0.20	70.1	5.52	3400.6	21.53	6.69	200	56.81
1354	2.25	0.19	72.7	5.52	3410.1	21.50	5.74	200	56.81
1359	2.50	0.19	70.9	5.51	3412.0	21.31	5.16	200	56.81
1404	2.75	0.18	70.5	5.50	3428.8	21.84	4.65	200	56.81
1409	3.0	0.17	70.7	5.50	3404.3	21.64	4.51	200	56.81

NOTES:
[1] Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 8/23/21
SAMPLE TIME: 1412

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions Cl, F, SO4
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	EPA 9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Hot time, Temp 87°F
SHIPPED VIA:	FED-X
SHIPPED TO:	~~LAB: Pace Laboratories 103 Technology Pkwy, Peachtree Corners, GA 30092 PM: (770) 734-4283 PW: Betsy Mallonee~~ betsy.mallonee@pacelabs.com Energy Testing Laboratories
SAMPLER:	David Howard
OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - GDB GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Pond E&S Solutions, Inc.
1015 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 1st Semi-Annual Event: ___ OTHER
WELL ID / SAMPLE ID: APIPZ-7 MATRIX: Groundwater
WELL MATERIAL: X PVC ___ SS ___ OTHER
SAMPLE METHOD: QED Bladder Pump

DUP./REP. OF:_____

Pump Intake Set at (bgs): 72.75
or
Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2
DEPTH TO WATER: ~~50.30~~ 45.98 GRAB (x) COMPOSITE ( )
TOTAL DEPTH: 77.25
WATER COLUMN HEIGHT: ~~27.45~~ 27.45
PURGE VOLUME:_____
[0.163 x water column height (ft) x 3 (well volumes)] for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes)] for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes)] for 6" wells]

TIME Start 1204	VOL. PURGED (gal)	DO (<0.2 mg/L or ±9% for DO > 0.5 mg/L) for DO < 0.5 mg/L, record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP. (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate <500 mL/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial: 1204	0	0.58	-54.8	6.45	2329.1	23.88	10.4	100	50.30
1209	0.125	0.60	-56.5	6.43	2326.7	24.48	11.7	100	50.32
1214	0.25	0.59	-53.6	6.40	2321.2	25.24	9.07	100	50.35
1219	0.375	0.58	-56.0	6.40	2322.1	25.09	8.43	100	50.32
1224	0.50	0.55	-56.7	6.40	2322.7	25.15	8.10	100	50.30
1229	0.625	0.54	-55.7	6.40	2316.6	24.96	6.80	100	50.29
1234	0.75	0.51	-56.1	6.40	2323.2	24.69	6.75	100	50.29
1239	0.875	0.48	-56.5	6.40	2325.8	24.85	6.61	100	50.29
1244	1.0	0.47	-56.1	6.40	2326.7	24.84	5.98	100	50.29
1249	1.125	0.43	-56.7	6.40	2324.6	24.74	6.03	100	50.29
1254	1.25	0.3[illegible]	-56.0	6.41	2323.9	24.80	5.71	100	50.29
1259	1.375	0.36	-56.0	6.41	2323.9	24.80	5.52	100	50.29
1304	1.5	0.35	-55.7	6.41	2314.4	24.26	4.83	100	50.30
1309	1.625	0.35	-56.0	6.41	2319.6	24.29	4.39	100	50.30

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 8/18/21
SAMPLE TIME: 1310

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pHchecked	ANALYTICAL METHOD	ANALYSIS
~~1 L Glass/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions Cl, F, SO4
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/EW1475A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	EB019/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Partly Sunny, Temp 82°F
SHIPPED VIA:	FED-X
SHIPPED TO:	~~Arch Laboratories - Pace Technology Drive, Peachtree Corners~~ GA 30092 PH: (770) 734-4200 POC: Shirley McDaniel; shirley.mcdaniel@pacelabs.com Eurofins TestAmerica
SAMPLER: Daniel Heward	OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123-20-1429.2001

Wood Env Solutions, Inc.
1675 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 2nd Semi-Annual Event; __ OTHER

WELL ID / SAMPLE ID: APIPZ-8 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: QED Bladder pump

DUP./REP. OF: DUP-1

Pump Intake Set at (btoc): 61.09

or

Tubing Inlet Set at (btoc): _____

WELL DIAMETER: 2

DEPTH TO WATER: ~~45.25~~ 46.62 GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 66.09

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L; for DO = 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate milliliter. (& pump setting) (100 milliliter)	Water Level (ft BTOC)
									46.62
Initial: 1532	0	0.46	-86.9	6.75	1561.2	24.74	31.3	125	~~46.87~~
1537	0.15	0.47	-97.3	6.75	1515.3	25.46	23.7	125	46.82
1542	0.3	0.47	-102.9	6.15	1573.6	24.83	17.0	125	46.77
1547	0.45	0.44	-97.9	6.75	1557.2	25.23	13.1	125	46.73
1552	0.6	0.39	-98.0	6.75	1558.1	25.08	11.3	125	46.71
1557	0.75	0.34	-98.3	6.76	1557.1	25.14	12.0	125	46.70
1602	0.9	0.32	-98.2	6.75	1559.3	25.35	8.50	125	46.70
1607	1.05	0.30	-98.0	6.75	1558.4	25.83	8.24	125	46.70
1612	1.3	0.28	-97.3	6.75	1544.6	26.06	7.58	125	46.70
1617	1.45	0.27	-97.4	6.74	1555.1	26.03	5.87	125	46.70
1622	1.6	0.26	-96.2	6.74	1559.1	25.89	5.70	125	46.70
1627	1.75	0.25	-94.5	6.75	1549.4	25.33	5.18	125	46.70
1632	1.9	0.24	-97.6	6.74	1556.0	25.73	4.05	125	46.70
1637	2.05	0.24	-96.5	6.74	1562.3	25.92	4.12	125	46.70

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs Also collected DUP-1 all analyses

SAMPLE DATE: 8/13/20

SAMPLE TIME: 1633

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~500 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Cl, F, SO4 App. III Analytes
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	1	HNO3 to pH <2 ✓	EPA 903.0/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Hot + Humid, Temp 91°F
SHIPPED VIA:	FED-X
SHIPPED TO:	~~PACE Laboratories - 110 TECHNOLOGY PKWY, PEACHTREE CORNERS, GA 30092 PH: (770) 734-4200 POC: Betsy McDaniel~~ betsy.mcdaniel@pacelabs.com Eurofins TestAmerica
SAMPLER:	Daniel Howard
OBSERVER:	

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 | FAX: (770) 421-3488

SAMPLING EVENT: X 2021 2nd Semi-Annual Event; __ OTHER
WELL ID / SAMPLE ID: APIPZ-9 MATRIX: Groundwater
WELL MATERIAL: X PVC __ SS __ OTHER:
SAMPLE METHOD: QED Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (tbtoc): 52.35
or
Tubing Inlet Set at (tbtoc):_____

WELL DIAMETER: 2
DEPTH TO WATER: 40.41
TOTAL DEPTH: 57.35
WATER COLUMN HEIGHT: 16.94
PURGE VOLUME:_____
GRAB (x) COMPOSITE ( )
[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP. (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial 1142	0	4.86	39.4	6.35	725.63	29.22	37.2	50	40.41
1147	0.06	2.72	30.3	6.00	751.41	28.15	70.0	50	40.90
1152	0.12	2.37	29.0	5.98	747.49	27.87	38.7	50	41.11
1157	0.18	2.26	30.2	6.00	743.63	27.02	38.3	50	41.27
1202	0.24	2.09	30.7	6.00	739.58	26.37	40.5	50	41.58
1207	0.30	1.99	30.5	6.00	739.13	26.92	40.3	50	41.84
1212	0.36	1.95	30.2	5.99	753.04	26.61	39.1	50	42.03
1217	0.42	1.89	29.1	5.99	751.26	27.41	39.0	50	42.29
1222	0.48	1.86	30.1	5.98	743.35	27.40	40.9	50	42.53
1227	0.54	1.83	31.3	5.98	745.77	26.35	38.7	50	42.75
1232	0.60	1.81	32.0	5.99	746.83	26.15	35.6	50	43.01
1237	0.66	1.81	32.7	5.99	746.07	26.08	36.8	50	43.18
1242	0.72	1.79	33.0	5.99	748.69	25.95	35.1	50	43.43
1247	0.78	1.78	33.9	5.98	748.08	26.01	33.1	50	43.67

NOTES:
- Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
- If well is purged dry, allow to recharge and sample within 24 hrs.
- Turbidity < 5 NTUs

SAMPLE DATE: 8/19/21
SAMPLE TIME: 16:50

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check	ANALYTICAL METHOD	ANALYTES
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Cl, F, SO_4 App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	EPA 9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Hazy Humid, Temp 87°F
SHIPPED VIA:	FED-X
SHIPPED TO:	~~GRACE Laboratories - 7727 Grow Drive, Pennsauken~~ Eurofins TestAmerica
SAMPLER:	Daniel Howard

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1428.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3600 / FAX: (770) 421-3486

SAMPLING EVENT: X 2020 2nd Semi-Annual Event; ___ OTHER
WELL ID / SAMPLE ID: APIPZ-9 MATRIX: Groundwater
WELL MATERIAL: X PVC ___ SS ___ OTHER
SAMPLE METHOD: QED Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (bmp): 52.55
or
Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2
DEPTH TO WATER: 40.41
TOTAL DEPTH: 57.35
WATER COLUMN HEIGHT: 16.94
PURGE VOLUME:_____
GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (uS/cm) (+/- 3%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial: 1252	0.84	1.79	34.9	6.97	747.15	26.24	32.6	50	43.87
1257	0.9	1.84	37.5	5.95	748.28	26.36	32.0	50	44.01
1302	0.96	1.95	40.8	5.93	745.49	26.29	31.7	50	44.27
1307	1.02	2.01	44.0	5.91	740.73	26.80	31.6	50	44.42
1312	1.08	2.06	46.6	5.91	737.86	26.92	30.5	50	44.59
1317	1.14	2.08	48.1	5.90	736.69	26.37	29.3	50	44.75
1322	1.2	2.18	51.9	5.89	734.38	26.05	26.4	50	44.93
1327	1.26	2.21	52.0	5.88	734.55	26.15	25.6	50	45.08
1332	1.32	2.23	53.0	5.88	735.48	26.25	24.2	50	45.25
1337	1.38	2.22	54.8	5.87	738.64	26.35	24.1	50	45.38
1342	1.44	2.22	55.6	5.87	741.27	26.34	23.1	50	45.56
1347	1.50	2.23	57.3	5.86	725.32	26.15	23.2	50	45.65
1352	1.56	2.25	58.0	5.86	726.89	26.15	22.5	50	45.84
1357	1.62	2.24	59.2	5.86	723.37	26.12	23.3	50	46.00

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 8/19/21
SAMPLE TIME: 1650

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE (Hach #)	ANALYTICAL METHOD	ANALYTES
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Cl, F, SO4 App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	3	HNO3 to pH <2 ✓	EPA 9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION		
WEATHER:	Hot + Humid, Temp 87°F	
SHIPPED VIA:	FED-X	
SHIPPED TO:	PACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 PH: (770) 734-4283 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com	
SAMPLER: Daniel Howard		OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100, KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Summit-Annual Event; ___ OTHER
WELL ID / SAMPLE ID: APIPZ-9 MATRIX: Groundwater
WELL MATERIAL: ✓PVC ___SS ___OTHER
SAMPLE METHOD: QED Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (bloc): 52.35
or
Tubing Inlet Set at (bloc):_____

WELL DIAMETER: 2
DEPTH TO WATER: 40.41
TOTAL DEPTH: 57.35
WATER COLUMN HEIGHT: 16.94
PURGE VOLUME:_____
GRAB (s) COMPOSITE ( )
[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft. BTOC)*
Initial: 1401	1.68	2.24	61.2	5.83	724.52	26.17	22.9	50	46.17
1407	1.74	2.27	62.8	5.85	724.68	25.35	21.3	50	46.30
1412	1.80	2.26	64.2	5.85	724.28	25.76	21.4	50	46.42
1417	1.86	2.26	66.0	5.85	722.62	25.17	20.2	50	46.51
1422	1.92	2.24	66.3	5.86	723.94	24.60	20.9	50	46.63
1427	1.98	2.23	67.2	5.86	723.11	24.33	20.3	50	46.84
1432	2.04	2.30	67.3	5.86	726.94	24.29	19.3	50	46.98
1437	2.10	2.30	67.8	5.85	724.90	24.32	19.0	50	47.09
1442	2.16	2.26	66.7	5.86	725.32	24.08	19.3	50	47.15
1447	2.22	2.32	67.3	5.85	726.30	23.96	19.2	50	47.11
1452	2.28	2.33	68.0	5.84	726.64	23.95	18.6	50	47.16
1457	2.34	2.30	67.3	5.84	725.32	24.02	18.2	50	47.22
1508	2.40	2.32	67.4	5.84	724.63	23.98	---	50	---
1513	2.46	2.32	68.9	5.84	725.23	23.98	---	50	---

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 6/19/21
SAMPLE TIME: 1650

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check	ANALYTICAL METHOD	ANALYSIS
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Cl, F, SO_4 App. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	3	HNO3 to pH <2 ✓	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Hot+Humid, Temp 97°F
SHIPPED VIA:	FED-X
SHIPPED TO:	Pace: (800)767-0859 - 110 Technology Pkwy, Peachtree Corners, GA 30092 Attn: (770) 734-4283 POC: Betsy McDaniel: betsy.mcdaniel@pacelabs.com Exciting Test America
SAMPLER: Daniel Hamm	OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Prepared for: Southern Company
1979 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semi-Annual Event; ___ OTHER
WELL ID / SAMPLE ID: APIPZ-9 MATRIX: Groundwater
WELL MATERIAL: ✓PVC ___ SS ___ OTHER
SAMPLE METHOD: QED 8" Bladder Pump

DUP.(REP. OF):_____

Pump Intake Set at (Btoc): 52.35
or
Tubing Inlet Set at (Btoc):_____

WELL DIAMETER: 2
DEPTH TO WATER: 30.41
TOTAL DEPTH: 57.35
WATER COLUMN HEIGHT: 16.94
PURGE VOLUME:_____
GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.8 mg/L) for DO < 0.8 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)
Initial 1512	2.52	2.38	69.3	5.84	727.48	24.02	18.6	500	47.33
1517	2.58	2.56	72.7	5.82	732.02	24.92	13.5	500	47.39
1522	2.64	2.60	73.1	5.81	739.22	24.87	17.9	500	47.41
1527	2.7	2.63	76.3	5.80	740.86	25.28	16.5	500	47.45
1532	2.76	2.63	81.2	5.78	746.62	25.65	17.9	500	47.50
1537	2.82	2.63	89.3	5.78	744.45	25.85	14.2	500	47.54
1542	2.88	2.62	91.1	5.78	753.80	25.93	12.1	500	47.54
1547	2.94	2.65	86.7	5.77	758.75	26.06	13.2	500	47.62
1552	3.00	2.59	82.8	5.78	759.40	26.33	12.3	500	47.68
1557	3.06	2.68	87.6	5.76	760.90	26.98	10.9	500	47.70
1602	3.12	2.61	88.2	5.76	761.04	26.99	10.7	500	47.73
1607	3.18	2.57	87.6	5.77	760.76	26.64	10.7	500	47.79
1612	3.24	2.54	88.9	5.76	760.56	26.57	10.2	500	47.82
1617	3.3	2.	92.1	5.77	763.62	26.37	10.5	500	47.86

NOTES:
- Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 500 ml/min and the water level is above the top of the screen.
- If well is purged dry, allow to recharge and sample within 24 hrs.
- Turbidity < 5 NTUs

SAMPLE DATE: 8/19/20
SAMPLE TIME: 1650

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check	ANALYTICAL METHOD	ANALYSIS
~~250 mL/Plastic~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Cl, F, SO_4 Appx. III Anions
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020B/SW7470A	Appx. III & IV Metals & Silver
1 L/Poly	3	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Hot + Humid, Temp 87°F
SHIPPED VIA:	FED-X
SHIPPED TO:	ALS Laboratories 1115 Technology Pkwy Pagosa Springs, CO 81003 ph: (970) 731-4303 POC: Betty McConnell betsy.mcdaniel@alsglobal.com Forsling TestAmerica
SAMPLER:	Daniel Herrald OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 1st Semi-Annual Event; __ OTHER
WELL ID / SAMPLE ID: APIPZ-9 MATRIX: Groundwater
WELL MATERIAL: X PVC __ SS __ OTHER
SAMPLE METHOD: ~~APIPZ-9~~ QED Bladder pump
DUP./REP. OF:_____
Pump Intake Set at (blow): 52.35
or
Tubing Inlet Set at (blow):_____

WELL DIAMETER: 2
DEPTH TO WATER: 40.71
TOTAL DEPTH: 57.35
WATER COLUMN HEIGHT: 16.64
PURGE VOLUME:_____
GRAB (x) COMPOSITE ( )
[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (≥0.2 mg/L or ±10% for DO > 0.5 mg/L) for DO > 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)[1]
Initial: 1612	3.36	2.51	92.8	5.76	769.41	26.70	10.1	50	47.87
1627	3.42	2.43	89.7	5.76	763.74	26.79	9.95	50	47.90
1632	3.48	2.46	88.6	5.77	763.65	26.60	8.96	50	47.93
1637	3.54	2.44	89.1	5.77	763.21	26.76	9.22	50	47.96
1642	3.60	2.44	88.2	5.77	761.92	26.69	9.08	50	48.00
1647	3.66	2.42	87.4	5.77	759.17	26.48	8.60	50	48.04

NOTES:
[1] Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 3/19/20
SAMPLE TIME: 1650

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check	ANALYTICAL METHOD	ANALYSIS
~~500 ml CP (B)~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Cl, F, SO4 App. III Anions
500 mL/P poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2 ✓	SW6010B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2 ✓	E9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	
SHIPPED VIA:	FED-X
SHIPPED TO:	RACE Laboratories - 110 Technology Pkwy, Peachtree Corners, GA 30092 Ph: (770) 734-4200 POC: Betsy McDaniel; betsy.mcdaniel@pacelabs.com Pace/Eurofins Test America
SAMPLER: Daniel Howard	OBSERVER:

PROJECT NAME: Plant Arkwright GA - CCR SW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 2nd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: APMPZ-10 MATRIX: Groundwater

WELL MATERIAL: X PVC _ SS _ OTHER

SAMPLE METHOD: QED Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (btoc): 51.48

or

Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2

DEPTH TO WATER: 38.04 GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 56.48

WATER COLUMN HEIGHT: 18.44

PURGE VOLUME:_____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 5.0 mg/L) for DO < 5.0 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate (<500 mL/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC) 38.04
Initial 1052	0	0.86	-22.0	6.36	744.47	22.72	10.1	60	~~38.04~~
1057	0.1	0.82	-37.6	6.37	744.79	23.03	10.6	75	38.97
1102	0.2	0.80	-47.6	6.39	746.14	23.22	6.9	75	39.02
1107	0.3	0.79	-52.0	6.43	751.86	24.01	6.08	75	39.08
1112	0.4	0.74	-67.2	6.47	759.31	24.04	7.37	75	39.13
1117	0.5	0.71	-71.8	6.50	762.30	24.15	3.78	75	39.16
1122	0.6	0.65	-75.6	6.53	764.38	24.10	3.06	75	39.20
1127	0.7	0.59	-76.0	6.53	763.38	24.16	2.74	75	39.23

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 700 ml/min and the water level is above the top of the screen.

If well is pumped dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8/20/21

SAMPLE TIME: 1130

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE pH check		ANALYTICAL METHOD	ANALYTES
~~250 mL/Poly~~	~~1~~	Cool to 6°C		EPA 300.0 R2.1	App. III Anions Cl, F, SO4
500 mL/Poly	1	Cool to 6°C		SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	✓	SW6020B/SW7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	✓	903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Partly Cloudy, Temp 80°F
SHIPPED VIA:	FEDEX
SHIPPED TO:	~~EMAIL: [illegible] PHONE: [illegible] ADDRESS: [illegible] PHONE: (770) 234-4263 ROC: Bailey McDaniel~~ Eurofins Test America
SAMPLER: Daniel Howard	OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1439.2001

Wood E&I Solutions, Inc.
5079 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 2nd Semi-Annual Event; ___ OTHER
WELL ID / SAMPLE ID: APIPZ-11 MATRIX: Groundwater
WELL MATERIAL: X PVC __ SS __ OTHER
SAMPLE METHOD: QED Bladder pump

DUP./REP. OF: _____

Pump Intake Set at (bmp): 68.3
or
Tubing Inlet Set at (bmp): _____

WELL DIAMETER: 2
DEPTH TO WATER: 37.90
TOTAL DEPTH: 73.30
WATER COLUMN HEIGHT: 35.40
PURGE VOLUME: _____
GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

Time	VOL. PURGED (gal)	DO (±0.2 mg/L for 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (uS/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (+/- 10 NTU)	Pump Rate (ml/min) (& pump setting) (100 ml/min)	Water Level (ft BTOC)
Initial: 1358	0	1.92	16.9	6.76	395.67	22.31	86.2	200	37.90
1403	0.25	1.81	20.9	6.73	401.06	21.93	11.5	200	38.16
1408	0.5	1.69	24.3	6.72	399.26	22.00	35.6	200	38.16
1413	0.75	1.58	27.6	6.71	397.97	22.09	78.3	200	38.16
1418	1.0	1.49	30.1	6.71	396.69	21.91	56.5	200	38.16
1423	1.25	1.43	32.8	6.71	394.09	22.00	48.5	200	38.16
1428	1.5	1.32	34.8	6.71	388.96	21.66	74.3	200	38.16
1433	1.75	1.27	35.7	6.72	383.09	21.60	70.8	200	38.16
1438	2.0	1.29	36.4	6.71	377.61	21.77	33.1	200	38.16
1443	2.25	1.31	36.9	6.72	368.75	21.79	28.3	200	38.16
1448	2.5	1.46	37.5	6.73	361.96	21.64	26.5	200	38.16
1453	2.75	1.42	38.2	6.73	358.18	21.60	22.4	200	38.16
1458	3.0	1.46	39.2	6.72	354.92	21.82	20.8	200	38.16
1503	3.25	1.75	40.3	6.72	349.76	21.82	17.6	200	38.16

NOTES:
Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs.

SAMPLE DATE: 8/20/21
SAMPLE TIME: 1656

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 320.0 R3.1	App. III Anions Cl, F, SO4
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020/SW7473A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	E903.0/9320	Radium 226 & 228 Combined

GENERAL INFORMATION

WEATHER: Partly Sunny, Temp 85°F
SHIPPED VIA: FEDEX
SHIPPED TO: ~~PACE Laboratories - meghan.[illegible]@pacelabs.com~~ Eurofins TestAmerica
SAMPLER: Daniel Haward
OBSERVER(S):

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122-20-1429.2001

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: 1 2020 Semi-Annual Event: __ OTHER
WELL ID / SAMPLE ID: APMW-11 MATRIX: Groundwater
WELL MATERIAL: X PVC __ SS __ OTHER
SAMPLE METHOD: QED Bladder pump

SUP./REP. OF:_____

Pump Intake Set at (btoc): 68.3
or
Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2
DEPTH TO WATER: 32.50
TOTAL DEPTH: 73.50
WATER COLUMN HEIGHT: 35.40
PURGE VOLUME:_____
GRAB (x) COMPOSITE ( )
[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL PURGED (gal)	DO (+/-2 mg/L or 10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)
Initial 1508	3.5	1.48	41.2	6.73	345.70	21.55	15.3	200	38.16
1513	3.75	1.49	41.7	6.73	342.48	21.46	14.9	200	38.16
1518	4.0	1.55	42.3	6.72	340.70	21.31	13.0	200	38.16
1523	4.25	1.58	42.4	6.73	338.07	21.79	12.8	200	38.16
1528	4.5	1.61	42.5	6.72	336.35	22.14	12.1	200	38.16
1533	4.75	1.63	43.2	6.72	338.03	22.09	10.9	200	38.16
1538	5.0	1.63	43.8	6.72	332.27	22.22	10.9	200	38.16
1543	5.25	1.63	44.1	6.72	330.70	22.18	11.2	200	38.11
1548	5.5	1.70	44.3	6.72	329.17	22.11	9.89	200	38.11
1553	5.75	1.72	45.5	6.72	328.25	22.25	9.76	200	38.11
1558	6.0	1.74	46.0	6.71	327.55	22.31	9.51	200	38.11
1603	6.25	1.73	46.5	6.71	326.11	22.43	9.41	200	38.11
1608	6.5	1.74	47.2	6.71	324.58	22.45	9.18	200	38.10
1613	6.75	1.78	46.9	6.71	325.02	22.71	8.32	200	38.10

NOTES: Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 feet or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 8/20/21
SAMPLE TIME: 16:50

CONTAINER SIZE/TYPE	NR.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTE
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	Appl. III Anions Cl, F, SO_4
500 mL/Poly	1	Cool to 6°C	SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	SW6020B/7470A	App. III & IV Metals & Silver
1 L/Poly	1	HNO3 to pH <2	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION

WEATHER: Partly Sunny, Temp 85°F
SHIPPED VIA: FED-X
SHIPPED TO: ~~[illegible]~~ Eurofins TestAmerica
SAMPLER: Daniel Howard OBSERVER:

PROJECT NAME: Plant Arkwright, GA - CCR EM

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 8122-19-1429.2001

Road Ecological Solutions, Inc.
1575 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 | FAX: (770) 421-3488

SAMPLING EVENT: X 2020 2nd Semi-Annual Event; ___ OTHER

WELL ID / SAMPLE ID: APIPZ-11 WATER: Groundwater

WELL MATERIAL: X PVC SS OTHER

SAMPLE METHOD: ~~APIPZ-11~~ RED Bladder Pump

EQUIP. DP: C

Pump Intake Set at (bmp): 68.3

or

Tubing Inlet Set at (bmp): _____

WELL DIAMETER: 2

DEPTH TO WATER: 37.90

TOTAL DEPTH: 73.36

WATER COLUMN HEIGHT: 35.46

PURGE VOLUME: _____

GRAB (x) COMPOSITE ( )

[0.161 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±5% for DO > 5.0 mg/L) for DO < 5.0 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (uS/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)
Initial 1613	7.0	1.78	48.3	6.71	323.21	22.65	8.31	200	38.10
1623	7.25	1.76	48.3	6.71	322.18	22.79	7.16	200	38.10
1628	7.5	1.75	48.4	6.71	322.37	22.82	6.06	200	38.10
1633	7.75	1.79	48.3	6.71	320.36	22.89	5.64	200	38.10
1638	8.0	1.81	49.2	6.71	319.52	22.83	5.11	200	38.10
1643	8.25	1.83	49.9	6.71	319.00	22.52	5.10	200	38.10
1648	8.5	1.84	49.8	6.71	318.40	22.13	4.25	200	38.10

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 8/25/21

SAMPLE TIME: 1650

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE: pHcheck		ANALYTICAL METHOD	ANALYSIS
~~500 mL/Poly~~	~~1~~	Cool to 6°C		EPA 300.0 R2.1	App. IV Anions Cl, F, SO4
500 mL/Poly	1	Cool to 6°C		SM 2540C	TDS
250 mL/Poly	1	HNO3 to pH <2	✓	EW3005B/6010C/7470A	App. III & IV Metals & Silver
1 L/Poly	2	HNO3 to pH <2	✓	E9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION

WEATHER: Partly Cloudy, Temp 83°F

SHIPPED VIA: FED-X

SHIPPED TO: ~~Addi Laboratories~~ 7719 Technology Pkwy, Peachtree Corners, GA 30092 Feb (770) 734-4200 POC: Betsy McClellan betsy.mcclellan@pacelabs.com ~~Eurofins Test America~~

SAMPLER: Daniel Howard OBSERVER:

Low-Flow Test Report:

Test Date / Time: 10/26/2021 11:40:43 AM
Project: Plant Arkwright
Operator Name: Ever Guillen

Location Name: AP1GWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.5 ft** **Total Depth: 37.5 ft** **Initial Depth to Water: 22.83 ft**	**Pump Type: Peristaltic** **Tubing Type: HDPE** **Pump Intake From TOC: 30 ft** **Estimated Total Volume Pumped: 10000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.08 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Sample time = 1235

Weather Conditions:
Sunny, warm, dry

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/26/2021 11:40 AM	00:00	4.46 pH	20.04 °C	242.14 µS/cm	4.18 mg/L	62.20 NTU	97.5 mV	22.91 ft	200.00 ml/min
10/26/2021 11:45 AM	05:00	4.49 pH	20.14 °C	240.40 µS/cm	3.91 mg/L	37.30 NTU	106.5 mV	22.91 ft	200.00 ml/min
10/26/2021 11:50 AM	10:00	4.40 pH	20.44 °C	237.98 µS/cm	3.85 mg/L	34.30 NTU	127.5 mV	22.91 ft	200.00 ml/min
10/26/2021 11:55 AM	15:00	4.48 pH	20.26 °C	237.31 µS/cm	3.80 mg/L	25.20 NTU	130.7 mV	22.91 ft	200.00 ml/min
10/26/2021 12:00 PM	20:00	4.50 pH	20.48 °C	237.38 µS/cm	3.72 mg/L	18.60 NTU	108.6 mV	22.91 ft	200.00 ml/min
10/26/2021 12:05 PM	25:00	4.56 pH	20.70 °C	233.51 µS/cm	3.68 mg/L	13.10 NTU	128.1 mV	22.91 ft	200.00 ml/min
10/26/2021 12:10 PM	30:00	4.59 pH	20.57 °C	232.82 µS/cm	3.52 mg/L	9.05 NTU	104.3 mV	22.91 ft	200.00 ml/min
10/26/2021 12:15 PM	35:00	4.58 pH	21.19 °C	234.64 µS/cm	3.85 mg/L	6.35 NTU	123.7 mV	22.91 ft	200.00 ml/min
10/26/2021 12:20 PM	40:00	4.71 pH	20.93 °C	223.70 µS/cm	3.36 mg/L	4.46 NTU	124.1 mV	22.91 ft	200.00 ml/min
10/26/2021 12:25 PM	45:00	4.73 pH	20.84 °C	224.28 µS/cm	3.29 mg/L	4.34 NTU	100.8 mV	22.91 ft	200.00 ml/min
10/26/2021 12:30 PM	50:00	4.76 pH	20.79 °C	224.50 µS/cm	3.33 mg/L	3.51 NTU	119.2 mV	22.91 ft	200.00 ml/min

Samples

Low-Flow Test Report:

Test Date / Time: 10/26/2021 1:31:22 PM
Project: Plant Arkwright (2)
Operator Name: Ever Guillen

Location Name: AP1GWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.1 ft** **Total Depth: 31.1 ft** **Initial Depth to Water: 17.32 ft**	**Pump Type: Peristaltic** **Tubing Type: HDPE** **Pump Intake From TOC: 29 ft** **Estimated Total Volume Pumped: 11000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Sample time = 1430

Weather Conditions:
Warm, sunny, dry

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/26/2021 1:31 PM	00:00	6.08 pH	22.60 °C	72.22 µS/cm	5.38 mg/L	77.60 NTU	95.6 mV	17.32 ft	200.00 ml/min
10/26/2021 1:36 PM	05:00	6.06 pH	22.04 °C	72.32 µS/cm	5.50 mg/L	54.00 NTU	88.2 mV	17.32 ft	200.00 ml/min
10/26/2021 1:41 PM	10:00	6.03 pH	22.12 °C	70.66 µS/cm	5.23 mg/L	47.30 NTU	84.4 mV	17.32 ft	200.00 ml/min
10/26/2021 1:46 PM	15:00	6.01 pH	22.03 °C	69.67 µS/cm	4.99 mg/L	36.10 NTU	83.2 mV	17.32 ft	200.00 ml/min
10/26/2021 1:51 PM	20:00	5.98 pH	22.07 °C	69.90 µS/cm	4.90 mg/L	22.40 NTU	82.6 mV	17.32 ft	200.00 ml/min
10/26/2021 1:56 PM	25:00	5.99 pH	22.04 °C	69.47 µS/cm	4.92 mg/L	17.60 NTU	81.8 mV	17.32 ft	200.00 ml/min
10/26/2021 2:01 PM	30:00	5.99 pH	22.29 °C	69.03 µS/cm	4.88 mg/L	19.70 NTU	81.8 mV	17.32 ft	200.00 ml/min
10/26/2021 2:06 PM	35:00	6.00 pH	22.28 °C	69.39 µS/cm	4.80 mg/L	13.20 NTU	79.4 mV	17.32 ft	200.00 ml/min
10/26/2021 2:11 PM	40:00	5.99 pH	22.45 °C	68.89 µS/cm	4.71 mg/L	9.65 NTU	79.3 mV	17.32 ft	200.00 ml/min
10/26/2021 2:16 PM	45:00	5.99 pH	22.44 °C	68.55 µS/cm	4.68 mg/L	6.48 NTU	78.7 mV	17.32 ft	200.00 ml/min
10/26/2021 2:21 PM	50:00	5.99 pH	22.44 °C	68.13 µS/cm	4.54 mg/L	5.43 NTU	78.4 mV	17.32 ft	200.00 ml/min
10/26/2021 2:26 PM	55:00	5.98 pH	22.50 °C	68.33 µS/cm	4.47 mg/L	2.07 NTU	78.4 mV	17.32 ft	200.00 ml/min

Low-Flow Test Report:

Test Date / Time: 10/28/2021 10:54:15 AM
Project: Plant Arkwright (5)
Operator Name: Ever Guillen

Location Name: AP1PZ-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 77.62 ft** **Total Depth: 87.62 ft** **Initial Depth to Water: 44.72 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 13000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.39 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Sample time =1310

Weather Conditions:
Cold, Rain,

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/28/2021 10:54 AM	00:00	6.29 pH	18.57 °C	319.72 µS/cm	3.19 mg/L	11.60 NTU	52.9 mV	44.98 ft	100.00 ml/min
10/28/2021 11:04 AM	10:00	6.41 pH	18.62 °C	319.60 µS/cm	2.86 mg/L	32.00 NTU	19.0 mV	45.11 ft	100.00 ml/min
10/28/2021 11:14 AM	20:00	6.41 pH	18.41 °C	318.94 µS/cm	2.36 mg/L	28.10 NTU	9.3 mV	45.11 ft	100.00 ml/min
10/28/2021 11:24 AM	30:00	6.43 pH	17.72 °C	318.67 µS/cm	2.11 mg/L	24.80 NTU	10.7 mV	45.11 ft	100.00 ml/min
10/28/2021 11:34 AM	40:00	6.43 pH	17.99 °C	316.54 µS/cm	1.60 mg/L	17.90 NTU	-0.5 mV	45.11 ft	100.00 ml/min
10/28/2021 11:44 AM	50:00	6.43 pH	17.78 °C	318.65 µS/cm	1.42 mg/L	15.80 NTU	-2.7 mV	45.11 ft	100.00 ml/min
10/28/2021 11:54 AM	01:00:00	6.43 pH	18.19 °C	321.09 µS/cm	1.37 mg/L	12.90 NTU	-5.8 mV	45.11 ft	100.00 ml/min
10/28/2021 12:04 PM	01:10:00	6.43 pH	18.08 °C	320.18 µS/cm	1.40 mg/L	11.60 NTU	-8.0 mV	45.11 ft	100.00 ml/min
10/28/2021 12:14 PM	01:20:00	6.44 pH	17.54 °C	317.79 µS/cm	1.20 mg/L	10.00 NTU	-7.6 mV	45.11 ft	100.00 ml/min
10/28/2021 12:24 PM	01:30:00	6.43 pH	17.92 °C	319.93 µS/cm	1.14 mg/L	9.47 NTU	-9.6 mV	45.11 ft	100.00 ml/min
10/28/2021 12:34 PM	01:40:00	6.43 pH	18.77 °C	317.57 µS/cm	1.06 mg/L	8.18 NTU	-12.3 mV	45.11 ft	100.00 ml/min
10/28/2021 12:44 PM	01:50:00	6.44 pH	18.91 °C	317.94 µS/cm	1.27 mg/L	6.42 NTU	-13.0 mV	45.11 ft	100.00 ml/min
10/28/2021 12:54 PM	02:00:00	6.44 pH	18.12 °C	319.03 µS/cm	1.28 mg/L	5.97 NTU	-11.0 mV	45.11 ft	100.00 ml/min

10/28/2021 1:04 PM	02:10:00	6.44 pH	18.34 °C	318.98 µS/cm	0.96 mg/L	4.73 NTU	-11.1 mV	45.11 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/28/2021 3:06:33 PM
Project: Plant Arkwright (6)
Operator Name: Ever Guillen

Location Name: AP1PZ-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.67 ft** **Total Depth: 62.67 ft** **Initial Depth to Water: 4090 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 57 ft** **Estimated Total Volume Pumped: 15000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: -4049.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Sample time = 1750

Weather Conditions:
Cool, rain

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/28/2021 3:06 PM	00:00	6.04 pH	20.94 °C	943.06 µS/cm	0.57 mg/L	220.00 NTU	59.5 mV	40.90 ft	100.00 ml/min
10/28/2021 3:16 PM	10:00	5.99 pH	20.38 °C	1,039.8 µS/cm	0.33 mg/L	163.00 NTU	53.8 mV	40.90 ft	100.00 ml/min
10/28/2021 3:26 PM	20:00	5.96 pH	20.30 °C	1,076.7 µS/cm	0.24 mg/L	148.00 NTU	54.6 mV	40.90 ft	100.00 ml/min
10/28/2021 3:36 PM	30:00	5.95 pH	20.22 °C	1,092.8 µS/cm	0.20 mg/L	109.00 NTU	55.9 mV	40.90 ft	100.00 ml/min
10/28/2021 3:46 PM	40:00	5.93 pH	21.54 °C	1,108.4 µS/cm	0.21 mg/L	68.90 NTU	55.3 mV	40.90 ft	100.00 ml/min
10/28/2021 3:56 PM	50:00	5.92 pH	20.82 °C	1,124.9 µS/cm	0.24 mg/L	62.30 NTU	56.9 mV	40.90 ft	100.00 ml/min
10/28/2021 4:06 PM	01:00:00	5.92 pH	21.19 °C	1,139.0 µS/cm	0.28 mg/L	52.00 NTU	56.7 mV	40.90 ft	100.00 ml/min
10/28/2021 4:16 PM	01:10:00	5.90 pH	21.02 °C	1,157.3 µS/cm	0.38 mg/L	34.80 NTU	57.4 mV	40.90 ft	100.00 ml/min
10/28/2021 4:26 PM	01:20:00	5.90 pH	20.85 °C	1,154.6 µS/cm	0.57 mg/L	24.10 NTU	57.8 mV	40.90 ft	100.00 ml/min
10/28/2021 4:36 PM	01:30:00	5.89 pH	20.68 °C	1,177.8 µS/cm	0.55 mg/L	18.20 NTU	59.7 mV	40.90 ft	100.00 ml/min
10/28/2021 4:46 PM	01:40:00	5.89 pH	20.53 °C	1,175.5 µS/cm	0.72 mg/L	13.40 NTU	60.0 mV	40.90 ft	100.00 ml/min
10/28/2021 4:56 PM	01:50:00	5.86 pH	20.66 °C	1,209.5 µS/cm	1.16 mg/L	11.60 NTU	63.7 mV	40.90 ft	100.00 ml/min
10/28/2021 5:06 PM	02:00:00	5.86 pH	23.79 °C	1,209.1 µS/cm	1.28 mg/L	7.92 NTU	62.4 mV	40.90 ft	100.00 ml/min

10/28/2021 5:16 PM	02:10:00	5.86 pH	23.48 °C	1,212.2 µS/cm	1.31 mg/L	6.65 NTU	64.6 mV	40.90 ft	100.00 ml/min
10/28/2021 5:26 PM	02:20:00	5.88 pH	22.72 °C	1,224.1 µS/cm	0.93 mg/L	5.36 NTU	65.7 mV	40.90 ft	100.00 ml/min
10/28/2021 5:36 PM	02:30:00	5.89 pH	22.36 °C	1,224.8 µS/cm	1.35 mg/L	4.77 NTU	68.0 mV	40.90 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/26/2021 4:05:09 PM
Project: Plant Arkwright (3)
Operator Name: Ever Guillen

Location Name: AP1PZ-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.44 ft** **Total Depth: 67.44 ft** **Initial Depth to Water: 46.52 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 23000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 1.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Sample time =

Weather Conditions:
Warm, sunny, dry

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/26/2021 4:05 PM	00:00	6.71 pH	22.18 °C	2,294.3 µS/cm	2.54 mg/L	169.20 NTU	-69.5 mV	46.52 ft	200.00 ml/min
10/26/2021 4:10 PM	05:00	6.77 pH	21.75 °C	2,300.8 µS/cm	3.64 mg/L	143.00 NTU	-77.3 mV	47.77 ft	200.00 ml/min
10/26/2021 4:15 PM	10:00	6.80 pH	21.79 °C	2,285.6 µS/cm	3.96 mg/L	139.00 NTU	-74.8 mV	47.77 ft	200.00 ml/min
10/26/2021 4:20 PM	15:00	6.80 pH	21.57 °C	2,259.1 µS/cm	4.26 mg/L	128.10 NTU	-63.1 mV	47.77 ft	200.00 ml/min
10/26/2021 4:25 PM	20:00	6.81 pH	21.46 °C	2,247.1 µS/cm	4.81 mg/L	113.80 NTU	-69.7 mV	47.77 ft	200.00 ml/min
10/26/2021 4:30 PM	25:00	6.81 pH	21.41 °C	2,234.1 µS/cm	5.09 mg/L	98.10 NTU	-69.8 mV	47.77 ft	200.00 ml/min
10/26/2021 4:35 PM	30:00	6.79 pH	21.84 °C	2,238.3 µS/cm	5.04 mg/L	84.60 NTU	-63.2 mV	47.77 ft	200.00 ml/min
10/26/2021 4:40 PM	35:00	6.76 pH	21.88 °C	2,231.3 µS/cm	4.52 mg/L	70.90 NTU	-70.2 mV	47.77 ft	200.00 ml/min
10/26/2021 4:45 PM	40:00	6.75 pH	21.80 °C	2,222.6 µS/cm	4.45 mg/L	62.60 NTU	-59.9 mV	47.77 ft	200.00 ml/min
10/26/2021 4:50 PM	45:00	6.75 pH	21.82 °C	2,215.9 µS/cm	4.45 mg/L	89.30 NTU	-67.3 mV	47.77 ft	200.00 ml/min
10/26/2021 4:55 PM	50:00	6.74 pH	21.76 °C	2,216.4 µS/cm	4.41 mg/L	84.10 NTU	-66.6 mV	47.77 ft	200.00 ml/min
10/26/2021 5:00 PM	55:00	6.72 pH	21.73 °C	2,208.1 µS/cm	4.35 mg/L	79.20 NTU	-65.8 mV	47.77 ft	200.00 ml/min
10/26/2021 5:05 PM	01:00:00	6.71 pH	21.69 °C	2,247.3 µS/cm	4.35 mg/L	66.40 NTU	-56.9 mV	47.77 ft	200.00 ml/min

10/26/2021 5:10 PM	01:05:00	6.71 pH	21.54 °C	2,234.9 µS/cm	4.41 mg/L	58.20 NTU	-55.7 mV	47.77 ft	200.00 ml/min
10/26/2021 5:15 PM	01:10:00	6.72 pH	21.51 °C	2,234.6 µS/cm	4.31 mg/L	54.10 NTU	-62.7 mV	47.77 ft	200.00 ml/min
10/26/2021 5:20 PM	01:15:00	6.72 pH	21.75 °C	2,247.9 µS/cm	4.36 mg/L	48.70 NTU	-64.0 mV	47.77 ft	200.00 ml/min
10/26/2021 5:25 PM	01:20:00	6.72 pH	22.18 °C	2,247.4 µS/cm	4.55 mg/L	42.20 NTU	-65.1 mV	47.77 ft	200.00 ml/min
10/26/2021 5:30 PM	01:25:00	6.62 pH	21.67 °C	2,240.7 µS/cm	3.54 mg/L	32.90 NTU	-63.9 mV	47.77 ft	200.00 ml/min
10/26/2021 5:35 PM	01:30:00	6.71 pH	21.24 °C	2,209.4 µS/cm	4.59 mg/L	45.80 NTU	-61.7 mV	47.77 ft	200.00 ml/min
10/26/2021 5:40 PM	01:35:00	6.72 pH	21.11 °C	2,209.9 µS/cm	4.87 mg/L	43.00 NTU	-62.8 mV	47.77 ft	200.00 ml/min
10/26/2021 5:45 PM	01:40:00	6.72 pH	21.07 °C	2,206.2 µS/cm	5.00 mg/L	44.40 NTU	-55.6 mV	47.77 ft	200.00 ml/min
10/26/2021 5:50 PM	01:45:00	6.71 pH	20.97 °C	2,213.7 µS/cm	5.15 mg/L	34.40 NTU	-61.9 mV	47.77 ft	200.00 ml/min
10/26/2021 5:55 PM	01:50:00	6.79 pH	20.75 °C	2,194.2 µS/cm	5.61 mg/L	59.30 NTU	-68.1 mV	47.77 ft	200.00 ml/min
10/26/2021 6:00 PM	01:55:00	6.81 pH	20.07 °C	2,175.8 µS/cm	6.08 mg/L	53.90 NTU	-68.6 mV	47.77 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/29/2021 9:56:22 AM
Project: Plant Arkwright CCR (7)
Operator Name: Daniel Howard

Location Name: AP1PZ-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.38 ft** **Total Depth: 67.38 ft** **Initial Depth to Water: 42.06 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 62.38 ft** **Estimated Total Volume Pumped: 14250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.37 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
AP1PZ-3 sample time 1134.

Weather Conditions:
Overcast, temp 55

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
10/29/2021 9:56 AM	00:00	5.59 pH	17.72 °C	2,258.5 µS/cm	1.73 mg/L	26.10 NTU	-10.0 mV	42.06 ft	150.00 ml/min
10/29/2021 10:01 AM	05:00	5.63 pH	18.08 °C	2,276.1 µS/cm	1.27 mg/L	21.40 NTU	-8.8 mV	42.48 ft	150.00 ml/min
10/29/2021 10:06 AM	10:00	5.62 pH	18.35 °C	2,282.5 µS/cm	1.09 mg/L	19.80 NTU	-13.6 mV	42.48 ft	150.00 ml/min
10/29/2021 10:11 AM	15:00	5.62 pH	18.43 °C	2,275.9 µS/cm	0.98 mg/L	15.00 NTU	-0.7 mV	42.45 ft	150.00 ml/min
10/29/2021 10:16 AM	20:00	5.62 pH	18.52 °C	2,281.6 µS/cm	0.88 mg/L	13.30 NTU	-8.0 mV	42.45 ft	150.00 ml/min
10/29/2021 10:21 AM	25:00	5.61 pH	18.63 °C	2,278.7 µS/cm	0.80 mg/L	11.80 NTU	-7.2 mV	42.45 ft	150.00 ml/min
10/29/2021 10:26 AM	30:00	5.61 pH	18.52 °C	2,274.7 µS/cm	0.74 mg/L	9.77 NTU	-4.9 mV	42.43 ft	150.00 ml/min
10/29/2021 10:31 AM	35:00	5.61 pH	18.65 °C	2,276.0 µS/cm	0.69 mg/L	9.22 NTU	-6.0 mV	42.43 ft	150.00 ml/min
10/29/2021 10:36 AM	40:00	5.60 pH	18.59 °C	2,270.0 µS/cm	0.61 mg/L	7.57 NTU	5.0 mV	42.43 ft	150.00 ml/min
10/29/2021 10:41 AM	45:00	5.60 pH	18.70 °C	2,275.4 µS/cm	0.57 mg/L	7.72 NTU	4.2 mV	42.43 ft	150.00 ml/min
10/29/2021 10:46 AM	50:00	5.61 pH	18.63 °C	2,275.9 µS/cm	0.52 mg/L	6.58 NTU	3.9 mV	42.43 ft	150.00 ml/min
10/29/2021 10:51 AM	55:00	5.61 pH	18.61 °C	2,276.4 µS/cm	0.47 mg/L	6.97 NTU	3.6 mV	42.43 ft	150.00 ml/min
10/29/2021 10:56 AM	01:00:00	5.60 pH	18.55 °C	2,269.6 µS/cm	0.44 mg/L	6.51 NTU	3.4 mV	42.43 ft	150.00 ml/min

10/29/2021 11:01 AM	01:05:00	5.61 pH	18.60 °C	2,277.1 µS/cm	0.39 mg/L	6.22 NTU	-7.8 mV	42.43 ft	150.00 ml/min
10/29/2021 11:06 AM	01:10:00	5.61 pH	18.44 °C	2,264.7 µS/cm	0.36 mg/L	6.45 NTU	3.3 mV	42.43 ft	150.00 ml/min
10/29/2021 11:11 AM	01:15:00	5.60 pH	18.56 °C	2,271.4 µS/cm	0.34 mg/L	6.03 NTU	2.6 mV	42.43 ft	150.00 ml/min
10/29/2021 11:16 AM	01:20:00	5.60 pH	18.75 °C	2,272.4 µS/cm	0.31 mg/L	5.73 NTU	1.2 mV	42.43 ft	150.00 ml/min
10/29/2021 11:21 AM	01:25:00	5.60 pH	18.61 °C	2,267.7 µS/cm	0.29 mg/L	5.22 NTU	1.2 mV	42.43 ft	150.00 ml/min
10/29/2021 11:26 AM	01:30:00	5.60 pH	18.71 °C	2,273.5 µS/cm	0.27 mg/L	4.88 NTU	0.2 mV	42.43 ft	150.00 ml/min
10/29/2021 11:31 AM	01:35:00	5.60 pH	18.74 °C	2,270.8 µS/cm	0.25 mg/L	4.66 NTU	-12.1 mV	42.43 ft	150.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/27/2021 10:47:17 AM
Project: Plant Arkwright (4)
Operator Name: Ever Guillen

Location Name: AP1PZ-4 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.42 ft** **Total Depth: 67.42 ft** **Initial Depth to Water: 46.77 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 52000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Sample time =1510

Weather Conditions:
Cool, sunny, dry

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/27/2021 10:47 AM	00:00	6.45 pH	16.44 °C	2,260.9 µS/cm	8.51 mg/L	88.10 NTU	23.9 mV	46.77 ft	200.00 ml/min
10/27/2021 10:52 AM	05:00	6.52 pH	18.82 °C	2,239.2 µS/cm	2.51 mg/L	210.00 NTU	-35.9 mV	46.77 ft	200.00 ml/min
10/27/2021 10:57 AM	10:00	6.68 pH	19.37 °C	2,137.2 µS/cm	6.07 mg/L	163.00 NTU	-35.4 mV	46.77 ft	200.00 ml/min
10/27/2021 11:02 AM	15:00	6.69 pH	19.23 °C	2,167.9 µS/cm	6.12 mg/L	102.00 NTU	-46.8 mV	46.77 ft	200.00 ml/min
10/27/2021 11:07 AM	20:00	6.66 pH	19.56 °C	2,170.4 µS/cm	5.18 mg/L	85.20 NTU	-52.6 mV	46.77 ft	200.00 ml/min
10/27/2021 11:12 AM	25:00	6.66 pH	19.26 °C	2,158.3 µS/cm	4.98 mg/L	62.00 NTU	-45.9 mV	46.77 ft	200.00 ml/min
10/27/2021 11:17 AM	30:00	6.60 pH	19.32 °C	2,191.7 µS/cm	3.96 mg/L	52.70 NTU	-51.6 mV	46.77 ft	200.00 ml/min
10/27/2021 11:22 AM	35:00	6.61 pH	19.52 °C	2,176.6 µS/cm	3.98 mg/L	61.20 NTU	-44.9 mV	46.77 ft	200.00 ml/min
10/27/2021 11:27 AM	40:00	6.61 pH	19.73 °C	2,170.6 µS/cm	4.24 mg/L	57.70 NTU	-43.4 mV	46.77 ft	200.00 ml/min
10/27/2021 11:32 AM	45:00	6.61 pH	19.60 °C	2,168.3 µS/cm	4.39 mg/L	54.60 NTU	-47.1 mV	46.77 ft	200.00 ml/min
10/27/2021 11:37 AM	50:00	6.60 pH	19.59 °C	2,176.1 µS/cm	4.38 mg/L	56.10 NTU	-41.2 mV	46.77 ft	200.00 ml/min
10/27/2021 11:42 AM	55:00	6.62 pH	19.95 °C	2,185.6 µS/cm	4.50 mg/L	56.50 NTU	-43.7 mV	46.77 ft	200.00 ml/min
10/27/2021 11:47 AM	01:00:00	6.60 pH	20.17 °C	2,173.2 µS/cm	4.16 mg/L	52.90 NTU	-46.6 mV	46.77 ft	200.00 ml/min

10/27/2021 11:52 AM	01:05:00	6.59 pH	19.95 °C	2,166.4 µS/cm	4.12 mg/L	50.90 NTU	-45.1 mV	46.77 ft	200.00 ml/min
10/27/2021 11:57 AM	01:10:00	6.59 pH	19.79 °C	2,169.7 µS/cm	4.33 mg/L	48.80 NTU	-38.6 mV	46.77 ft	200.00 ml/min
10/27/2021 12:02 PM	01:15:00	6.58 pH	19.68 °C	2,175.6 µS/cm	4.18 mg/L	43.20 NTU	-42.4 mV	46.77 ft	200.00 ml/min
10/27/2021 12:07 PM	01:20:00	6.58 pH	19.88 °C	2,170.7 µS/cm	4.08 mg/L	45.40 NTU	-42.2 mV	46.77 ft	200.00 ml/min
10/27/2021 12:12 PM	01:25:00	6.57 pH	20.22 °C	2,171.5 µS/cm	3.97 mg/L	44.50 NTU	-38.2 mV	46.77 ft	200.00 ml/min
10/27/2021 12:17 PM	01:30:00	6.56 pH	20.08 °C	2,168.7 µS/cm	3.90 mg/L	43.20 NTU	-37.0 mV	46.77 ft	200.00 ml/min
10/27/2021 12:22 PM	01:35:00	6.56 pH	19.98 °C	2,161.5 µS/cm	3.84 mg/L	42.70 NTU	-35.9 mV	46.77 ft	200.00 ml/min
10/27/2021 12:27 PM	01:40:00	6.56 pH	19.68 °C	2,166.6 µS/cm	3.89 mg/L	41.10 NTU	-39.5 mV	46.77 ft	200.00 ml/min
10/27/2021 12:32 PM	01:45:00	6.56 pH	19.59 °C	2,163.2 µS/cm	3.99 mg/L	39.40 NTU	-35.0 mV	46.77 ft	200.00 ml/min
10/27/2021 12:37 PM	01:50:00	6.56 pH	19.63 °C	2,163.9 µS/cm	4.09 mg/L	38.90 NTU	-39.0 mV	46.77 ft	200.00 ml/min
10/27/2021 12:42 PM	01:55:00	6.55 pH	19.86 °C	2,169.2 µS/cm	4.23 mg/L	38.60 NTU	-34.6 mV	46.77 ft	200.00 ml/min
10/27/2021 12:47 PM	02:00:00	6.55 pH	19.72 °C	2,157.8 µS/cm	4.20 mg/L	37.80 NTU	-33.4 mV	46.77 ft	200.00 ml/min
10/27/2021 12:52 PM	02:05:00	6.55 pH	19.95 °C	2,163.7 µS/cm	4.15 mg/L	37.10 NTU	-38.0 mV	46.77 ft	200.00 ml/min
10/27/2021 12:57 PM	02:10:00	6.55 pH	19.86 °C	2,157.7 µS/cm	4.19 mg/L	36.10 NTU	-33.3 mV	46.77 ft	200.00 ml/min
10/27/2021 1:02 PM	02:15:00	6.55 pH	19.81 °C	2,161.1 µS/cm	4.29 mg/L	33.90 NTU	-33.0 mV	46.77 ft	200.00 ml/min
10/27/2021 1:07 PM	02:20:00	6.54 pH	19.90 °C	2,162.4 µS/cm	4.26 mg/L	33.70 NTU	-37.0 mV	46.77 ft	200.00 ml/min
10/27/2021 1:12 PM	02:25:00	6.54 pH	20.13 °C	2,157.9 µS/cm	4.16 mg/L	32.60 NTU	-32.8 mV	46.77 ft	200.00 ml/min
10/27/2021 1:17 PM	02:30:00	6.53 pH	20.08 °C	2,172.7 µS/cm	4.14 mg/L	32.10 NTU	-36.6 mV	46.77 ft	200.00 ml/min
10/27/2021 1:22 PM	02:35:00	6.53 pH	20.46 °C	2,152.0 µS/cm	4.03 mg/L	32.40 NTU	-32.3 mV	46.77 ft	200.00 ml/min
10/27/2021 1:27 PM	02:40:00	6.52 pH	20.21 °C	2,164.1 µS/cm	4.03 mg/L	31.90 NTU	-36.2 mV	46.77 ft	200.00 ml/min
10/27/2021 1:32 PM	02:45:00	6.52 pH	20.53 °C	2,157.8 µS/cm	4.08 mg/L	31.30 NTU	-32.1 mV	46.77 ft	200.00 ml/min
10/27/2021 1:37 PM	02:50:00	6.52 pH	20.44 °C	2,156.5 µS/cm	4.05 mg/L	30.10 NTU	-35.5 mV	46.77 ft	200.00 ml/min
10/27/2021 1:42 PM	02:55:00	6.52 pH	20.42 °C	2,149.9 µS/cm	4.09 mg/L	29.50 NTU	-31.2 mV	46.77 ft	200.00 ml/min
10/27/2021 1:47 PM	03:00:00	6.51 pH	20.57 °C	2,157.3 µS/cm	4.08 mg/L	30.40 NTU	-35.1 mV	46.77 ft	200.00 ml/min
10/27/2021 1:52 PM	03:05:00	6.51 pH	20.59 °C	2,157.5 µS/cm	4.06 mg/L	27.60 NTU	-30.9 mV	46.77 ft	200.00 ml/min
10/27/2021 1:57 PM	03:10:00	6.51 pH	20.58 °C	2,153.3 µS/cm	4.06 mg/L	27.70 NTU	-34.5 mV	46.77 ft	200.00 ml/min
10/27/2021 2:02 PM	03:15:00	6.51 pH	20.77 °C	2,156.3 µS/cm	4.03 mg/L	27.90 NTU	-34.5 mV	46.77 ft	200.00 ml/min
10/27/2021 2:07 PM	03:20:00	6.50 pH	21.04 °C	2,152.4 µS/cm	3.92 mg/L	27.70 NTU	-30.8 mV	46.77 ft	200.00 ml/min
10/27/2021 2:12 PM	03:25:00	6.50 pH	20.73 °C	2,155.1 µS/cm	4.05 mg/L	26.50 NTU	-34.0 mV	46.77 ft	200.00 ml/min

10/27/2021 2:17 PM	03:30:00	6.50 pH	20.57 °C	2,154.0 µS/cm	4.09 mg/L	26.10 NTU	-29.8 mV	46.77 ft	200.00 ml/min
10/27/2021 2:22 PM	03:35:00	6.50 pH	21.06 °C	2,159.7 µS/cm	4.05 mg/L	25.70 NTU	-34.1 mV	46.77 ft	200.00 ml/min
10/27/2021 2:27 PM	03:40:00	6.50 pH	20.88 °C	2,158.3 µS/cm	4.04 mg/L	25.20 NTU	-29.5 mV	46.77 ft	200.00 ml/min
10/27/2021 2:32 PM	03:45:00	6.49 pH	20.91 °C	2,159.5 µS/cm	4.10 mg/L	26.90 NTU	-33.0 mV	46.77 ft	200.00 ml/min
10/27/2021 2:37 PM	03:50:00	6.49 pH	21.33 °C	2,159.2 µS/cm	4.08 mg/L	26.50 NTU	-29.8 mV	46.77 ft	200.00 ml/min
10/27/2021 2:42 PM	03:55:00	6.49 pH	21.01 °C	2,157.1 µS/cm	4.07 mg/L	25.20 NTU	-32.9 mV	46.77 ft	200.00 ml/min
10/27/2021 2:47 PM	04:00:00	6.49 pH	21.02 °C	2,150.5 µS/cm	4.05 mg/L	24.70 NTU	-28.5 mV	46.77 ft	200.00 ml/min
10/27/2021 2:52 PM	04:05:00	6.49 pH	21.12 °C	2,161.9 µS/cm	4.01 mg/L	24.10 NTU	-32.6 mV	46.77 ft	200.00 ml/min
10/27/2021 2:57 PM	04:10:00	6.48 pH	21.04 °C	2,154.9 µS/cm	3.97 mg/L	24.40 NTU	-28.3 mV	46.77 ft	200.00 ml/min
10/27/2021 3:02 PM	04:15:00	6.48 pH	21.13 °C	2,157.8 µS/cm	3.99 mg/L	23.50 NTU	-32.2 mV	46.77 ft	200.00 ml/min
10/27/2021 3:07 PM	04:20:00	6.47 pH	21.50 °C	2,163.2 µS/cm	3.99 mg/L	22.40 NTU	-32.0 mV	46.77 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/29/2021 9:41:30 AM
Project: Plant Arkwright (7)
Operator Name: Ever Guillen

Location Name: AP1PZ-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.25 ft** **Total Depth: 67.25 ft** **Initial Depth to Water: 48.5 ft**	**Pump Type: Bladder** **Tubing Type: PE** **Pump Intake From TOC: 57 ft** **Estimated Total Volume Pumped: 8000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 1.42 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 843593**

Test Notes:
Sample time = 1105

Weather Conditions:
Cold, rain

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 0.2	+/- 5	+/- 10	+/- 0.3	
10/29/2021 9:41 AM	00:00	6.25 pH	16.85 °C	2,566.1 µS/cm	1.03 mg/L	13.70 NTU	-9.9 mV	48.50 ft	100.00 ml/min
10/29/2021 9:51 AM	10:00	6.30 pH	17.14 °C	2,524.9 µS/cm	0.49 mg/L	11.20 NTU	-39.6 mV	49.92 ft	100.00 ml/min
10/29/2021 10:01 AM	20:00	6.32 pH	17.13 °C	2,532.7 µS/cm	0.47 mg/L	9.88 NTU	-50.2 mV	49.92 ft	100.00 ml/min
10/29/2021 10:11 AM	30:00	6.33 pH	17.53 °C	2,517.6 µS/cm	0.44 mg/L	6.71 NTU	-60.1 mV	49.92 ft	100.00 ml/min
10/29/2021 10:21 AM	40:00	6.36 pH	18.03 °C	2,508.7 µS/cm	0.62 mg/L	5.68 NTU	-67.1 mV	49.92 ft	100.00 ml/min
10/29/2021 10:31 AM	50:00	6.35 pH	17.75 °C	2,507.0 µS/cm	0.45 mg/L	4.89 NTU	-66.8 mV	49.92 ft	100.00 ml/min
10/29/2021 10:41 AM	01:00:00	6.35 pH	17.87 °C	2,506.8 µS/cm	0.38 mg/L	3.02 NTU	-68.1 mV	49.92 ft	100.00 ml/min
10/29/2021 10:51 AM	01:10:00	6.35 pH	17.81 °C	2,500.3 µS/cm	0.35 mg/L	2.18 NTU	-67.4 mV	49.92 ft	100.00 ml/min
10/29/2021 11:01 AM	01:20:00	6.36 pH	17.94 °C	2,529.2 µS/cm	0.22 mg/L	1.43 NTU	-70.2 mV	49.92 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/26/2021 12:12:35 PM
Project: Plant Arkwright CCR
Operator Name: Daniel Howard

Location Name: AP1PZ-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 62.65 ft** **Total Depth: 72.65 ft** **Initial Depth to Water: 56.94 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 67.65 ft** **Estimated Total Volume Pumped: 10000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.31 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
AP1PZ-6 sample time 1305. Also collected DUP-1.

Weather Conditions:
Clear and sunny, Temp 60

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
10/26/2021 12:12 PM	00:00	5.68 pH	19.85 °C	3,437.7 µS/cm	0.88 mg/L	11.00 NTU	-1.6 mV	56.94 ft	200.00 ml/min
10/26/2021 12:17 PM	05:00	5.68 pH	20.10 °C	3,423.6 µS/cm	0.76 mg/L	11.10 NTU	-15.7 mV	57.28 ft	200.00 ml/min
10/26/2021 12:22 PM	10:00	5.69 pH	20.11 °C	3,409.7 µS/cm	0.71 mg/L	10.50 NTU	-6.1 mV	57.25 ft	200.00 ml/min
10/26/2021 12:27 PM	15:00	5.69 pH	20.04 °C	3,402.2 µS/cm	0.72 mg/L	8.95 NTU	-15.2 mV	57.25 ft	200.00 ml/min
10/26/2021 12:32 PM	20:00	5.68 pH	19.89 °C	3,406.8 µS/cm	0.62 mg/L	8.67 NTU	-5.4 mV	57.25 ft	200.00 ml/min
10/26/2021 12:37 PM	25:00	5.68 pH	19.75 °C	3,395.5 µS/cm	0.58 mg/L	7.74 NTU	-14.0 mV	57.25 ft	200.00 ml/min
10/26/2021 12:42 PM	30:00	5.68 pH	19.86 °C	3,387.0 µS/cm	0.55 mg/L	6.91 NTU	-3.9 mV	57.25 ft	200.00 ml/min
10/26/2021 12:47 PM	35:00	5.67 pH	19.73 °C	3,372.8 µS/cm	0.47 mg/L	5.99 NTU	-13.5 mV	57.25 ft	200.00 ml/min
10/26/2021 12:52 PM	40:00	5.67 pH	19.52 °C	3,380.0 µS/cm	0.42 mg/L	5.54 NTU	-14.3 mV	57.25 ft	200.00 ml/min
10/26/2021 12:57 PM	45:00	5.66 pH	19.42 °C	3,372.4 µS/cm	0.38 mg/L	4.70 NTU	-14.2 mV	57.25 ft	200.00 ml/min
10/26/2021 1:02 PM	50:00	5.66 pH	19.27 °C	3,367.3 µS/cm	0.36 mg/L		-3.7 mV	57.25 ft	200.00 ml/min

Samples

Low-Flow Test Report:

Test Date / Time: 10/26/2021 3:31:52 PM
Project: Plant Arkwright CCR (2)
Operator Name: Daniel Howard

Location Name: AP1PZ-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 67.6 ft** **Total Depth: 77.6 ft** **Initial Depth to Water: 50.25 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 72.6 ft** **Estimated Total Volume Pumped: 4500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 2.65 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
AP1PZ-7 sample time 1618.

Weather Conditions:
Clear and sunny, Temp 68

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
10/26/2021 3:31 PM	00:00	6.47 pH	23.59 °C	2,297.7 µS/cm	0.98 mg/L	10.50 NTU	-99.8 mV	50.25 ft	100.00 ml/min
10/26/2021 3:36 PM	05:00	6.47 pH	23.38 °C	2,288.2 µS/cm	0.79 mg/L	5.09 NTU	-104.5 mV	51.28 ft	100.00 ml/min
10/26/2021 3:41 PM	10:00	6.47 pH	23.58 °C	2,263.4 µS/cm	0.77 mg/L	5.67 NTU	-124.5 mV	51.48 ft	100.00 ml/min
10/26/2021 3:46 PM	15:00	6.47 pH	23.25 °C	2,200.2 µS/cm	0.70 mg/L	4.70 NTU	-107.3 mV	51.58 ft	100.00 ml/min
10/26/2021 3:51 PM	20:00	6.47 pH	22.75 °C	2,152.9 µS/cm	0.58 mg/L	4.83 NTU	-107.9 mV	51.58 ft	100.00 ml/min
10/26/2021 3:56 PM	25:00	6.47 pH	22.67 °C	2,106.9 µS/cm	0.51 mg/L	5.47 NTU	-133.0 mV	52.18 ft	100.00 ml/min
10/26/2021 4:01 PM	30:00	6.46 pH	22.80 °C	2,098.6 µS/cm	0.42 mg/L	5.01 NTU	-109.7 mV	52.27 ft	100.00 ml/min
10/26/2021 4:06 PM	35:00	6.46 pH	22.65 °C	2,048.4 µS/cm	0.38 mg/L	5.38 NTU	-109.6 mV	52.42 ft	100.00 ml/min
10/26/2021 4:11 PM	40:00	6.46 pH	22.89 °C	2,016.1 µS/cm	0.36 mg/L	5.06 NTU	-110.5 mV	52.66 ft	100.00 ml/min
10/26/2021 4:16 PM	45:00	6.45 pH	22.02 °C	1,983.1 µS/cm	0.33 mg/L	4.12 NTU	-108.9 mV	52.90 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/27/2021 11:11:23 AM
Project: Plant Arkwright CCR (3)
Operator Name: Daniel Howard

Location Name: AP1PZ-8 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 56.06 ft** **Total Depth: 66.06 ft** **Initial Depth to Water: 46.15 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 61.06 ft** **Estimated Total Volume Pumped: 5000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 125 ml/min** **Final Draw Down: 1.88 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
AP1PZ-8 sample time 1154.

Weather Conditions:
Clear, temp 63

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
10/27/2021 11:11 AM	00:00	6.69 pH	22.45 °C	1,641.1 µS/cm	1.80 mg/L	3.74 NTU	-76.4 mV	46.15 ft	125.00 ml/min
10/27/2021 11:16 AM	05:00	6.68 pH	21.55 °C	1,657.3 µS/cm	1.13 mg/L	3.40 NTU	-119.8 mV	47.36 ft	125.00 ml/min
10/27/2021 11:21 AM	10:00	6.68 pH	21.69 °C	1,639.7 µS/cm	0.92 mg/L	3.42 NTU	-124.0 mV	47.59 ft	125.00 ml/min
10/27/2021 11:26 AM	15:00	6.67 pH	21.75 °C	1,626.0 µS/cm	0.78 mg/L	5.08 NTU	-93.1 mV	47.74 ft	125.00 ml/min
10/27/2021 11:31 AM	20:00	6.67 pH	21.73 °C	1,608.8 µS/cm	0.72 mg/L	5.88 NTU	-92.5 mV	47.87 ft	125.00 ml/min
10/27/2021 11:36 AM	25:00	6.67 pH	21.90 °C	1,594.8 µS/cm	0.65 mg/L	5.68 NTU	-126.4 mV	47.93 ft	125.00 ml/min
10/27/2021 11:41 AM	30:00	6.67 pH	21.88 °C	1,578.1 µS/cm	0.59 mg/L	5.40 NTU	-93.8 mV	47.97 ft	125.00 ml/min
10/27/2021 11:46 AM	35:00	6.67 pH	22.01 °C	1,561.7 µS/cm	0.49 mg/L	4.57 NTU	-93.5 mV	47.99 ft	125.00 ml/min
10/27/2021 11:51 AM	40:00	6.67 pH	22.04 °C	1,582.4 µS/cm	0.43 mg/L	4.59 NTU	-93.3 mV	48.03 ft	125.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/28/2021 12:32:23 PM
Project: Plant Arkwright CCR (5)
Operator Name: Daniel Howard

Location Name: AP1PZ-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 47.3 ft** **Total Depth: 57.3 ft** **Initial Depth to Water: 39.76 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 52.3 ft** **Estimated Total Volume Pumped: 6250 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 50 ml/min** **Final Draw Down: 4.06 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
AP1PZ-9 sample time 1440.

Weather Conditions:
Rain on and off, temp 60

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
10/28/2021 12:32 PM	00:00	5.52 pH	18.26 °C	770.43 µS/cm	1.74 mg/L	25.20 NTU	100.1 mV	39.76 ft	50.00 ml/min
10/28/2021 12:37 PM	05:00	5.53 pH	18.30 °C	773.30 µS/cm	1.27 mg/L	44.80 NTU	127.6 mV	40.27 ft	50.00 ml/min
10/28/2021 12:42 PM	10:00	5.53 pH	18.38 °C	772.81 µS/cm	0.96 mg/L	43.70 NTU	109.4 mV	40.64 ft	50.00 ml/min
10/28/2021 12:47 PM	15:00	5.53 pH	18.36 °C	773.78 µS/cm	0.80 mg/L	39.20 NTU	124.1 mV	40.82 ft	50.00 ml/min
10/28/2021 12:52 PM	20:00	5.53 pH	18.44 °C	775.28 µS/cm	0.75 mg/L	40.60 NTU	109.1 mV	41.09 ft	50.00 ml/min
10/28/2021 12:57 PM	25:00	5.52 pH	18.39 °C	773.09 µS/cm	0.68 mg/L	36.30 NTU	107.7 mV	41.36 ft	50.00 ml/min
10/28/2021 1:02 PM	30:00	5.52 pH	18.35 °C	771.81 µS/cm	0.63 mg/L	37.30 NTU	121.2 mV	41.58 ft	50.00 ml/min
10/28/2021 1:07 PM	35:00	5.52 pH	18.44 °C	771.97 µS/cm	0.61 mg/L	35.70 NTU	121.3 mV	41.83 ft	50.00 ml/min
10/28/2021 1:12 PM	40:00	5.52 pH	18.46 °C	771.70 µS/cm	0.58 mg/L	32.50 NTU	107.5 mV	42.11 ft	50.00 ml/min
10/28/2021 1:17 PM	45:00	5.51 pH	18.52 °C	770.72 µS/cm	0.57 mg/L	28.80 NTU	107.3 mV	42.35 ft	50.00 ml/min
10/28/2021 1:22 PM	50:00	5.50 pH	18.57 °C	768.07 µS/cm	0.52 mg/L	25.70 NTU	108.1 mV	42.50 ft	50.00 ml/min
10/28/2021 1:27 PM	55:00	5.49 pH	18.58 °C	766.53 µS/cm	0.51 mg/L	24.40 NTU	109.0 mV	42.65 ft	50.00 ml/min
10/28/2021 1:32 PM	01:00:00	5.49 pH	18.57 °C	763.47 µS/cm	0.49 mg/L	23.80 NTU	109.8 mV	42.86 ft	50.00 ml/min

10/28/2021 1:37 PM	01:05:00	5.48 pH	18.61 °C	762.66 µS/cm	0.48 mg/L	20.80 NTU	110.6 mV	43.09 ft	50.00 ml/min
10/28/2021 1:42 PM	01:10:00	5.48 pH	18.64 °C	762.87 µS/cm	0.47 mg/L	17.80 NTU	111.3 mV	43.25 ft	50.00 ml/min
10/28/2021 1:47 PM	01:15:00	5.47 pH	18.66 °C	760.73 µS/cm	0.46 mg/L	15.70 NTU	111.6 mV	43.41 ft	50.00 ml/min
10/28/2021 1:52 PM	01:20:00	5.46 pH	18.88 °C	757.60 µS/cm	0.44 mg/L	13.90 NTU	112.4 mV	43.57 ft	50.00 ml/min
10/28/2021 1:57 PM	01:25:00	5.46 pH	19.16 °C	754.74 µS/cm	0.43 mg/L	12.50 NTU	125.8 mV	43.72 ft	50.00 ml/min
10/28/2021 2:02 PM	01:30:00	5.46 pH	19.26 °C	752.89 µS/cm	0.44 mg/L	11.10 NTU	113.9 mV	43.89 ft	50.00 ml/min
10/28/2021 2:07 PM	01:35:00	5.46 pH	19.32 °C	749.42 µS/cm	0.43 mg/L	9.54 NTU	113.4 mV	44.04 ft	50.00 ml/min
10/28/2021 2:12 PM	01:40:00	5.46 pH	19.37 °C	747.43 µS/cm	0.41 mg/L	8.80 NTU	113.2 mV	44.18 ft	50.00 ml/min
10/28/2021 2:17 PM	01:45:00	5.47 pH	19.46 °C	745.86 µS/cm	0.40 mg/L	7.03 NTU	112.4 mV	44.31 ft	50.00 ml/min
10/28/2021 2:22 PM	01:50:00	5.45 pH	19.41 °C	742.01 µS/cm	0.39 mg/L	5.81 NTU	112.8 mV	43.43 ft	50.00 ml/min
10/28/2021 2:27 PM	01:55:00	5.48 pH	19.31 °C	740.07 µS/cm	0.39 mg/L	5.27 NTU	112.1 mV	43.56 ft	50.00 ml/min
10/28/2021 2:32 PM	02:00:00	5.49 pH	19.24 °C	735.34 µS/cm	0.38 mg/L	5.03 NTU	110.6 mV	43.69 ft	50.00 ml/min
10/28/2021 2:37 PM	02:05:00	5.49 pH	19.38 °C	733.04 µS/cm	0.38 mg/L	4.56 NTU	110.3 mV	43.82 ft	50.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/27/2021 4:11:24 PM
Project: Plant Arkwright CCR (4)
Operator Name: Daniel Howard

Location Name: AP1PZ-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 46.43 ft** **Total Depth: 56.43 ft** **Initial Depth to Water: 36.8 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 51.43 ft** **Estimated Total Volume Pumped: 2500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 75 ml/min** **Final Draw Down: 1.93 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
AP1PZ-10 sample time 1638.

Weather Conditions:
Clear and sunny, temp 77

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
10/27/2021 4:11 PM	00:00	6.61 pH	22.82 °C	798.86 µS/cm	0.68 mg/L	3.25 NTU	-83.8 mV	36.80 ft	100.00 ml/min
10/27/2021 4:16 PM	05:00	6.60 pH	22.14 °C	799.71 µS/cm	0.52 mg/L	3.69 NTU	-84.6 mV	37.95 ft	100.00 ml/min
10/27/2021 4:21 PM	10:00	6.59 pH	21.85 °C	795.12 µS/cm	0.46 mg/L	1.78 NTU	-105.9 mV	38.19 ft	100.00 ml/min
10/27/2021 4:26 PM	15:00	6.59 pH	21.51 °C	788.07 µS/cm	0.40 mg/L	1.51 NTU	-83.8 mV	38.44 ft	100.00 ml/min
10/27/2021 4:31 PM	20:00	6.59 pH	21.28 °C	777.18 µS/cm	0.36 mg/L	1.99 NTU	-83.3 mV	38.57 ft	100.00 ml/min
10/27/2021 4:36 PM	25:00	6.58 pH	21.28 °C	764.27 µS/cm	0.33 mg/L	1.54 NTU	-81.3 mV	38.73 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 10/28/2021 4:49:23 PM
Project: Plant Arkwright CCR (6)
Operator Name: Daniel Howard

Location Name: AP1PZ-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 63.3 ft** **Total Depth: 73.3 ft** **Initial Depth to Water: 36.38 ft**	**Pump Type: QED Bladder Pump** **Tubing Type: LDPE** **Pump Intake From TOC: 68.3 ft** **Estimated Total Volume Pumped: 15750 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.5 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 850767**

Test Notes:
AP1PZ-11 sample time 1836.

Weather Conditions:
Partly cloudy, temp 70

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
10/28/2021 4:49 PM	00:00	6.70 pH	20.14 °C	364.23 µS/cm	2.60 mg/L	99.70 NTU	47.6 mV	36.38 ft	150.00 ml/min
10/28/2021 4:54 PM	05:00	6.70 pH	19.79 °C	366.00 µS/cm	2.56 mg/L	102.00 NTU	60.6 mV	36.82 ft	150.00 ml/min
10/28/2021 4:59 PM	10:00	6.71 pH	19.77 °C	364.92 µS/cm	2.49 mg/L	94.00 NTU	59.3 mV	36.83 ft	150.00 ml/min
10/28/2021 5:04 PM	15:00	6.71 pH	19.81 °C	363.57 µS/cm	2.42 mg/L	72.20 NTU	58.4 mV	36.86 ft	150.00 ml/min
10/28/2021 5:09 PM	20:00	6.71 pH	19.68 °C	363.29 µS/cm	2.36 mg/L	65.90 NTU	57.7 mV	36.86 ft	150.00 ml/min
10/28/2021 5:14 PM	25:00	6.71 pH	19.63 °C	361.66 µS/cm	2.27 mg/L	44.00 NTU	57.5 mV	36.86 ft	150.00 ml/min
10/28/2021 5:19 PM	30:00	6.72 pH	19.57 °C	360.36 µS/cm	2.10 mg/L	24.10 NTU	70.8 mV	36.86 ft	150.00 ml/min
10/28/2021 5:24 PM	35:00	6.73 pH	19.52 °C	354.65 µS/cm	1.94 mg/L	18.60 NTU	56.7 mV	36.86 ft	150.00 ml/min
10/28/2021 5:29 PM	40:00	6.75 pH	19.50 °C	351.69 µS/cm	1.92 mg/L	16.70 NTU	54.5 mV	36.86 ft	150.00 ml/min
10/28/2021 5:34 PM	45:00	6.74 pH	19.50 °C	347.94 µS/cm	1.92 mg/L	11.40 NTU	53.9 mV	36.86 ft	150.00 ml/min
10/28/2021 5:39 PM	50:00	6.74 pH	19.47 °C	344.21 µS/cm	1.91 mg/L	9.61 NTU	65.9 mV	36.86 ft	150.00 ml/min
10/28/2021 5:44 PM	55:00	6.75 pH	19.41 °C	339.41 µS/cm	1.90 mg/L	8.70 NTU	53.8 mV	36.88 ft	150.00 ml/min
10/28/2021 5:49 PM	01:00:00	6.75 pH	19.37 °C	335.64 µS/cm	1.91 mg/L	7.93 NTU	52.5 mV	36.88 ft	150.00 ml/min

10/28/2021 5:54 PM	01:05:00	6.76 pH	19.33 °C	332.51 µS/cm	1.90 mg/L	7.77 NTU	51.1 mV	36.88 ft	150.00 ml/min
10/28/2021 5:59 PM	01:10:00	6.76 pH	19.32 °C	330.09 µS/cm	1.86 mg/L	6.87 NTU	49.2 mV	36.88 ft	150.00 ml/min
10/28/2021 6:04 PM	01:15:00	6.77 pH	19.32 °C	329.15 µS/cm	1.83 mg/L	6.68 NTU	56.6 mV	36.88 ft	150.00 ml/min
10/28/2021 6:09 PM	01:20:00	6.77 pH	19.29 °C	326.99 µS/cm	1.81 mg/L	6.25 NTU	43.8 mV	36.88 ft	150.00 ml/min
10/28/2021 6:14 PM	01:25:00	6.77 pH	19.28 °C	326.59 µS/cm	1.80 mg/L	6.16 NTU	47.5 mV	36.88 ft	150.00 ml/min
10/28/2021 6:19 PM	01:30:00	6.77 pH	19.25 °C	323.64 µS/cm	1.85 mg/L	5.90 NTU	39.0 mV	36.88 ft	150.00 ml/min
10/28/2021 6:24 PM	01:35:00	6.78 pH	19.26 °C	324.32 µS/cm	1.81 mg/L	5.68 NTU	43.5 mV	36.88 ft	150.00 ml/min
10/28/2021 6:29 PM	01:40:00	6.77 pH	19.25 °C	323.17 µS/cm	1.85 mg/L	4.94 NTU	43.2 mV	36.88 ft	150.00 ml/min
10/28/2021 6:34 PM	01:45:00	6.78 pH	19.24 °C	321.65 µS/cm	1.84 mg/L	4.94 NTU	36.3 mV	36.88 ft	150.00 ml/min

Samples

Sample ID:	Description:

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61323117142165

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: ~~Equipment Blank 8~~ MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Direct Pour

DUP./REP. OF: ---

Pump Intake Set at (btoc): ---

or

Tubing Inlet Set at (btoc): ---

WELL DIAMETER: ---

DEPTH TO WATER: ---

TOTAL DEPTH: ---

WATER COLUMN HEIGHT: ---

PURGE VOLUME: ---

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (≥0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 3%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial									

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs Collected equipment blank EB-1 of GED sample for Analyte Group 110 2106 65 (DI ASTM Type II Deionized water (DS156))

SAMPLE DATE: 10/26/21

SAMPLE TIME: 12:50

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	pH check	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	< 2	SW6010D/SW6020B/E WI7470A	App. III & IV Metals, SW6020B/SW7470A*
~~500~~ mL/Poly	✓	Cool to 6°C		EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C		SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	< 2	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Clear + Sunny, Breezy, Temp 65°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center, Sample Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shalil Brown at Shalil.Brown@Eurofinset.com 615-301-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Daniel Heard	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions – Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6133211714.2195

Wood E&I Solutions, Inc
1675 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: Field Blank #1 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Direct Fill

DUP./REP. OF: ---

Pump Intake Set at (btmc): ---

or

Tubing Inlet Set at (btmc): ---

WELL DIAMETER: ---

DEPTH TO WATER: ---

TOTAL DEPTH: ---

WATER COLUMN HEIGHT: ---

PURGE VOLUME: ---

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

Time	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial								( )	

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs Collected Field Blank FB-1 of ASTM Type I Deionized water ASTM D5996. Field Blank at Ash Pond 1 AP1P2-S

SAMPLE DATE: 10/27/21

SAMPLE TIME: 1010

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Clear, Temp 60°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shalil Brown at Shalil.Brown@Eurofinset.com 615-301-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: David Hayward	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61332117143.2185

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: AP1GWA-1 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Peristaltic Low Flow

DUP./REP. OF: _____

Pump Intake Set at (ft/mk): 30.0'

or

Tubing Inlet Set at (ft/mk): _____

WELL DIAMETER: 2"

DEPTH TO WATER: 27.83

TOTAL DEPTH: 32.5

GRAB (x) COMPOSITE ( )

WATER COLUMN HEIGHT: 19.61 x 0.17 x 2.93 x 3 = 2.98

PURGE VOLUME: 2.98

[0.163 x water column height (ft) x 3 (well volumes)] for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes)] for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes)] for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 5.0 mg/L) for DO < 5.0 mg/L, record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min (Target setting=100 ml/min)	Water Level (ft BTOC)
initial 0.2 (est)	0.61	4.18	77.5	9.96	242.14	20.09	62.2	400	27.31
1105 05	0.15	3.91	102.5	9.49	240.40	20.14	37.3	200	27.91
1110 10	0.52	3.85	122.5	9.40	239.58	20.19	29.3	200	27.91
1115 15	0.75	3.64	136.7	9.38	239.31	20.24	25.2	200	27.91
1120 20	1.0	[illegible]	[illegible]	[illegible]	239.57	20.30	18.2	200	[illegible]
1125 25	1.25	3.58	118.1				18.1		
1130 30	1.0	3.72	108.6	9.40	237.78	20.48	16.6	200	27.91
1135 35	1.25	3.68	108.1	9.38	238.51	20.70	13.10	200	27.91
1140 40	1.5	3.62	107.3	9.37	238.82	20.92	9.05	200	27.91
1145 45	1.75	3.85	103.7	9.38	239.64	20.19	6.75	200	27.91
1150 40	2.0	3.76	100.1	9.71	223.70	20.93	6.46	200	28.9
1155 45	2.25	3.69	100.8	9.73	224.28	20.89	4.34	200	27.91
1200 50	2.5	3.38	119.2	9.76	224.50	20.73	3.51	200	27.91
1205	Collected Sample								

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs Preferred Sample pH = 6.0-9

SAMPLE DATE: 10-26-21

SAMPLE TIME: 1205

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/E WI-NTA	App. III & IV Metals, SW6020B/SWTNTA*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions*
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	7010/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Sunny - Clear - 81.7
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6215 Regency Parkway, Norcross GA 30071 PH: (678) 966-9981 POC: Shell Brown at Shell.Brown@Eurofinsus.com 615-301-9031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Evan Squillen	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

*App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61232117T14.3155

Wood E&S Solutions, Inc.
1970 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3456

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: AP1GWA-2 MATRIX: Groundwater

WELL MATERIAL: X PVC ___ SS ___ OTHER

SAMPLE METHOD: Low Flow - Peristaltic

DUP./REP. OF:_____

Pump Intake Set at (bmp):_____

or

Tubing Inlet Set at (bmp): 29.0'

WELL DIAMETER: 2"

DEPTH TO WATER: 17.32

GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 31.10

WATER COLUMN HEIGHT: 13.78 X 0.17 = 2.34 X 3 = 7.03

PURGE VOLUME: 7.0 L

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 8" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L / for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP (°C) Record only	TURB. (NTU) (<10 NTU)	Pump Rate ml/min. (& pump settings) (100 ml/min)	Water Level (ft's BTOC)*
Initial 1331	0.01	5.38	95.6	6.08	72.22	22.60	23.6	200	17.32
1336 5.0	0.25	5.30	89.2	6.06	72.32	22.09	59.0	200	17.32
1341 10.0	0.50	5.23	89.4	6.03	70.36	22.16	91.3	200	17.32
1346 15.0	0.75	4.99	83.6	6.01	69.63	22.03	36.1	200	17.32
1351 20	1.0	4.90	85.6	5.98	69.70	22.01	25.1	200	17.32
1356 25	1.25	4.96	81.8	5.99	69.47	22.09	17.6	200	17.32
1401 30	1.5	4.88	81.8	5.99	69.03	22.27	13.20	200	17.32
1406 35	1.75	4.80	79.9	6.00	69.39	22.26	10.2	200	17.32
1411 40	2.0	4.71	79.3	5.99	68.89	22.42	9.45	200	17.32
1416 45	2.25	4.68	78.2	5.99	68.56	22.49	6.98	200	17.32
1421 50	2.5	4.54	78.9	5.99	68.13	22.99	5.43	200	17.32
1426 55	2.75	4.47	78.9	5.98	68.33	22.30	6.07	200	17.32
1430	Collected Sample								

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity: < 5 NTUs

SAMPLE DATE: 10-26-21

SAMPLE TIME: 1430

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/S WTA76A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions*
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Warm - Cloudy - Dry
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6215 Regency Parkway, Norcross GA 30071 PH: (678) 966-8991 POC: Shuti Brown at Shuti.Brown@EurofinsUS.com 615-301-5831 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: B.E.P. Gwinnett	DELIVERED:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

*App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 60323171.4.2155

Wood E&I Solutions, Inc.
1075 (W) GRAVITY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 | FAX: (770) 421-3486

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-1 MATRIX: Groundwater

WELL MATERIAL: _ PVC _ SS _ OTHER

SAMPLE METHOD: Low-Flow (Peristaltic)

DUP./REP. OF:_____

Pump Intake Set at (ftbtoc):_____

or

Tubing Inlet Set at (ftbtoc): 82'

WELL DIAMETER: 2"

DEPTH TO WATER: 44.61

TOTAL DEPTH: 82.66

GRAB (x) COMPOSITE ( )

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min (& pump setting) (100 ml/min)	Water Level (ftBTOC)*
Initial 1029 10.0	0.01	3.19	96.9	6.84	319.24	18.67	11.60	100A	44.98
1034 10.0	0.35	2.86	19.0	6.91	319.60	18.66	32.0	100	45.11
1039 10.0	0.7	2.34	9.3	6.91	318.98	18.91	26.1	100	45.11
1044 10.0	1.075	2.11	10.3	6.93	318.67	19.06	24.8	100	45.11
1134 10.0	1.10	1.60	-0.7	6.90	316.59	19.99	13.7	100	45.11
1149 10.0	1.25	1.92	-2.7	6.93	318.65	19.26	15.8	100	45.11
1154 10.0	1.5	1.37	-5.8	6.93	318.09	18.19	18.9	100	45.11
1159 10.0	1.75	1.48	-8.0	6.93	318.18	18.08	11.6	100	45.11
1204 10.0	2.0	1.20	-7.6	6.98	317.71	17.50	10.0	100	45.11
1209 10.0	2.25	1.19	-9.6	6.93	319.93	17.98	9.47	100	45.11
1214 10.0	2.5	1.06	-12.3	6.93	317.57	18.77	8.18	100	45.11
1219 10.0	2.75	1.27	-13.0	6.94	317.59	18.91	6.95	100	45.11
1224 10.0	3.0	1.26	-11.0	6.89	319.63	18.12	5.97	100	45.11
1229 10.0	3.25	0.96	-11.1	6.94	318.18	18.34	5.73	100	45.11

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 06-30-21

SAMPLE TIME: 1310

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW846 6010B/6020B/7470A/7471A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 Rev 2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/904.0	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Sunny - Humid
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shati Brown at Shati.Brown@EurofinsUS.com 615-301-9031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Evelt Arriola	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - GCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61322117143.2155

Wood E&I Solutions Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3456

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event, ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-2 MATRIX: Groundwater

WELL MATERIAL: X PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow (PERISTALTIC)

DUP./REP. OF:_____

Pump Intake Set at (btoc):_____

or

Tubing Inlet Set at (btoc): 57'

WELL DIAMETER: 2"

DEPTH TO WATER: 40.92

TOTAL DEPTH: 62.67

GRAB (x) COMPOSITE ( )

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP (°C) Record only	TURB. (NTU) (<10 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial: 1206	0.0	0.57	59.5	6.84	983.8#	17.99	238.4"	100	40.92
1526	0.25	0.33	53.6	5.99	1039.8	20.30	163.5	100	40.94
1536	0.50	0.34	54.6	5.96	1076.7	20.30	138.0	100	40.96
1536	0.75	0.59	55.8	5.95	1092.6	20.52	109.0	100	41.36
1546	1.0	0.51	55.3	5.93	1108.4	21.54	68.9	100	41.36
1556	1.25	0.24	56.9	5.92	1124.9	21.82	62.3	100	41.36
1606	1.5	0.38	56.7	5.93	1139.0	21.19	52.0	100	41.36
1616	1.75	0.38	57.4	5.90	1152.3	21.02	39.8	100	41.36
1626	2.0	0.57	57.8	5.96	1164.6	20.85	29.1	100	41.36
1636	2.25	0.55	59.7	5.89	1177.8	20.68	18.3	100	41.36
1646	2.5	0.72	60.0	5.89	1175.5	20.53	13.4	100	41.36
1656	2.75	1.16	63.7	5.86	1209.5	20.64	10.6	100	41.36
1706	3.0	1.58	66.9	5.86	1209.1	13.79	7.97	100	41.36
1716	3.25	1.31	69.4	5.86	1216.5	13.98	6.65	100	41.36

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10-26-21

SAMPLE TIME: 1759

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/3 WY4764	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 Rd.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	E9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Cool - Rainy/Windy
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross, GA 30071 PH: (678) 966-9961 POC: Shuti Brown at Shuti.Brown@Eurofinsus.com 615-391-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chlorides, Fluorides, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR DR

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 612321714.2105

Wood E&I Solutions, Inc.
1675 DO DUANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: AP1-2-R2 MATRIX: Groundwater

WELL MATERIAL: PVC ___ SS ___ OTHER

SAMPLE METHOD: Low Flow Peristaltic

DUP./REP. OF:_____

Pump Intake Set at (bloc):_____

or

Tubing Inlet Set at (bloc): 52'

WELL DIAMETER: 2"

DEPTH TO WATER: 40.90

TOTAL DEPTH: 62.63

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (≥0.2 mg/L or 10% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (±10) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)
Initial 1214 CST	3.50	0.93	95.7	5.88	1559.1	16.72	2.34	100	40.96
1230 CST	3.75	1.35	98.0	5.87	1274.8	17.34	4.27	100	40.96

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10-28-21

SAMPLE TIME: 1230

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6215 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shali Brown at Shali.Brown@Eurofinset.com 615-501-5831 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chlorids, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61232117/14.2105

Wood E&I Solutions, Inc.
1829 Reg Street Ft ROAD NW SUITE 500, KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-#3 MATRIX: Groundwater

WELL MATERIAL: X PVC ___ SS ___ OTHER

SAMPLE METHOD: QED Bladder pump
Low flow

DUP./REP. OF: ___

Pump Intake Set at (btoc): 62.38
or
Tubing Inlet Set at (btoc): ___

WELL DIAMETER: 2
DEPTH TO WATER: 42.06
TOTAL DEPTH: 67.38
WATER COLUMN HEIGHT: 25.32
PURGE VOLUME: ___
[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

GRAB (x) COMPOSITE ( )

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 5.0 mg/L) for DO = 5.0 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (≤ pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial: 0956	0	1.23	-10.0	5.58	2238.3	17.72	36.1	150	42.48
1001	0.5	1.27	-8.8	5.63	2236.1	18.08	21.4	150	42.48
1006	0.9	1.19	-12.6	5.62	2242.5	18.35	19.3	150	42.46
1011	0.6	0.93	-0.7	5.64	2238.9	18.43	15.0	150	42.46
1016	0.3	0.88	-3.0	5.62	2241.6	18.52	13.3	150	42.45
1021	1.0	0.80	-7.2	5.61	2238.7	18.63	11.8	150	42.43
1026	1.2	0.74	-7.6	5.61	2234.7	18.52	9.77	150	42.43
1031	1.4	0.69	-6.0	5.61	2236.0	18.63	9.22	150	42.43
1036	1.6	0.61	5.0	5.60	2236.6	18.59	7.38	150	42.43
1041	1.8	0.57	-4.3	5.60	2235.4	18.70	7.32	150	42.43
1046	2.0	0.52	3.9	5.61	2235.9	18.61	6.58	150	42.43
1051	2.2	0.47	3.6	5.61	2236.9	18.61	6.97	150	42.43
1056	2.4	0.44	3.4	5.60	2269.6	18.55	6.51	150	42.43
1101	2.6	0.39	-3.8	5.61	2237.1	18.60	6.22	150	42.43

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
^Turbidity < 5 NTUs

SAMPLE DATE: 10/29/21
SAMPLE TIME: 1134

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW846 ISO/SW846 3005A/S 6010B	App. III & IV Metals, SW846 3005A/SW1471A^
~~250 mL/Poly~~	~~1~~	Cool to 4°C	EPA 300.0 R2.1	App. III Anions*
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Overcast Temp 55°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shali Brown at Shali.Brown@Eurofinset.com 615-301-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	David Hamm OBSERVER:

^App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

*App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123211314.2100

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3456

SAMPLING EVENT: X 3021 AP-1 2nd Background Sampling Event: ___ OTHER

WELL ID / SAMPLE ID: APIPZ-3 MATRIX: Groundwater

WELL MATERIAL: X PVC SS OTHER

SAMPLE METHOD: QED Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (btoc): 62.38

or

Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2

DEPTH TO WATER: 43.96

TOTAL DEPTH: 61.38

GRAB (x) COMPOSITE ( )

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

Time	VOL. PURGED (gal)	DO (+/-0.2 mg/L or +/-10% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (+/-) record only	pH (+/-0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (+/-5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial									
1106	2.8	0.36	3.3	5.61	2264.7	18.44	6.45	150	43.93
1111	3.0	0.34	2.6	5.61	2271.4	18.36	6.03	150	43.93
1116	3.2	0.31	1.3	5.60	2272.4	18.35	5.73	150	43.93
1121	3.4	0.29	1.2	5.60	2267.7	18.41	5.22	150	43.93
1126	3.6	0.27	0.2	5.60	2273.5	18.71	4.83	150	43.93
1131	3.8	0.25	-12.1	5.60	2270.3	18.34	4.66	150	43.93

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

*Turbidity < 5 NTUs

SAMPLE DATE: 10/28/21

SAMPLE TIME: 1134

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SWT419A	App. III & IV Metals, SW6020B/SWT419A*
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	1	HNO3 to pH <2	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION		
WEATHER:	Overcast, Temp 53°F	
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.	
SHIPPED TO:	Eurofins TestAmerica Service Center - 5215 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shali Brown at Shali.Brown@Eurofinsus.com 615-301-5931 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058	
SAMPLER:	Daniel Howard	ORDER/RVDR:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 612021714.2165

Wood E&I Solutions, Inc
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-14 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow Grundfos

DUP./REP. OF:_____

Pump Intake Set at (Dmbs):_____

or

Tubing Inlet Set at (Dmbs): 63.0'

WELL DIAMETER: 2"

DEPTH TO WATER: 46.52 GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 62.49

WATER COLUMN HEIGHT: 20.02 X .17 = 3.40 X 3 = 10.2

PURGE VOLUME: 10.2

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME:	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 unit units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial 1607 0.0	0.01	2.59	-69.5	6.71	2713.3	22.08	869.2	3400	46.52
1610 40	0.25	3.64	-71.3	6.72	2710.6	21.76	142.0	2400	46.77
1615 100	0.5	3.96	-74.8	6.80	2705.6	21.79	139.0	2400	47.27
1620 150	0.75	4.06	-63.1	6.80	2269.1	21.57	126.1	2400	47.27
1625 200	1.0	4.81	-69.7	6.81	2247.1	21.76	113.8	2400	47.27
1630 250	1.25	5.09	-69.8	6.81	2239.1	21.91	98.10	2400	47.27
1635 300	1.5	5.09	-63.2	6.79	2238.3	21.89	89.6	2400	47.27
1640 350	1.75	4.52	-70.2	6.76	2231.3	21.88	78.9	2400	47.27
1645 400	2.0	3.73	-73.9	6.75	2228.6	21.80	62.6	2400	47.27
1650 450	2.25	3.35	-62.3	6.73	2225.9	21.82	55.3	2400	47.27
1655 500	2.5	4.41	-66.6	6.74	2216.4	21.76	49.1	2400	47.27
1700 55	2.75	4.35	-65.8	6.72	2208.1	21.73	39.2	2400	47.27
1705 600	3.0	4.35	-58.9	6.71	2202.3	21.64	66.4	2400	47.27
1710 65	3.25	4.41	-55.7	6.71	2234.9	21.64	58.2	2400	47.27

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

*Turbidity < 5 NTUs

WATER HAS GRAY (MUCH) ABUNDANCE

SAMPLE DATE: 10/26/21

SAMPLE TIME:_____

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010C/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	1	HNO3 to pH <2	EPA 903.0/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	SUNNY, COLD ~ 25°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6215 Regency Parkway, Norcross GA 30071 PH: (678) 966-0991 POC: Shuli Brown III Shuli.Brown@EurofinsUS.com 615-301-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123251714.2105

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 | FAX: (770) 421-3488

SAMPLING EVENT: X 3021 AP-1 Bnd Background Sampling Event, ___ OTHER

WELL ID / SAMPLE ID: AP1BG-4 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: _____

DUP./REP. OF: _____

Pump Intake Set at (bmp): _____

or

Tubing Inlet Set at (bmp): _____

WELL DIAMETER: _____

DEPTH TO WATER: _____ GRAB (x) COMPOSITE ( )

TOTAL DEPTH: _____

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (<0.5 mg/L or 10% for DO > 0.5 mg/L) for DO <0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<10 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial 1715	3.5	4.31	-62.7	6.72	2239.6	21.51	54.1	240 1	92.22
1720 15	3.75	4.34	-64.0	6.72	2247.3	21.72	48.7	240	92.22
1725 20	4.0	4.35	-65.1	6.72	2247.4	21.98	44.2	240	92.22
1730 25	4.25	3.59	-67.9	6.68	2240.7	21.67	38.9	240	92.22
1735 30	4.5	4.37	-61.7	6.71	2209.4	21.29	42.8	240	92.22
1740 35	4.75	4.83	-65.8	6.73	2249.8	21.11	43.0	240	92.22
1745 40	5.0	5.00	-59.6	6.72	2264.2	21.07	40.4	240	92.22
1750 45	5.25	5.13	-61.9	6.71	2273.7	20.97	39.4	240	92.22
1755 50	5.5	5.61	-68.1	6.72	2277.2	20.75	38.3	240	92.22
1800 55	5.75	6.08	-68.4	6.81	2275.8	20.07	53.7	240	92.22
1805	6.00	6.18	6.48	Sample	collected	straight	from	pump	discharge

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 12-12-21

SAMPLE TIME: _____

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shali Brown at Shali.Brown@Eurofinset.com 615-581-5831 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR ISM

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 60323117/14.2105

Wood Env Solutions, Inc
1105 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3496

10-27-21

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: AP1BG-4 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow (Bladder)

DUP./REP. OF:_____

Pump Intake Set at (feet):_____
or
Tubing Inlet Set at (feet): 63'

WELL DIAMETER: 6"
DEPTH TO WATER: 46.77
TOTAL DEPTH: 67.42
WATER COLUMN HEIGHT:_____
PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±10% for DO > 8.8 mg/L) for DO > 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial 1047 0.0	0.01	8.51	83.9	6.97	2364.9	16.94	28.1	200	46.77
1052 5.4	0.25	2.51	-39.8	6.86	2233.2	18.82	4.10	200	46.77
1057 10.8	0.495	6.07	-38.9	6.68	2132.5	19.27	14.3	100	46.77
1102 15.4	0.5	6.12	-96.8	6.69	2168.9	19.23	10.2	100	46.77
1107 20.9	0.635	5.18	-55.6	6.66	2170.4	19.26	85.2	100	46.77
1112 25	0.75	4.98	-48.9	6.66	2138.3	19.26	62	100	46.77
1117 30	0.825	3.96	-50.6	6.60	2191.7	19.32	52.7	100	46.77
1122 35	1.0	3.98	-48.9	6.61	2176.6	19.52	61.2	100	46.77
1127 40	1.115	4.24	-43.4	6.61	2170.6	19.73	57.7	100	46.77
1132 45	1.15	4.39	-42.1	6.61	2168.3	19.64	54.6	100	46.77
1137 50	1.375	4.38	-41.2	6.60	2174.1	19.51	56.1	100	46.77
1142 55	1.5	4.30	-43.7	6.62	2185.6	19.35	56.5	100	46.77
1147 60	1.615	4.16	-46.6	6.60	2173.2	20.17	52.9	100	46.77
1152 65	1.75	4.12	-45.1	6.59	2166.4	19.92	50.9	100	46.77

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 10-27-21

SAMPLE TIME:_____

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 4°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 4°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	E903.0/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Cool - Clear - Dry
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6711 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shell Brown at Shell.Brown@EurofinsUS.com 615-301-5931 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Evee Gallegos	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 613221171A.2100

Shaw E&I Solutions, Inc
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 | FAX: (770) 421-3488

10-27-21

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event: ___ OTHER

WELL ID / SAMPLE ID: AP1 PZ-4 MATRIX: Groundwater

WELL MATERIAL: ___ PVC ___ SS ___ OTHER

SAMPLE METHOD: Low Flow (Bladder)

WELL DIAMETER: 2"

DEPTH TO WATER: 96.77

TOTAL DEPTH: 62.55

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

GRAB (x) COMPOSITE ( )

DUP./REP. OF: _____

Pump Intake Set at (Btoc): _____

or

Tubing Inlet Set at (Btoc): 63'

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L; for DO < 0.5 mg/L record only)	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP. (°C) Record only	TURB. (NTU) (10 NTU)	Pump Rate ml/min (& pump setting) (100 ml/min)	Water Level (Ft BTOC)
Initial 11:12:20	1.625	4.33	-38.4	6.57	2169.7	19.77	46.8	100	96.77
12:05 75	2.0	4.18	-41.9	6.58	2175.9	19.68	43.5	100	96.77
12:07 80	2.125	4.08	-42.5	6.58	2130.7	19.88	45.4	100	96.77
12:12 85	2.5	3.97	-38.1	6.57	2171.8	20.15	44.5	100	96.77
12:17 90	2.875	3.90	-37.6	6.56	2168.7	20.08	43.2	100	96.77
12:22 95	3.25	3.89	-36.9	6.56	2161.5	20.18	46.7	100	96.77
12:27 100	3.625	3.89	-39.5	6.58	2164.6	19.68	41.1	100	96.77
12:32 105	3.0	3.99	-35.0	6.56	2163.6	19.57	39.4	100	96.77
12:37 110	3.125	4.03	-33.0	6.56	2163.7	19.61	38.9	100	96.77
12:42 115	3.25	4.13	-34.6	6.55	2167.6	19.66	38.6	100	96.77
12:47 120	3.375	4.02	-33.9	6.55	2167.8	19.72	39.8	100	96.77
12:52 125	3.50	4.15	-38.0	6.53	2163.7	19.77	37.1	100	96.77
12:57 130	3.625	4.19	-32.3	6.55	2167.7	19.80	36.1	100	96.77
13:02 135	3.75	4.25	-32.0	6.55	2161.1	19.81	33.9	100	96.77

NOTES:

[1] Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10-27-21

SAMPLE TIME: _____

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A[1]
250 mL/Poly	1	Cool to 4°C	EPA 300.0 Rev.1	App. III Anions[2]
500 mL/Poly	1	Cool to 4°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Windy - Cloudy - 39°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 4310 Kingsley Parkway, Norcross GA 30071 PH: (678) 966-8951 POC: Shali Brown at Shali.Brown@EurofinsUS.com 615-581-5631 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	Evie Gullett
OBSERVER:	

[1] App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

[2] App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61222117142105

Wood E&I Solutions Inc
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 I FAX: (770) 421-3488

10-27-21

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: APIPZ-4 MATRIX: Groundwater

WELL MATERIAL: __ PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow (Bladder)

DUP /REP. OF:_____

Pump Intake Set at (ft/mt):_____

or

Tubing Inlet Set at (ft/mt): 63'

WELL DIAMTER: 2"

DEPTH TO WATER: 86.22

TOTAL DEPTH: 87.98

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

GRAB (X); COMPOSITE ( )

Time	Vol. Purged (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (+10 NTU)	Pump Rate ml/min (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial 1307 AM	3.625	4.26	-37.0	6.59	2102.4	19.30	33.7	100	86.22
1312 1.25	4.0	4.16	-36.8	6.59	2157.9	20.13	32.6	100	86.22
1317 1.00	4.125	4.19	-36.8	6.53	2132.3	20.28	32.1	100	86.22
1322 1.25	4.25	4.03	-36.3	6.53	2156.0	20.46	32.4	100	86.22
1327 1.50	4.375	4.03	-36.4	6.52	2169.1	20.21	31.9	100	86.22
1332 1.25	4.50	4.08	-36.1	6.52	2157.8	20.53	31.2	100	86.22
1337 1.25	4.625	4.05	-36.5	6.52	2156.5	20.49	30.1	100	86.22
1342 1.25	4.75	4.07	-36.2	6.52	2169.9	20.42	29.5	100	86.22
1347 1.25	4.875	4.08	-35.1	6.51	2167.3	20.53	28.9	100	86.22
1352 1.25	5.00	4.06	-36.9	6.51	2167.5	20.53	27.6	100	86.22
1357 1.00	5.125	4.06	-34.5	6.51	2153.3	20.58	27.7	100	86.22
1402 1.25	5.25	4.03	-34.5	6.51	2156.3	20.77	27.9	100	86.22
1407 1.25	5.375	3.92	-30.8	6.50	2152.4	21.09	27.7	100	86.22
1412 1.25	5.5	3.98	-37.0	6.50	2152.1	20.78	26.5	100	86.22

NOTES:
1 Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity +/- 5 NTUs

SAMPLE DATE: 10-27-21

SAMPLE TIME:_____

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/E WI/ICPMA	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 REL1	App. III Anions*
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 9315	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	SUNNY - Clear - 70's
SHIPPED Via:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6213 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shell Brown at Shell.Brown@EurofinsUS.com 615-301-8631 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	Seth Guilden
OBSERVER:	

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

*App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6122211714.2108

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3488

10-27-21

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-4 MATRIX: Groundwater

WELL MATERIAL: PVC __ SS __ OTHER

SAMPLE METHOD: Low Flow (Bladder)

DUP./REP. OF:_____

Pump Intake Set at (block):_____

or

Tubing Inlet Set at (block): 623'

WELL DIAMETER: 2"

DEPTH TO WATER: 90.77

TOTAL DEPTH: 623.45

GRAB (x) COMPOSITE ( )

WATER COLUMN HEIGHT:_____

PURGE VOLUME:_____

(0.163 x water column height (ft) x 3 (well volumes) for 2" wells)

(0.653 x water column height (ft) x 3 (well volumes) for 4" wells)

(1.47 x water column height (ft) x 3 (well volumes) for 6" wells)

TIME	VOL. PURGED (gal)	DO (≤ 0.5 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
1400	5.6	4.17	-27.2	6.50	2137.0	20.52	26.10	100	90.77
1406	5.75	4.05	-33.1	6.52	2138.2	20.69	27.20	100	90.77
						20.91			
1417	6.0	4.09	-29.8	6.51	2136.0	20.53	26.10	100	90.77
1422	6.25	4.03	-28.7	6.50	2137.7	21.06	25.70	100	90.77
1427	6.50	4.04	-27.7	6.50	2138.3	20.85	25.2	100	90.77
1432	6.75	4.10	-28.0	6.49	2137.3	20.91	24.9	100	90.77
1437	7.0	4.08	-26.8	6.49	2137.2	21.03	26.5	100	90.77
1442	7.25	4.03	-32.9	6.49	2137.1	21.01	25.2	100	90.77
1447	7.50	4.05	-28.5	6.49	2137.3	21.02	24.7	100	90.77
1452	7.75	4.01	-31.6	6.49	2136.9	21.12	24.1	100	90.77
1457	8.00	3.97	-28.3	6.48	2134.9	21.04	24.4	100	90.77
1502	8.25	3.99	-32.2	6.48	2137.8	21.13	23.5	100	90.77
1507	8.50	3.93	-32.0	6.47	2136.2	21.50	22.4	100	90.77

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity <10 NTUs

SAMPLE DATE: 10-27-21

SAMPLE TIME: 1510

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions*
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	1	HNO3 to pH <2	E903.0/E909	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Sunny - Clear - Dry
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Rogerdale Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shuti Brown at Shuti.Brown@EurofinsUS.com 615-591-5631 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Eugene Guzman	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

*App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61332117143.2165

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3486

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event: ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-5 MATRIX: Groundwater

WELL MATERIAL: PVC ___ SS ___ OTHER

SAMPLE METHOD: Low Flow (Peristaltic Pump)

DUP./RSP. OF: _____

Pump Intake Set at (ft/mk): _____

or

Tubing Inlet Set at (ft/mk): 62'

WELL DIAMETER: 2"

DEPTH TO WATER: 48.50

TOTAL DEPTH: 62.25

WATER COLUMN HEIGHT: _____

PURGE VOLUME: _____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial 940	0.0	1.05	-9.9	6.35	2566.1	16.85	13.20	100	48.50
950	0.25	0.49	-39.6	6.31	2520.9	17.14	11.20	100	48.52
1000	0.5	0.47	-50.1	6.36	2535.7	17.13	9.86	100	48.52
1011	0.75	0.44	-64.1	6.33	2517.6	17.53	6.71	100	48.52
1021	1.0	0.42	-67.1	6.34	2508.7	18.03	5.68	100	48.52
1031	1.25	0.45	-66.8	6.35	2507.0	17.75	4.89	100	48.52
1041	1.5	0.38	-68.1	6.35	2506.6	17.67	3.62	100	48.52
1051	1.75	0.35	-62.9	6.35	2500.3	17.81	2.18	100	48.52
1101	2.0	0.28	-58.2	6.36	2527.5	17.94	1.45	100	48.52
1105	Collected	Sample							

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity: < 5 NTUs

SAMPLE DATE: 10-27-21

SAMPLE TIME: 1105

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020(R1)/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
250 mL/Poly	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	D3115/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Cold - Raining
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6218 Regency Parkway, Norcross GA 30071 PH: (678) 966-0591 POC: Shali Brown at Shali.Brown@EurofinsUS.com 615-301-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Chris Guilden	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61232517114.2105

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW, GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-8 MATRIX: Groundwater

WELL MATERIAL: X PVC ___ SS ___ OTHER

SAMPLE METHOD: QED Bladder pump

DUP./REP. OF: DUP-1

Pump Intake Set at (btoc): 67.65

or

Tubing Inlet Set at (btoc): ___

WELL DIAMETER: 2

DEPTH TO WATER: 56.34

TOTAL DEPTH: 82.45

WATER COLUMN HEIGHT: 13.71

PURGE VOLUME: ___

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft)] x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft)] x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft)] x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
initial 1211	0	0.88	-1.6	5.68	3437.7	19.35	11.0	200 3	56.34
1217	0.25	0.76	-15.7	5.68	3423.6	20.10	11.1	200	57.28
1222	0.5	0.71	-6.1	5.69	3409.7	20.11	10.5	200	57.25
1227	0.75	0.72	-15.2	5.69	3408.2	20.24	8.95	200	57.25
1232	1.0	0.62	-5.4	5.68	3406.8	19.89	8.67	200	57.25
1237	1.25	0.55	-14.0	5.68	3395.5	19.75	7.74	200	57.28
1242	1.5	0.35	-3.9	5.68	3387.0	19.68	6.91	200	57.25
1247	1.75	0.47	-13.5	5.67	3372.8	19.73	5.99	200	57.25
1252	2.0	0.42	-14.3	5.67	3380.0	19.52	5.54	200	57.25
1257	2.25	0.38	-14.2	5.66	3372.4	19.42	4.70	200	57.25
1302	2.5	0.36	-3.7	5.66	3367.3	19.27	3.69	200	57.25

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10/26/21

SAMPLE TIME: 1305

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	pH Check	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	< 2	SW6010C/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~250 mL/Poly~~	1	Cool to 6°C		EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C		SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	< 2	EPA 9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Clear - Sunny, Temp 60°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-0991 POC: Shuli Brown at Shuli.Brown@Eurofinsus.com 615-351-5851 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Daniel Hendrix	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61232117142155

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: ~~Duplicate#1 DUP~~ MATRIX: Groundwater

WELL MATERIAL: ___ PVC ___ SS ___ OTHER

SAMPLE METHOD: QED Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (bmp):_____

or

Tubing Inlet Set at (bmp):_____

WELL DIAMETER: 2

DEPTH TO WATER: 36.94

TOTAL DEPTH: 52.63

WATER COLUMN HEIGHT: 15.71

PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (±20) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 5%]	TEMP (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial:								( )	

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs See AP1PZ-6 for field parameters

SAMPLE DATE: 10/26/2021

SAMPLE TIME: _____

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	pH check	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	ok 2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~250 mL/Poly~~	1	Cool to 6°C		EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C		SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	ok 2	9315/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Clear, Sunny, Temp 60°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6315 Regency Parkway, Norcross GA 30071 PH: (678) 966-0991 POC: Shali Brown at Shali.Brown@Eurofinsus.com 615-301-5015 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Daniel Herrera	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 61332101714.2105

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-7 MATRIX: Groundwater

WELL MATERIAL: X PVC __ SS __ OTHER

SAMPLE METHOD: QED Bladder pump Low flow

DUP./REP. OF:_____

Pump Intake Set at (btoc): 72.6

or

Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2

DEPTH TO WATER: 50.25

TOTAL DEPTH: 97.60

WATER COLUMN HEIGHT: 47.35

PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
Initial: 1531	0	0.98	-99.8	6.47	2297.7	21.89	10.5	100	50.25
1536	0.125	0.79	-104.3	6.47	2258.2	22.38	5.09	100	51.28
1541	0.25	0.77	-104.5	6.47	2263.4	22.58	5.67	100	51.48
1546	0.375	0.70	-103.3	6.47	2262.3	22.25	4.70	100	51.58
1551	0.5	0.58	-107.9	6.47	2152.9	22.35	4.83	100	51.86
1556	0.625	0.51	-103.0	6.47	2106.9	22.67	5.71	100	52.18
1601	0.75	0.42	-101.7	6.46	2058.2	22.80	5.01	100	52.27
1606	0.875	0.38	-102.6	6.46	2048.9	22.63	5.38	100	52.42
1611	1.0	0.36	-110.3	6.46	2016.1	22.39	5.06	100	52.66
1616	1.125	0.33	-108.9	6.45	1933.1	22.02	4.12	100	52.90
1									

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10/26/21

SAMPLE TIME: 1618

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010C/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~250 mL/Poly~~	1	Cool to 6°C	EPA 300.0 R2.1	App. III Anions*
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	3	HNO3 to pH <2	EPA 903.1/904.0	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Clear Sunny Temp 68°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shell Brown at Shell.Brown@Eurofinset.com 615-581-5511 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Daniel Howard	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

*App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123211714.2155

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3456

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-8 MATRIX: Groundwater

WELL MATERIAL: ___ PVC ___ SS ___ OTHER

SAMPLE METHOD: AE D 13 Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (btoc): 61.06

or

Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2

DEPTH TO WATER: 46.15

GRAB (x) COMPOSITE ( )

TOTAL DEPTH: 60.06

WATER COLUMN HEIGHT: 13.91

PURGE VOLUME:_____

[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes) for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±9% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (+5 NTU)	Pump Rate ml/min (& pump setting) (100 ml/min)	Water Level (Ft BTOC)[1]
Initial: 1111	0.80	1.80	-76.9	6.69	1641.1	22.45	3.77	125	46.45
1116	0.15	1.13	-101.8	6.65	1657.3	21.55	3.70	125	47.36
1121	0.3	0.96	-124.0	6.65	1659.7	21.69	3.42	125	47.59
1126	0.45	0.78	-93.1	6.62	1626.0	21.75	5.08	125	47.74
1131	0.6	0.72	-92.3	6.61	1663.9	21.73	5.88	125	47.87
1136	0.75	0.65	-126.4	6.67	1594.8	21.90	5.63	125	47.93
1141	0.9	0.59	-93.8	6.67	1518.1	21.85	5.90	125	47.97
1146	1.05	0.49	-92.3	6.67	1361.7	22.01	4.57	125	47.99
1151	1.2	0.43	-93.3	6.67	1582.4	22.09	4.59	125	48.03

NOTES:

[1] Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10/29/21

SAMPLE TIME: 1154

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A[1]
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions[2]
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Clear, Temp 65°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6215 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shell Brown at Shell.Brown@Eurofinsus.com 615-301-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Daniel Hanewinckel	OBSERVER:

[1] App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

[2] App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 60323131714.2105

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event) ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-9 MATRIX: Groundwater

WELL MATERIAL: X PVC __ SS __ OTHER

SAMPLE METHOD: GED Bladder pump
low flow

DUP./REP. OF:_____

Pump Intake Set at (btoc): 52.30
or
Tubing Inlet Set at (btoc):_____

WELL DIAMETER: 2
DEPTH TO WATER: 39.76
TOTAL DEPTH: 57.30
WATER COLUMN HEIGHT: 17.54
PURGE VOLUME:_____
(0.163 x water column height (ft) x 3 (well volumes) for 2" wells)
(0.653 x water column height (ft) x 3 (well volumes) for 4" wells)
(1.47 x water column height (ft) x 3 (well volumes) for 6" wells)

GRAB (x) COMPOSITE ( )

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or ±10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 3%)	TEMP (°C) Record only	TURB. (NTU) (+/-5 NTU)	Pump Rate ml/min. (& pump setting) (10ml increments)	Water Level (ft BTOC)*
Initial 1232	0.08	1.74	180.1	5.57	770.43	18.26	29.6	50	39.76
1237	0.05	1.27	127.6	5.53	773.30	18.30	44.8	50	40.27
1242	0.1	0.96	109.7	5.53	772.81	18.38	43.7	50	40.64
1247	0.15	0.80	124.1	5.53	773.78	18.34	39.2	50	40.82
1252	0.2	0.75	109.1	5.53	775.28	18.19	40.6	50	41.04
1257	0.25	0.68	107.1	5.52	773.09	18.39	36.3	50	41.36
1302	0.30	0.63	121.2	5.52	771.61	18.35	37.3	50	41.58
1307	0.35	0.61	121.3	5.52	774.97	18.44	35.7	50	41.85
1312	0.4	0.58	107.5	5.52	771.70	18.46	32.5	50	42.11
1317	0.45	0.51	102.3	5.51	770.12	18.52	33.8	50	42.35
1322	0.5	0.32	108.1	5.50	765.07	18.57	25.7	50	42.50
1327	0.55	0.31	109.0	5.49	766.53	18.58	24.9	50	42.65
1332	0.6	0.49	109.8	5.49	767.47	18.57	23.3	50	42.80
1337	0.65	0.48	110.6	5.48	767.46	18.61	20.8	50	43.09

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity < 5 NTUs

SAMPLE DATE: 10/23/21
SAMPLE TIME: 1440

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Rain on + off, Temp 60°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center, Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shali Brown at Shali.Brown@Eurofinsset.com 615-301-5615 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	Daniel Watson OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 6123211704.2105

Wood E&I Solutions, Inc
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: APIPZ-9 MATRIX: Groundwater

WELL MATERIAL: X PVC ___ SS ___ OTHER

SAMPLE METHOD: QED Bladder pump

DUP./REP. OF:_____

Pump Intake Set at (ftbtoc): 52.38

or

Tubing Inlet Set at (ftbtoc):_____

WELL DIAMETER: 2

DEPTH TO WATER: 39.76

TOTAL DEPTH: 57.30

WATER COLUMN HEIGHT: 17.54

PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes)] for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes)] for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes)] for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 8.8 mg/L) for DO = 8.8 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) [+/- 3%]	TEMP. (°C) Record only	TURB. (NTU) [<5 NTU]	Pump Rate milliliter, (& pump setting) (100 milliliter)	Water Level (ft BTOC)*
Initial: 1342	0.7	0.47	111.3	5.48	762.87	18.64	12.8	50	43.25
1347	0.75	0.46	111.6	5.47	760.13	18.66	15.7	50	43.41
1352	0.8	0.44	112.9	5.46	753.60	18.88	13.9	50	43.57
1357	0.85	0.43	125.8	5.46	754.77	19.16	12.6	50	43.72
1402	0.9	0.44	113.9	5.46	752.89	19.26	11.1	50	43.89
1407	0.95	0.43	113.4	5.46	749.72	19.32	9.54	50	44.04
1412	1.0	0.41	113.2	5.46	747.93	19.37	8.80	50	44.18
1417	1.05	0.40	112.4	5.47	745.86	19.46	7.03	50	43.31
1422	1.1	0.39	112.8	5.45	742.01	19.41	5.81	50	42.43
1427	1.15	0.39	112.1	5.48	740.07	19.31	5.27	50	43.56
1432	1.20	0.38	110.6	5.49	735.34	19.24	5.03	50	43.69
1437	1.25	0.38	110.3	5.49	733.04	19.38	4.36	50	43.82

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10/28/21

SAMPLE TIME: 1440

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SWT473A	App. III & IV Metals, SW6020B/SWT473A*
~~500 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	1	HNO3 to pH <2	E903.0/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Rain earlier, Temp 60's F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center, Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6213 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shali Brown at Shali.Brown@Eurofinsat.com 615-301-5031 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7159
SAMPLER:	Daniel Howard OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 612321171/4.2155

Wood E&I Solutions, Inc
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX: (770) 421-3488

SAMPLING EVENT: X 3021 AP-1 2nd Background Sampling Event: ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-10 MATRIX: Groundwater

WELL MATERIAL: X PVC SS OTHER

SAMPLE METHOD: QED Bladder pump low flow

DUP./REP. OF:_____

Pump Intake Set at (ftbtoc): 51.43

or

Tubing Inlet Set at (ftbtoc):_____

WELL DIAMETER: 2

DEPTH TO WATER: 36.80

TOTAL DEPTH: 56.93

WATER COLUMN HEIGHT: 19.43

PURGE VOLUME:_____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes)] for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes)] for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes)] for 6" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L, record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (+5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (Ft BTOC)*
initial: 1611	0	0.63	-33.8	6.61	798.86	22.82	3.25	100	36.80
1616	0.1	0.52	-84.6	6.60	799.71	22.14	3.69	75	37.95
1621	0.2	0.46	-105.9	6.59	795.12	21.85	1.72	75	38.14
1626	0.3	0.70	-83.8	6.59	788.07	21.51	1.51	75	38.44
1631	0.4	0.36	-83.3	6.59	777.18	21.28	1.99	74	38.57
1636	0.5	0.33	-81.3	6.58	769.37	21.28	1.54	75	38.73

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10/27/21

SAMPLE TIME: 1638

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Clear Sunny Temp 75°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6215 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shell Brown at Shell.Brown@Eurofinset.com 615-301-5601 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER: Daniel Haward	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 612321171 4.2155

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event; ___ OTHER

WELL ID / SAMPLE ID: AP1PZ-11 MATRIX: Groundwater

WELL MATERIAL: PVC SS OTHER

SAMPLE METHOD: QED Bladder pump Low Flow

DUP./REP. OF:

Pump Intake Set at (btoc): 68.30

or

Tubing Inlet Set at (btoc):

WELL DIAMETER: 2

DEPTH TO WATER: 36.38

TOTAL DEPTH: 73.30

WATER COLUMN HEIGHT: 36.92

PURGE VOLUME:

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes)] for 2" wells]
[0.653 x water column height (ft) x 3 (well volumes)] for 4" wells]
[1.47 x water column height (ft) x 3 (well volumes)] for 8" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO = 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP (°C) Record only	TURB. (NTU) (+5 NTU)	Pump Rate ml/min (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial 1649	0	2.60	97.6	6.70	364.23	20.14	99.7	150	36.38 36.38
1654	0.2	2.56	60.6	6.70	366.00	19.79	102	150	36.84
1659	0.4	2.49	59.2	6.71	367.92	19.77	94	150	36.83
1704	0.6	2.46	58.7	6.71	368.37	19.80	72.2	150	36.86
1709	0.8	2.36	57.7	6.71	368.29	19.80	65.9	150	36.86
1714	1.0	2.27	57.5	6.71	369.46	19.83	54.0	150	36.86
1719	1.2	2.10	70.8	6.72	370.36	19.87	59.1	150	36.86
1724	1.4	1.97	56.7	6.73	371.63	19.92	18.6	150	36.86
1729	1.6	1.92	55.5	6.75	371.69	19.90	16.7	150	36.86
1734	1.8	1.92	53.9	6.74	372.94	19.90	11.9	150	36.86
1739	2.0	1.91	55.9	6.74	374.21	19.97	9.61	150	36.86
1744	2.2	1.90	53.3	6.75	374.41	19.91	8.10	150	36.86
1749	2.4	1.91	52.5	6.75	375.64	19.93	7.93	150	36.86
1754	2.6	1.90	51.1	6.76	376.51	19.93	7.71	150	36.86

NOTES:
* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.
If well is purged dry, allow to recharge and sample within 24 hrs.
Turbidity +/- 5 NTUs

SAMPLE DATE: 10/28/21

SAMPLE TIME: 1836

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYTES
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~250 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 Rev.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM5540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/904.0	Radium 226 & 228 Combined

GENERAL INFORMATION	
WEATHER:	Partly Cloudy Temp 70°F
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center, Service Center to ship samples to Pittsburg, PA lab.
SHIPPED TO:	Eurofins TestAmerica Service Center - 6215 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shali Brown at Shali.Brown@EurofinsUS.com 615-301-5831 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7058
SAMPLER:	Daniel Howard OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chlorides, Fluorides, Sulfate

PROJECT NAME: Plant Arkwright, GA - CCR GW

PLANT Arkwright FIELD SAMPLING REPORT

Project Number: 612321TT14.2105

Wood E&I Solutions, Inc.
1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW GA 30144
PHONE: (770) 421-3400 / FAX (770) 421-3488

SAMPLING EVENT: X 2021 AP-1 2nd Background Sampling Event ___ OTHER

WELL ID / SAMPLE ID: APIPZ-11 MATRIX: Groundwater

WELL MATERIAL: X PVC ___ SS ___ OTHER

SAMPLE METHOD: QED Bladder pump Tubing

DUP./REP. OF: _____

Pump Intake Set at (bmp): 68.30

or

Tubing Inlet Set at (bmp): _____

WELL DIAMETER: 2

DEPTH TO WATER: 36.38

TOTAL DEPTH: 93.30

WATER COLUMN HEIGHT: 56.92

PURGE VOLUME: _____

GRAB (x) COMPOSITE ( )

[0.163 x water column height (ft) x 3 (well volumes)] for 2" wells]

[0.653 x water column height (ft) x 3 (well volumes)] for 4" wells]

[1.47 x water column height (ft) x 3 (well volumes)] for 8" wells]

TIME	VOL. PURGED (gal)	DO (±0.2 mg/L or 10% for DO > 0.5 mg/L) for DO < 0.5 mg/L record only	ORP (mV) record only	pH (+/- 0.1 pH units)	SPEC. COND. (µs/cm) (+/- 5%)	TEMP. (°C) Record only	TURB. (NTU) (<5 NTU)	Pump Rate ml/min. (& pump setting) (100 ml/min)	Water Level (ft BTOC)*
Initial	1759	2.8	1.86	49.2	6.76	330.09	19.32	6.87	100	36.38
	1804	3.0	1.83	50.6	6.77	329.15	19.32	6.68	150	36.38
	1809	3.2	1.81	49.8	6.77	326.99	19.29	6.25	150	36.38
	1814	3.4	1.80	47.5	6.77	326.59	19.28	6.16	150	36.38
	1819	3.6	1.85	39.0	6.77	323.64	19.25	5.90	150	36.38
	1824	3.8	1.81	43.5	6.78	324.32	19.26	5.65	150	36.38
	1829	4.0	1.85	43.2	6.77	323.17	19.25	4.94	150	36.38
	1834	4.2	1.84	36.3	6.78	321.65	19.28	4.94	150	36.38

NOTES:

* Stabilization of water column will be considered achieved when 3 consecutive water level measurements vary by 0.3 foot or less at a pumping rate no greater than 100 ml/min and the water level is above the top of the screen.

If well is purged dry, allow to recharge and sample within 24 hrs.

Turbidity < 5 NTUs

SAMPLE DATE: 10/28/21

SAMPLE TIME: 1836

CONTAINER SIZE/TYPE	NO.	PRESERVATIVE	ANALYTICAL METHOD	ANALYSIS
250 mL/Poly	1	HNO3 to pH <2	SW6010D/SW6020B/SW7470A	App. III & IV Metals, SW6020B/SW7470A*
~~500 mL/Poly~~	~~1~~	Cool to 6°C	EPA 300.0 R2.1	App. III Anions**
500 mL/Poly	1	Cool to 6°C	SM2540C	TDS
1 L/Poly	2	HNO3 to pH <2	EPA 903.1/9320	Radium 226 & 228 Combined

GENERAL INFORMATION		
WEATHER:	Partly Cloudy, Temp 70°F	
SHIPPED VIA:	Courier to Eurofins TestAmerica Service Center. Service Center to ship samples to Pittsburg, PA lab.	
SHIPPED TO:	Eurofins TestAmerica Service Center - 6310 Regency Parkway, Norcross GA 30071 PH: (678) 966-9991 POC: Shell Brown at Shell.Brown@Eurofinset.com 615-301-9631 Eurofins TestAmerica Pittsburgh - 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 412-963-7158	
SAMPLER:	Daniel Howard	OBSERVER:

*App. III Metals - Boron, Calcium; App. IV Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

**App. III Anions - Chloride, Fluoride, Sulfate

Low-Flow Test Report:

Test Date / Time: 2/7/2022 2:18:48 PM
Project: Plant Arkwright (9)
Operator Name: Ever Guillen

Location Name: AP1GWA-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 27.5 ft** **Total Depth: 37.5 ft** **Initial Depth to Water: 24.26 ft**	**Pump Type: QED** **Tubing Type: LDPE** **Pump Intake From TOC: 32.5 ft** **Estimated Total Volume Pumped: 2.5 gal** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.16 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884189**

Test Notes:
Sample time =

Weather Conditions:
Cold, cloudy,humid

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 5 %	+/- 5	+/- 10	+/- 0.3	
2/7/2022 2:18 PM	00:00	5.95 pH	16.60 °C	190.12 µS/cm	8.58 mg/L	43.70 NTU	190.2 mV	24.26 ft	200.00 ml/min
2/7/2022 2:23 PM	05:00	5.40 pH	17.99 °C	176.88 µS/cm	3.86 mg/L	34.60 NTU	178.3 mV	24.42 ft	200.00 ml/min
2/7/2022 2:28 PM	10:00	5.33 pH	18.07 °C	179.25 µS/cm	3.24 mg/L	27.50 NTU	141.9 mV	24.42 ft	200.00 ml/min
2/7/2022 2:33 PM	15:00	5.31 pH	18.16 °C	179.55 µS/cm	3.07 mg/L	19.30 NTU	126.1 mV	24.42 ft	200.00 ml/min
2/7/2022 2:38 PM	20:00	5.30 pH	18.10 °C	180.28 µS/cm	3.02 mg/L	15.10 NTU	72.1 mV	24.42 ft	200.00 ml/min
2/7/2022 2:43 PM	25:00	5.30 pH	17.99 °C	179.41 µS/cm	2.97 mg/L	13.20 NTU	68.3 mV	24.42 ft	200.00 ml/min
2/7/2022 2:48 PM	30:00	5.30 pH	17.97 °C	179.37 µS/cm	2.96 mg/L	9.79 NTU	65.9 mV	24.42 ft	200.00 ml/min
2/7/2022 2:53 PM	35:00	5.29 pH	18.09 °C	179.58 µS/cm	2.96 mg/L	7.13 NTU	64.9 mV	24.42 ft	200.00 ml/min
2/7/2022 2:58 PM	40:00	5.27 pH	18.17 °C	180.37 µS/cm	2.99 mg/L	5.27 NTU	103.9 mV	24.42 ft	200.00 ml/min
2/7/2022 3:03 PM	45:00	5.27 pH	18.14 °C	180.18 µS/cm	2.99 mg/L	3.43 NTU	64.1 mV	24.42 ft	200.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/7/2022 3:59:59 PM
Project: Plant Arkwright (10)
Operator Name: Ever Guillen

Location Name: AP1GWA-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 21.1 ft** **Total Depth: 31.1 ft** **Initial Depth to Water: 18.44 ft**	**Pump Type: QED** **Tubing Type: LDPE** **Pump Intake From TOC: 26.1 ft** **Estimated Total Volume Pumped: 3 gal** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.07 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884189**

Test Notes:
Sample time =1705

Weather Conditions:
Cold, cloudy, humid

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 5 %	+/- 5	+/- 10	+/- 0.3	
2/7/2022 3:59 PM	00:00	6.19 pH	16.49 °C	65.95 µS/cm	9.15 mg/L	42.10 NTU	109.5 mV	18.44 ft	200.00 ml/min
2/7/2022 4:04 PM	05:00	6.01 pH	18.65 °C	61.75 µS/cm	4.55 mg/L	37.30 NTU	80.3 mV	18.51 ft	200.00 ml/min
2/7/2022 4:09 PM	10:00	6.04 pH	16.29 °C	61.19 µS/cm	4.97 mg/L	32.30 NTU	66.3 mV	18.51 ft	200.00 ml/min
2/7/2022 4:14 PM	15:00	6.07 pH	14.31 °C	61.34 µS/cm	5.20 mg/L	27.70 NTU	62.8 mV	18.51 ft	200.00 ml/min
2/7/2022 4:19 PM	20:00	6.09 pH	13.86 °C	62.51 µS/cm	5.29 mg/L	22.80 NTU	92.2 mV	18.51 ft	200.00 ml/min
2/7/2022 4:24 PM	25:00	6.11 pH	13.17 °C	62.70 µS/cm	5.41 mg/L	16.90 NTU	90.7 mV	18.51 ft	200.00 ml/min
2/7/2022 4:29 PM	30:00	6.01 pH	16.85 °C	62.10 µS/cm	4.44 mg/L	14.40 NTU	64.7 mV	18.51 ft	200.00 ml/min
2/7/2022 4:34 PM	35:00	6.04 pH	14.28 °C	63.39 µS/cm	5.18 mg/L	12.90 NTU	60.6 mV	18.51 ft	200.00 ml/min
2/7/2022 4:39 PM	40:00	6.00 pH	18.70 °C	62.61 µS/cm	4.48 mg/L	11.20 NTU	59.3 mV	18.51 ft	200.00 ml/min
2/7/2022 4:44 PM	45:00	6.00 pH	19.06 °C	61.66 µS/cm	4.32 mg/L	9.97 NTU	56.6 mV	18.51 ft	200.00 ml/min
2/7/2022 4:49 PM	50:00	5.99 pH	19.15 °C	62.42 µS/cm	4.16 mg/L	7.66 NTU	50.7 mV	18.51 ft	200.00 ml/min
2/7/2022 4:54 PM	55:00	5.99 pH	19.33 °C	63.00 µS/cm	4.01 mg/L	5.65 NTU	36.1 mV	18.51 ft	200.00 ml/min
2/7/2022 4:59 PM	01:00:00	5.98 pH	19.33 °C	63.94 µS/cm	3.88 mg/L	3.36 NTU	27.9 mV	18.51 ft	200.00 ml/min

Low-Flow Test Report:

Test Date / Time: 2/8/2022 9:48:54 AM
Project: Plant Arkwright (12)
Operator Name: Ever Guillen

Location Name: AP1PZ-1 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 77.62 ft** **Total Depth: 87.62 ft** **Initial Depth to Water: 43.42 ft**	**Pump Type: QED** **Tubing Type: LDPE** **Pump Intake From TOC: 85.62 ft** **Estimated Total Volume Pumped: 1.75 gal** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884189**

Test Notes:
Sample time =1105

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 5 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 9:48 AM	00:00	6.62 pH	10.93 °C	319.23 µS/cm	2.34 mg/L	33.60 NTU	60.2 mV	43.52 ft	100.00 ml/min
2/8/2022 9:53 AM	04:13	6.61 pH	10.27 °C	324.71 µS/cm	2.22 mg/L	33.90 NTU	36.9 mV	43.52 ft	100.00 ml/min
2/8/2022 10:03 AM	14:13	6.60 pH	10.05 °C	326.46 µS/cm	1.38 mg/L	28.40 NTU	29.0 mV	43.52 ft	100.00 ml/min
2/8/2022 10:13 AM	24:13	6.59 pH	12.51 °C	323.68 µS/cm	0.91 mg/L	23.10 NTU	27.3 mV	43.52 ft	100.00 ml/min
2/8/2022 10:23 AM	34:13	6.57 pH	11.66 °C	329.47 µS/cm	0.56 mg/L	16.30 NTU	26.7 mV	43.52 ft	100.00 ml/min
2/8/2022 10:33 AM	44:13	6.58 pH	11.57 °C	325.91 µS/cm	0.61 mg/L	12.40 NTU	24.4 mV	43.52 ft	100.00 ml/min
2/8/2022 10:43 AM	54:13	6.58 pH	12.21 °C	326.28 µS/cm	0.62 mg/L	9.96 NTU	24.0 mV	43.52 ft	100.00 ml/min
2/8/2022 10:53 AM	01:04:13	6.57 pH	12.35 °C	328.94 µS/cm	0.64 mg/L	6.11 NTU	24.0 mV	43.52 ft	100.00 ml/min
2/8/2022 11:03 AM	01:14:13	6.57 pH	12.25 °C	325.02 µS/cm	0.63 mg/L	3.71 NTU	23.7 mV	43.52 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/7/2022 1:46:13 PM
Project: AP1PZ-2
Operator Name: Terrell Parker

Location Name: AP1PZ-2 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 52.67 ft** **Total Depth: 62.67 ft**	**Pump Type: Dedicated QED Bladder** **Tubing Type: 1/4 LDPE** **Pump Intake From TOC: 57 ft** **Estimated Total Volume Pumped: 9500 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 0.25 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Overcast, 48 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/7/2022 1:46 PM	00:00	6.19 pH	15.82 °C	1,085.2 µS/cm	3.00 mg/L	63.00 NTU	43.2 mV	41.24 ft	100.00 ml/min
2/7/2022 1:51 PM	05:00	6.18 pH	17.77 °C	1,055.1 µS/cm	0.76 mg/L	47.30 NTU	68.4 mV	41.24 ft	100.00 ml/min
2/7/2022 1:56 PM	10:00	6.17 pH	17.84 °C	1,047.9 µS/cm	0.37 mg/L	41.20 NTU	69.7 mV	41.24 ft	100.00 ml/min
2/7/2022 2:01 PM	15:00	6.17 pH	17.90 °C	1,043.9 µS/cm	0.31 mg/L	35.70 NTU	102.7 mV	41.24 ft	100.00 ml/min
2/7/2022 2:06 PM	20:00	6.17 pH	17.90 °C	1,049.9 µS/cm	0.29 mg/L	27.80 NTU	68.9 mV	41.24 ft	100.00 ml/min
2/7/2022 2:11 PM	25:00	6.15 pH	17.79 °C	1,073.8 µS/cm	0.26 mg/L	18.90 NTU	98.2 mV	41.24 ft	100.00 ml/min
2/7/2022 2:16 PM	30:00	6.14 pH	17.87 °C	1,098.9 µS/cm	0.26 mg/L	15.20 NTU	68.4 mV	41.24 ft	100.00 ml/min
2/7/2022 2:21 PM	35:00	6.13 pH	17.93 °C	1,110.9 µS/cm	0.25 mg/L	14.90 NTU	94.5 mV	41.24 ft	100.00 ml/min
2/7/2022 2:26 PM	40:00	6.13 pH	17.88 °C	1,118.4 µS/cm	0.24 mg/L	13.20 NTU	93.4 mV	41.24 ft	100.00 ml/min
2/7/2022 2:31 PM	45:00	6.13 pH	17.99 °C	1,134.6 µS/cm	0.24 mg/L	10.70 NTU	67.3 mV	41.24 ft	100.00 ml/min
2/7/2022 2:36 PM	50:00	6.14 pH	17.86 °C	1,137.4 µS/cm	0.24 mg/L	8.75 NTU	65.7 mV	41.24 ft	100.00 ml/min
2/7/2022 2:41 PM	55:00	6.13 pH	17.85 °C	1,140.6 µS/cm	0.23 mg/L	7.41 NTU	87.8 mV	41.24 ft	100.00 ml/min
2/7/2022 2:46 PM	01:00:00	6.13 pH	17.90 °C	1,150.2 µS/cm	0.25 mg/L	7.06 NTU	87.6 mV	41.24 ft	100.00 ml/min

2/7/2022 2:51 PM	01:05:00	6.12 pH	17.90 °C	1,161.2 µS/cm	0.23 mg/L	6.41 NTU	64.7 mV	41.24 ft	100.00 ml/min
2/7/2022 2:56 PM	01:10:00	6.12 pH	17.99 °C	1,160.8 µS/cm	0.24 mg/L	5.53 NTU	64.2 mV	41.24 ft	100.00 ml/min
2/7/2022 3:01 PM	01:15:00	6.11 pH	17.94 °C	1,166.5 µS/cm	0.26 mg/L	5.47 NTU	64.7 mV	41.24 ft	100.00 ml/min
2/7/2022 3:06 PM	01:20:00	6.10 pH	17.90 °C	1,169.8 µS/cm	0.23 mg/L	5.38 NTU	63.9 mV	41.24 ft	100.00 ml/min
2/7/2022 3:11 PM	01:25:00	6.10 pH	17.87 °C	1,175.2 µS/cm	0.22 mg/L	5.49 NTU	63.1 mV	41.24 ft	100.00 ml/min
2/7/2022 3:16 PM	01:30:00	6.10 pH	17.92 °C	1,180.7 µS/cm	0.22 mg/L	4.75 NTU	83.2 mV	41.24 ft	100.00 ml/min

Samples

Sample ID:	Description:
AP1PZ-2	Groundwater 15:20

Low-Flow Test Report:

Test Date / Time: 2/8/2022 8:31:00 AM
Project: AP1PZ-3
Operator Name: Terrell Parker

Location Name: AP1PZ-3 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.38 ft** **Total Depth: 67.38 ft**	**Pump Type: Dedicated QED Bladder** **Tubing Type: 1/4 LDPE** **Pump Intake From TOC: 62.38 ft** **Estimated Total Volume Pumped: 6000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.5 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Partly Sunny, 39 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 8:31 AM	00:00	5.64 pH	17.40 °C	2,064.5 µS/cm	0.81 mg/L	7.98 NTU	56.9 mV	42.17 ft	150.00 ml/min
2/8/2022 8:36 AM	05:00	5.63 pH	17.61 °C	2,078.6 µS/cm	0.27 mg/L	7.40 NTU	30.5 mV	42.17 ft	150.00 ml/min
2/8/2022 8:41 AM	10:00	5.63 pH	17.69 °C	2,084.9 µS/cm	0.24 mg/L	7.73 NTU	20.1 mV	42.17 ft	150.00 ml/min
2/8/2022 8:46 AM	15:00	5.63 pH	17.75 °C	2,087.5 µS/cm	0.23 mg/L	5.33 NTU	14.5 mV	42.17 ft	150.00 ml/min
2/8/2022 8:51 AM	20:00	5.63 pH	17.85 °C	2,084.1 µS/cm	0.23 mg/L	4.34 NTU	9.5 mV	42.17 ft	150.00 ml/min
2/8/2022 8:56 AM	25:00	5.63 pH	17.96 °C	2,089.4 µS/cm	0.23 mg/L	4.42 NTU	-8.1 mV	42.17 ft	150.00 ml/min

Samples

Sample ID:	Description:
AP1PZ-3	Groundwater 09:00

Low-Flow Test Report:

Test Date / Time: 2/8/2022 9:56:11 AM
Project: AP1PZ-4
Operator Name: Terrell Parker

Location Name: AP1PZ-4 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.44 ft** **Total Depth: 67.44 ft**	**Pump Type: Dedicated QED Bladder** **Tubing Type: 1/4 LDPE** **Pump Intake From TOC: 63 ft** **Estimated Total Volume Pumped: 7000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 2.57 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Mostly sunny, 44 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 9:56 AM	00:00	6.53 pH	15.97 °C	2,405.0 µS/cm	1.39 mg/L	2.71 NTU	-20.6 mV	46.23 ft	200.00 ml/min
2/8/2022 10:01 AM	05:00	6.55 pH	17.58 °C	2,358.4 µS/cm	0.33 mg/L	2.17 NTU	-31.7 mV	46.46 ft	200.00 ml/min
2/8/2022 10:06 AM	10:00	6.56 pH	17.61 °C	2,354.1 µS/cm	0.23 mg/L	1.51 NTU	-73.5 mV	46.63 ft	200.00 ml/min
2/8/2022 10:11 AM	15:00	6.53 pH	17.44 °C	2,346.0 µS/cm	0.19 mg/L	0.98 NTU	-31.1 mV	46.63 ft	200.00 ml/min
2/8/2022 10:16 AM	20:00	6.51 pH	17.32 °C	2,340.2 µS/cm	0.19 mg/L	0.69 NTU	-71.8 mV	46.63 ft	200.00 ml/min
2/8/2022 10:21 AM	25:00	6.48 pH	17.50 °C	2,330.6 µS/cm	0.19 mg/L	0.55 NTU	-30.5 mV	46.63 ft	200.00 ml/min

Samples

Sample ID:	Description:
AP1PZ-4	Groundwater 10:25

Low-Flow Test Report:

Test Date / Time: 2/8/2022 1:12:42 PM
Project: Plant Arkwright (13)
Operator Name: Ever Guillen

Location Name: AP1PZ-5 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 57.25 ft** **Total Depth: 67.25 ft** **Initial Depth to Water: 46.14 ft**	**Pump Type: QED** **Tubing Type: LDPE** **Pump Intake From TOC: 62.25 ft** **Estimated Total Volume Pumped: 2 gal** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 1.18 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 884189**

Test Notes:
Sample time =1435

Weather Conditions:
Cold, cloudy, humid

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 5 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 1:12 PM	00:00	6.58 pH	15.93 °C	1,569.5 µS/cm	8.39 mg/L	17.50 NTU	52.4 mV	46.14 ft	100.00 ml/min
2/8/2022 1:22 PM	10:00	6.37 pH	16.13 °C	2,727.9 µS/cm	1.02 mg/L	14.80 NTU	-26.2 mV	47.32 ft	100.00 ml/min
2/8/2022 1:32 PM	20:00	6.39 pH	15.03 °C	2,787.8 µS/cm	0.48 mg/L	11.90 NTU	-28.6 mV	47.32 ft	100.00 ml/min
2/8/2022 1:42 PM	30:00	6.43 pH	14.08 °C	2,810.0 µS/cm	0.53 mg/L	8.54 NTU	-31.5 mV	47.32 ft	100.00 ml/min
2/8/2022 1:52 PM	40:00	6.42 pH	14.76 °C	2,831.7 µS/cm	0.49 mg/L	6.44 NTU	-32.3 mV	47.32 ft	100.00 ml/min
2/8/2022 2:02 PM	50:00	6.43 pH	14.72 °C	2,821.4 µS/cm	0.46 mg/L	5.46 NTU	-31.0 mV	47.32 ft	100.00 ml/min
2/8/2022 2:12 PM	01:00:00	6.43 pH	14.49 °C	2,838.2 µS/cm	0.41 mg/L	4.87 NTU	-31.6 mV	47.32 ft	100.00 ml/min
2/8/2022 2:22 PM	01:10:00	6.43 pH	14.97 °C	2,822.0 µS/cm	0.42 mg/L	2.54 NTU	-30.9 mV	47.32 ft	100.00 ml/min
2/8/2022 2:32 PM	01:20:00	6.43 pH	14.85 °C	2,818.0 µS/cm	0.40 mg/L	1.21 NTU	-30.4 mV	47.32 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/8/2022 12:03:12 PM
Project: AP1PZ-6
Operator Name: Terrell Parker

Location Name: AP1PZ-6 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 62.65 ft** **Total Depth: 72.65 ft**	**Pump Type: Dedicated QED Bladder** **Tubing Type: 1/4 LDPE** **Pump Intake From TOC: 67.65 ft** **Estimated Total Volume Pumped: 7000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 200 ml/min** **Final Draw Down: 0.58 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Overcast, 49 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 12:03 PM	00:00	5.52 pH	17.25 °C	3,139.0 µS/cm	1.24 mg/L	22.40 NTU	39.6 mV	54.42 ft	200.00 ml/min
2/8/2022 12:08 PM	05:00	5.53 pH	17.21 °C	3,249.2 µS/cm	1.50 mg/L	11.50 NTU	26.8 mV	54.45 ft	200.00 ml/min
2/8/2022 12:13 PM	10:00	5.58 pH	17.32 °C	3,268.0 µS/cm	0.22 mg/L	7.54 NTU	26.3 mV	54.45 ft	200.00 ml/min
2/8/2022 12:18 PM	15:00	5.59 pH	17.45 °C	3,253.3 µS/cm	0.19 mg/L	6.44 NTU	24.8 mV	54.45 ft	200.00 ml/min
2/8/2022 12:23 PM	20:00	5.59 pH	17.63 °C	3,251.3 µS/cm	0.19 mg/L	5.84 NTU	23.3 mV	54.45 ft	200.00 ml/min
2/8/2022 12:28 PM	25:00	5.59 pH	17.58 °C	3,254.6 µS/cm	0.19 mg/L	4.69 NTU	23.6 mV	54.45 ft	200.00 ml/min
2/8/2022 12:33 PM	30:00	5.59 pH	17.59 °C	3,253.2 µS/cm	0.18 mg/L	4.88 NTU	23.4 mV	54.45 ft	200.00 ml/min

Samples

Sample ID:	Description:
AP1PZ-6	Groundwater 12:40

Low-Flow Test Report:

Test Date / Time: 2/7/2022 2:53:11 PM
Project: Plant Arkwright AP1 CCR
Operator Name: Daniel Howard

Location Name: AP1PZ-7 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 58.3 ft** **Total Depth: 68.3 ft** **Initial Depth to Water: 45.52 ft**	**Pump Type: Dedicated bladder pump** **Tubing Type: HDPE** **Pump Intake From TOC: 63.3 ft** **Estimated Total Volume Pumped: 4000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 100 ml/min** **Final Draw Down: 3.1 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
AP1PZ-7 sample time 1535.

Weather Conditions:
Overcast, temp 48.

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/7/2022 2:53 PM	00:00	6.38 pH	15.03 °C	2,331.0 µS/cm	2.27 mg/L	8.99 NTU	-20.5 mV	46.70 ft	100.00 ml/min
2/7/2022 2:58 PM	05:00	6.40 pH	16.02 °C	2,335.5 µS/cm	0.83 mg/L	11.10 NTU	-41.8 mV	46.99 ft	100.00 ml/min
2/7/2022 3:03 PM	10:00	6.42 pH	15.85 °C	2,319.6 µS/cm	0.70 mg/L	9.52 NTU	-61.9 mV	47.49 ft	100.00 ml/min
2/7/2022 3:08 PM	15:00	6.42 pH	15.80 °C	2,313.4 µS/cm	0.52 mg/L	8.31 NTU	-66.6 mV	47.63 ft	100.00 ml/min
2/7/2022 3:13 PM	20:00	6.42 pH	15.57 °C	2,323.3 µS/cm	0.40 mg/L	6.81 NTU	-50.7 mV	47.95 ft	100.00 ml/min
2/7/2022 3:18 PM	25:00	6.42 pH	15.62 °C	2,319.8 µS/cm	0.40 mg/L	4.02 NTU	-70.7 mV	48.12 ft	100.00 ml/min
2/7/2022 3:23 PM	30:00	6.42 pH	15.60 °C	2,313.3 µS/cm	0.35 mg/L	3.96 NTU	-52.2 mV	48.35 ft	100.00 ml/min
2/7/2022 3:28 PM	35:00	6.42 pH	15.63 °C	2,310.9 µS/cm	0.34 mg/L	4.00 NTU	-52.6 mV	48.52 ft	100.00 ml/min
2/7/2022 3:33 PM	40:00	6.42 pH	15.64 °C	2,318.4 µS/cm	0.34 mg/L	3.55 NTU	-73.7 mV	48.62 ft	100.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/8/2022 9:57:06 AM
Project: Plant Arkwright AP1 CCR (2)
Operator Name: Daniel Howard

Location Name: AP1PZ-8 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 56.09 ft** **Total Depth: 66.09 ft** **Initial Depth to Water: 43.76 ft**	**Pump Type: Dedicated bladder pump** **Tubing Type: HDPE** **Pump Intake From TOC: 61.09 ft** **Estimated Total Volume Pumped: 4375 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 125 ml/min** **Final Draw Down: 2.3 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
AP1PZ-8 sample time 1035. Also collected DUP-1.

Weather Conditions:
Clear, temp 45

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 9:57 AM	00:00	6.42 pH	15.58 °C	1,599.3 µS/cm	1.57 mg/L	4.11 NTU	-2.8 mV	44.94 ft	125.00 ml/min
2/8/2022 10:02 AM	05:00	6.44 pH	15.08 °C	1,638.1 µS/cm	0.90 mg/L	4.07 NTU	-35.6 mV	45.45 ft	125.00 ml/min
2/8/2022 10:07 AM	10:00	6.44 pH	15.08 °C	1,653.5 µS/cm	0.57 mg/L	2.25 NTU	-48.9 mV	45.61 ft	125.00 ml/min
2/8/2022 10:12 AM	15:00	6.43 pH	15.24 °C	1,657.5 µS/cm	0.41 mg/L	2.27 NTU	-42.6 mV	45.78 ft	125.00 ml/min
2/8/2022 10:17 AM	20:00	6.42 pH	15.40 °C	1,671.7 µS/cm	0.32 mg/L	1.58 NTU	-64.3 mV	45.89 ft	125.00 ml/min
2/8/2022 10:22 AM	25:00	6.43 pH	15.50 °C	1,662.0 µS/cm	0.28 mg/L	1.51 NTU	-49.7 mV	45.96 ft	125.00 ml/min
2/8/2022 10:27 AM	30:00	6.43 pH	15.35 °C	1,665.8 µS/cm	0.26 mg/L	0.83 NTU	-71.2 mV	46.01 ft	125.00 ml/min
2/8/2022 10:32 AM	35:00	6.42 pH	15.58 °C	1,666.8 µS/cm	0.26 mg/L	0.59 NTU	-53.1 mV	46.06 ft	125.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/8/2022 1:17:20 PM
Project: Plant Arkwright AP1 CCR (3)
Operator Name: Daniel Howard

Location Name: AP1PZ-9 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 47.35 ft** **Total Depth: 57.35 ft** **Initial Depth to Water: 39.98 ft**	**Pump Type: Dedicated bladder pump** **Tubing Type: HDPE** **Pump Intake From TOC: 52.35 ft** **Estimated Total Volume Pumped: 3000 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 75 ml/min** **Final Draw Down: 3.47 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
AP1PZ-9 sample time 1400.

Weather Conditions:
Partly cloudy, temp 51

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 1:17 PM	00:00	5.43 pH	16.78 °C	708.48 µS/cm	1.85 mg/L	10.80 NTU	91.0 mV	41.26 ft	75.00 ml/min
2/8/2022 1:22 PM	05:00	4.92 pH	15.13 °C	711.96 µS/cm	2.06 mg/L	8.88 NTU	111.1 mV	41.56 ft	75.00 ml/min
2/8/2022 1:27 PM	10:00	4.77 pH	14.80 °C	716.40 µS/cm	1.64 mg/L	8.63 NTU	138.6 mV	41.89 ft	75.00 ml/min
2/8/2022 1:32 PM	15:00	4.67 pH	15.54 °C	716.93 µS/cm	1.10 mg/L	6.97 NTU	156.5 mV	42.21 ft	75.00 ml/min
2/8/2022 1:37 PM	20:00	4.62 pH	16.11 °C	708.40 µS/cm	0.94 mg/L	4.95 NTU	166.7 mV	42.48 ft	75.00 ml/min
2/8/2022 1:42 PM	25:00	4.63 pH	15.39 °C	704.55 µS/cm	1.03 mg/L	5.80 NTU	155.5 mV	42.76 ft	75.00 ml/min
2/8/2022 1:47 PM	30:00	4.62 pH	15.25 °C	709.54 µS/cm	1.06 mg/L	4.41 NTU	167.8 mV	43.03 ft	75.00 ml/min
2/8/2022 1:52 PM	35:00	4.62 pH	15.75 °C	707.79 µS/cm	1.11 mg/L	2.45 NTU	157.4 mV	43.25 ft	75.00 ml/min
2/8/2022 1:57 PM	40:00	4.63 pH	15.86 °C	705.29 µS/cm	1.15 mg/L	2.33 NTU	166.4 mV	43.45 ft	75.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/9/2022 9:14:12 AM
Project: Plant Arkwright AP1 CCR (4)
Operator Name: Daniel Howard

Location Name: AP1PZ-10 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 46.48 ft** **Total Depth: 56.48 ft** **Initial Depth to Water: 37.7 ft**	**Pump Type: Dedicated bladder pump** **Tubing Type: HDPE** **Pump Intake From TOC: 51.48 ft** **Estimated Total Volume Pumped: 3375 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 75 ml/min** **Final Draw Down: 2.14 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 728541**

Test Notes:
AP1PZ-10 sample time 1002.

Weather Conditions:
Clear and cold, temp 35

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth to Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/9/2022 9:14 AM	00:00	6.04 pH	13.04 °C	673.49 µS/cm	1.58 mg/L	3.58 NTU	-54.0 mV	38.66 ft	75.00 ml/min
2/9/2022 9:19 AM	05:00	6.04 pH	13.15 °C	669.14 µS/cm	0.78 mg/L	3.85 NTU	-63.1 mV	38.88 ft	75.00 ml/min
2/9/2022 9:24 AM	10:00	6.08 pH	13.54 °C	683.07 µS/cm	0.95 mg/L	2.14 NTU	-83.7 mV	39.07 ft	75.00 ml/min
2/9/2022 9:29 AM	15:00	6.16 pH	13.72 °C	708.35 µS/cm	0.79 mg/L	1.59 NTU	-70.7 mV	39.24 ft	75.00 ml/min
2/9/2022 9:34 AM	20:00	6.24 pH	13.90 °C	720.81 µS/cm	0.72 mg/L	1.63 NTU	-92.0 mV	39.38 ft	75.00 ml/min
2/9/2022 9:39 AM	25:00	6.27 pH	13.78 °C	733.46 µS/cm	0.81 mg/L	1.17 NTU	-69.5 mV	39.48 ft	75.00 ml/min
2/9/2022 9:44 AM	30:00	6.29 pH	14.17 °C	737.40 µS/cm	0.72 mg/L	1.28 NTU	-87.8 mV	39.61 ft	75.00 ml/min
2/9/2022 9:49 AM	35:00	6.28 pH	14.21 °C	734.80 µS/cm	0.58 mg/L	1.19 NTU	-85.0 mV	39.68 ft	75.00 ml/min
2/9/2022 9:54 AM	40:00	6.24 pH	14.35 °C	720.68 µS/cm	0.51 mg/L	0.80 NTU	-60.2 mV	39.77 ft	75.00 ml/min
2/9/2022 9:59 AM	45:00	6.19 pH	14.31 °C	715.55 µS/cm	0.49 mg/L	0.78 NTU	-72.8 mV	39.84 ft	75.00 ml/min

Samples

Sample ID:	Description:

Low-Flow Test Report:

Test Date / Time: 2/8/2022 2:25:35 PM
Project: AP1PZ-11
Operator Name: Terrell Parker

Location Name: AP1PZ-11 **Well Diameter: 2 in** **Casing Type: PVC** **Screen Length: 10 ft** **Top of Screen: 63.3 ft** **Total Depth: 73.3 ft**	**Pump Type: Dedicated QED Bladder** **Tubing Type: 1/4 LDPE** **Pump Intake From TOC: 68.3 ft** **Estimated Total Volume Pumped: 21800 ml** **Flow Cell Volume: 90 ml** **Final Flow Rate: 150 ml/min** **Final Draw Down: 0.28 ft**	**Instrument Used: Aqua TROLL 400** **Serial Number: 883533**

Test Notes:

Weather Conditions:
Overcast, 52 degrees F

Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 5	+/- 10	+/- 0.3	
2/8/2022 2:25 PM	00:00	6.75 pH	17.93 °C	311.48 µS/cm	3.08 mg/L	9.32 NTU	33.6 mV	37.92 ft	200.00 ml/min
2/8/2022 2:30 PM	05:00	6.75 pH	18.01 °C	309.05 µS/cm	2.94 mg/L	6.61 NTU	60.1 mV	37.92 ft	200.00 ml/min
2/8/2022 2:35 PM	10:00	6.75 pH	18.17 °C	304.63 µS/cm	2.82 mg/L	5.80 NTU	46.6 mV	37.92 ft	200.00 ml/min
2/8/2022 2:40 PM	15:00	6.75 pH	18.11 °C	301.44 µS/cm	2.74 mg/L	5.81 NTU	47.3 mV	37.92 ft	200.00 ml/min
2/8/2022 2:45 PM	20:00	6.75 pH	18.18 °C	306.41 µS/cm	2.61 mg/L	6.36 NTU	69.1 mV	37.92 ft	200.00 ml/min
2/8/2022 2:50 PM	25:00	6.75 pH	18.21 °C	302.93 µS/cm	2.57 mg/L	6.42 NTU	50.0 mV	37.92 ft	200.00 ml/min
2/8/2022 2:55 PM	30:00	6.75 pH	18.08 °C	299.75 µS/cm	2.56 mg/L	6.37 NTU	50.0 mV	37.92 ft	200.00 ml/min
2/8/2022 3:00 PM	35:00	6.74 pH	18.08 °C	296.80 µS/cm	2.56 mg/L	6.94 NTU	72.7 mV	37.92 ft	200.00 ml/min
2/8/2022 3:05 PM	40:00	6.75 pH	18.14 °C	297.17 µS/cm	2.55 mg/L	6.63 NTU	50.6 mV	37.92 ft	200.00 ml/min
2/8/2022 3:10 PM	45:00	6.75 pH	18.08 °C	295.89 µS/cm	2.57 mg/L	6.50 NTU	50.1 mV	37.92 ft	200.00 ml/min
2/8/2022 3:15 PM	50:00	6.75 pH	17.95 °C	292.85 µS/cm	2.60 mg/L	6.17 NTU	73.4 mV	37.92 ft	200.00 ml/min
2/8/2022 3:20 PM	55:00	6.75 pH	17.99 °C	291.75 µS/cm	2.62 mg/L	6.69 NTU	50.8 mV	37.92 ft	200.00 ml/min
2/8/2022 3:25 PM	01:00:00	6.75 pH	18.01 °C	289.64 µS/cm	2.62 mg/L	7.48 NTU	73.6 mV	37.92 ft	200.00 ml/min

2/8/2022 3:30 PM	01:05:00	6.75 pH	17.87 °C	288.77 µS/cm	2.65 mg/L	6.22 NTU	50.5 mV	37.92 ft	200.00 ml/min
2/8/2022 3:35 PM	01:10:00	6.75 pH	17.88 °C	287.74 µS/cm	2.65 mg/L	6.46 NTU	72.9 mV	37.92 ft	200.00 ml/min
2/8/2022 3:40 PM	01:15:00	6.75 pH	17.92 °C	286.68 µS/cm	2.65 mg/L	6.23 NTU	50.0 mV	37.88 ft	200.00 ml/min
2/8/2022 3:45 PM	01:20:00	6.76 pH	17.65 °C	286.19 µS/cm	2.63 mg/L	6.68 NTU	48.7 mV	37.88 ft	200.00 ml/min
2/8/2022 3:50 PM	01:25:00	6.75 pH	17.70 °C	284.93 µS/cm	2.67 mg/L	6.54 NTU	70.7 mV	37.87 ft	200.00 ml/min
2/8/2022 3:55 PM	01:30:00	6.74 pH	17.54 °C	283.88 µS/cm	2.65 mg/L	7.65 NTU	48.9 mV	37.87 ft	200.00 ml/min
2/8/2022 4:00 PM	01:35:00	6.76 pH	17.29 °C	286.76 µS/cm	2.77 mg/L	5.51 NTU	69.3 mV	37.87 ft	200.00 ml/min
2/8/2022 4:05 PM	01:40:00	6.75 pH	17.68 °C	284.57 µS/cm	2.69 mg/L	4.99 NTU	48.2 mV	37.87 ft	200.00 ml/min
2/8/2022 4:10 PM	01:45:00	6.75 pH	17.72 °C	284.54 µS/cm	2.68 mg/L	4.46 NTU	69.4 mV	37.87 ft	200.00 ml/min

Samples

Sample ID:	Description:
AP1PZ-11	Groundwater 16:15

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Equipment & Field Blanks

Direct Capacity Fill

NOTES

Collected Equipment blank EB-1 at 1400 hrs. Analyzed for TSS, TDS, Alkalinity, Hardness, Chloride, Sulfate, Nitrate, Nitrite, Fluoride, Phosphate, Total Phosphorus, Total Kjeldahl Nitrogen, Ammonia, Total Organic Carbon, Total Coliform, Fecal Coliform, and Fecal Streptococcus.

2/8/22

Arkwright

Field

Signature: David Howard

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Equipment & Field Blanks

EB-2

Collected equipment blank EB-2 at 1345 by pouring distilled water over cleaned stainless steel bowl and scoop then poured water into decontaminated bottle

Sampled Date: 2/28/12

Received Date: 2/29/12

Analyzed Date: 3/1/12

Analyzed by: Daniel Hewett

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Equipment & Field Blanks FB-1

Orchard Farm Field

NOTES

Collected Field Blank FB-1 for VOA, TOC, Total Chloride, Total As, TM Dissolved Field Blank not Analyzed (Bottle 2)

2/7/21

1405

Orchard Farm Field

Daniel Hansell

PLANT ALLWRIGHT FIELD SAMPLING REPORT

Page 1 of 1

SAMPLE ID: AP1GWA-1

NOTES

SAMPLED BY:

SIGNATURE:

ADDITIONAL INFORMATION

ATTACHED:

REMARKS:

SHIPPED TO:

SAMPLED BY:

SIGNATURE:

PLANT ARKWRIGHT FIELD SAMPLING REPORT

NOTES

PLANT ARKWRIGHT FIELD SAMPLING REPORT

NOTES

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Project Manager: 6123201114.2124

SAMPLING AGENCY: [illegible]

AREA SAMPLED: AP1PZ-2

WEATHER: [illegible]

SAMPLE METHOD: [illegible]

AREA SAMPLED: 2

SAMPLE MATRIX: [illegible]

TOTAL DEPTH: [illegible]

WATER COLUMN HEIGHT: [illegible]

PURGE VOLUME: [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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NOTES

[illegible]

SAMPLE TAKEN BY: [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

PLANT ARKWRIGHT: FIELD SAMPLING REPORT

p. 2 of 2

PLANT ARKWRIGHT FIELD SAMPLING REPORT

MW-2D

NOTES

PLANT ARKWRIGHT FIELD SAMPLING REPORT

PLANT AIRWRIGHT FIELD SAMPLING REPORT

SAMPLE LOCATION: AP1PZ-5

NOTES

SAMPLE DATE:

SAMPLE TIME:

SAMPLE INFORMATION

[illegible]

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Project Number: [illegible]

[illegible]

WELL ID / SAMPLE ID: PIPZ-6

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NOTES: [illegible]

SAMPLE DATE: [illegible]

SAMPLE TIME: [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

GENERAL INFORMATION

[illegible]

Total Metals App III: Boron, Calcium

Total Metals App IV: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium

[illegible]

PLANT AIDKWIRIGHT FIELD SAMPLING REPORT

Project Number 6125-31-17-4104

Time	Gal Pumped	Chlorine Residual mg/l	Temp °F	pH	Conductivity	Turb NTU	DO mg/l	Bacteria Present/Absent	Bacteria Count/100ml
1453	0	2.27	70.5	6.58	2351.0	13.01	8.99	Abs	36.70
1454	0.125	0.83	71.8	6.90	2355.3	10.04	10.1	Abs	36.99
1503	0.25	0.76	69.9	6.92	2317.6	15.83	9.32	Abs	47.44
1508	0.375	0.82	69.6	6.98	2311.4	13.30	8.31	Abs	47.63
1513	0.5	0.90	70.1	6.92	2312.3	15.57	6.81	Abs	36.70
1518	0.625	0.98	70.7	6.91	2319.8	16.63	9.03	Abs	48.12
1523	0.75	0.35	72.1	6.91	2318.3	13.60	3.96	Abs	48.45
1528	0.875	0.34	72.6	6.92	2310.7	15.63	4.0	Abs	48.30
1533	1.0	0.34	73.7	6.96	2313.4	15.64	3.35	Abs	48.62

NOTES: Water level is well 1.65 ft high than last week which we think is because of the rain. Flow is approximately 5 GPM less than last week.

Stream Rate: 2 / 7 / 5 gpm. The creek is also 4-5 ft high today than last week

Sample Time: 1515

Parameter Collected	Yes	Preservative	Check	Analysis Method	Analysis
Chlorine		Nitric Acid	pH < 2	Standard Methods	Total Coliform & Escherichia coli
Conductivity		Cooled		EPA Approved	
Turbidity		Cooled		Distilled	
Alkalinity		Cooled	pH < 2	Potentiometric	Total Coliform & Escherichia coli

GENERAL INFORMATION

Weather: Overcast, Temp 70°F

Comments: Water Sample collected at Aidkwiright Creek Campground Pump House. Sample transported to Pinebrook Water Analysis Lab for testing.

Sampled by: David Hansel

Reviewed by: _____ Date: _____

Water Quality Supervisor

Pinebrook Water Analysis Laboratory, Aidkwiright Creek Campground, Pinebrook, PA 18301

PLANT AGRIWRIGHT FIELD SAMPLING REPORT

AP1PZ-8

Deducted Blade

DUP-1

61.05

43.76

46.09

1051	0	1.51	2.8	6.91	1298.3	15.58	4.11	125	44.84
1052	0.15	0.90	53.6	6.94	1658.1	15.28	4.62	125	45.45
1001	0.3	6.57	48.9	6.97	1643.5	15.04	4.35	125	45.61
1013	0.45	6.41	54.6	6.93	1657.5	15.24	4.27	125	45.68
1017	0.9	0.31	64.3	6.72	1671.7	15.70	7.58	125	45.89
1012	0.75	0.25	59.1	6.63	1611.0	15.60	1.51	125	44.96
1027	0.9	0.26	71.2	6.43	1655.8	15.35	0.83	125	46.01
1031	1.05	0.26	75.1	6.42	1666.8	15.55	0.59	125	46.06

NOTES: Collected duplicate DUP-1 at this location

2/18/21

1035

Clear Top 4 5/8"

Daniel Howard

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Project Number: [illegible]

Client:

Date:

Weather:

Air Monitor ID: AP1PZ-3

Air Monitor Type:

Sampler Purpose: Quarterly Monitoring

Sampler Type: Peristaltic Bladder Pump

Pump Serial #:

Pump Calibration Date: 12-22-23

Pump Calibration Flow: 52.35

Pump Calibration Vacuum:

Pump Calibration Temp:

Pump Calibration Barometric Pressure:

Pump Calibration Performed By:

Pump Correction Factor: 2

Pump Flow Rate: 49.68

Total Pump Time: 51.15

Water Column Height:

Static Water Level:

Grab or Composite:

Time	Flow Rate (L/min)	Total Volume (L)	Temperature (°C)	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Turbidity (NTU)	Water Level Below Measuring Point (ft)	Barometric Pressure (mmHg)
1311	0	1.83	91.0	5.43	708.48	16.28	10.8	6.15	741.26
1312	0.1	1.96	111.1	4.92	711.56	13.22	9.88	7.25	741.26
1317	0.4	1.69	138.6	4.77	716.40	14.98	8.63	7.15	741.27
1322	0.3	1.70	154.3	4.67	716.93	15.37	6.97	7.25	741.21
1327	0.4	0.39	166.7	4.63	708.96	16.11	7.93	7.3	741.18
1332	0.5	1.03	113.3	4.61	701.55	15.30	5.80	7.5	741.16
1337	0.6	1.96	142.8	4.62	709.54	13.25	4.41	7.3	741.04
1342	0.7	1.91	151.9	4.64	703.14	15.15	3.45	7.3	741.23
1357	0.8	1.45	166.1	4.63	703.29	15.80	2.33	7.25	741.15

NOTES:

Sample Date: 2/8/24

Sample Time: 1400

Container Type	Qty	Preservative	pH Check	Analysis	Lab Used
250 mL Poly	1	Unpreserved	✓	Gross Alpha/Beta	Accutest Mountain States (Albuquerque, NM)
250 mL Poly	1	Cooled		Ra-226/Ra-228	
1 Gal Poly	1	Cooled		Sulfate	ESS
250 mL Poly	1	Unpreserved	✓	Uranium	Accutest Mountain States (Albuquerque, NM)

Shipping Information

Carrier: Fedex Ground Tracking #: 5797

Relinquished by: Date/Time:

Received by: Date/Time:

Sampler: Daniel Howard

Date/Time:

Field Water Quality Meter: [illegible]

Field Calibration Standards: [illegible]

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Project Number 0123-24-17-0104

Well Number AP-MPZ-10

Sampled From Deducted Field Pump

Purge Volume Calculation: 51.4%

Well Diameter 2

Casing Volume 37.70

Total Depth 54.78

Time	Purge Volume	Purge Rate (gpm)	Temp (°C)	pH	Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)
0714	0	1.4X	54.0	4.07	611.99	13.01	3.58	28.66
0719	0.1	0.18	64.1	6.07	669.14	13.15	3.85	33.98
0724	0.2	0.15	61.7	6.08	681.03	13.54	3.14	37.07
0729	0.3	0.19	70.1	6.16	708.35	13.32	3.03	37.24
0734	0.4	0.22	76.0	6.44	720.81	13.40	2.63	35.38
0739	0.5	0.21	61.5	6.23	711.46	13.78	2.11	39.48
0744	0.6	0.12	51.3	6.29	717.40	14.11	1.38	37.61
0749	0.7	0.18	55.1	6.23	714.80	14.21	1.19	34.68
0754	0.8	0.21	60.2	6.24	710.63	14.35	0.90	31.77
0759	0.9	0.19	72.8	6.19	715.33	14.31	0.28	29.54

NOTES

Sample Date 2/9/24

Sample Time 1004

Container Type	Qty	Preservative	Analysis	Analysis Method
250 mL Poly	1	HNO3 to pH<2	Dissolved Metals	EPA 200.8
250 mL Poly	1	Unpreserved	Alkalinity	SM 2320B
500 mL Poly	1	Unpreserved	Anions	EPA 300.0
VOA	3	HCl to pH<2	VOCs	EPA 524.2

Weather Clear, Cold, Temp 3.5°F

Sampled By Daniel Howard

PLANT ARKWRIGHT FIELD SAMPLING REPORT

Project Number 6133-11-4104

NOTES

PLANT ARRAY GIT FIELD SAMPLING REPORT

B.2 Calibration Data

Date: 8/17/21
Time: 0910
Prepared By: Daniel Howard
Checked By: _____

Wood.
Project No.
6122201429

~~Pine~~ Sonde ID: 728866
Pine Handset ID: _____
Battery Voltage %: 92

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ____ No ✓ Date: ____ Time: ____	
Current Air Temperature °C (meter reading):		26.74
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	1001.1 mbar
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	7.98
DO concentration after Calibration (mg/L):		~~8.66~~ 7.29
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	100.9
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.05668

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)		1.413
Temperature (°C)	Lot 19410200	26.61
Reading before Calibration (mS/cm)		1.419.1
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.007

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 19450117 2/22	7.11
pH 7.0 value after calibration:	25.87	7.00
pH 7.0 mV (range is -50 to +50 mV):		-8.2
pH 10 value before calibration:	Lot 21010067 2/22	10.78
pH 10 value after calibration:	25.51	10.00
pH 10 mV (range is -130 to -230 mV):		-178.3
pH 4.0 value before calibration:	Lot 20440805 2/22	4.06
pH 4.0 value after calibration:	25.43	4.00
pH 4.0 mV (range is 130 to 230 mV):		168.0

Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot MM460167 2/22	25.51
Theoretical Calibration standard (mV)	0.231+(0.001)(25-T) x 1000 = mV (T is Temperature °C)	228.44
Reading before calibration (mV):		223.7
Reading after calibration (mV):		228.44

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
20 NTU Turbidity Standard	Lot A0136	8/21	Before Cal:	After Cal: 20.2
100 NTU Turbidity Standard	Lot A0139	8/21	Before Cal:	After Cal: 99.7
800 NTU Turbidity Standard	Lot A0139	8/21	Before Cal:	After Cal: 800
10 NTU Turbidity Check STD			Before Cal:	After Cal: 10.5
____ NTU Turbidity Check STD			Before Cal:	After Cal:
CALIBRATION SUCCESSFUL?				

Hach 2100Q ID: 18110C071494

Date: 8/10/21
Time: 1340
Prepared By: Evan Guillen
Checked By: _____

Wood.
Project No. 612220142

Pine Sonde ID: 642531
Pine Handset ID: Allegator 24
Battery Voltage %: 60

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ___ No ✓ Date: ___ Time: ___	
Current Air Temperature °C (meter reading):		32.69
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):	1010, 2 HREAL	
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg, **subtract** 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	
DO concentration after Calibration (mg/L):		8.88
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.068790

Notes:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used ~~(mS/cm)~~ µS/cm	19410200	1413
Temperature (°C)		23.1
Reading before Calibration (~~mS/cm~~) µS/cm		1392.9
Reading AFTER Calibration ~~mS/cm~~ µS/cm		1413
Conductivity Cell Constant (unitless):		0.985

Notes: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	210100166 08/22	7.06
pH 7.0 value after calibration:		7.0
pH 7.0 mV (**range is -50 to +50 mV**):		-2.1
pH 10 value before calibration:	210F0189 08/22	10.10
pH 10 value after calibration:		10.0
pH 10 mV (**range is -130 to -230 mV**):		-166.5
pH 4.0 value before calibration:	210720193 08/22	4.07
pH 4.0 value after calibration:		4.0
pH 4.0 mV (**range is 130 to 230 mV**):		160.3

Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	19860167 08/22 22 C	23.36
Theoretical Calibration standard (mV)	0.23 [+0.00 L(25-T) x 1000 = mV (T is Temperature °C)	228.0
Reading before calibration (mV):		229.6
Reading after calibration (mV):		230.86

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
10 NTU Turbidity Standard	Before Cal:	10.4	After Cal:	10.3
1.0 NTU Turbidity Standard	Before Cal:		After Cal:	1.06
100 NTU Turbidity Standard	Before Cal:		After Cal:	99.7
800 NTU Turbidity Check STD	Before Cal:		After Cal:	792
___ NTU Turbidity Check STD	Before Cal:		After Cal:	
CALIBRATION SUCCESSFUL?				YES

Date: 8/18/21
Time: 0846
Prepared By: Daniel Howard
Checked By: _____

Wood.
Project No.
6122201429

Pine Sonde ID: 725566
Pine Handset ID: _____
Battery Voltage %: 80

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ____ No ✓ Date: ____ Time: ____	
Current Air Temperature °C (meter reading):		24.06
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	1010.2 mm Hg
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.37
DO concentration after Calibration (mg/L):		7.71
% Recovery (actual/theory x 100):	Range is 90 to 110% Recovery	99.77
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.8668

Notes:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 19910200	1.413
Temperature (°C)		24.47
Reading before Calibration (mS/cm)		1.384
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.029

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 19450117 2/22	7.00
pH 7.0 value after calibration:	24.87	7.00
pH 7.0 mV (range is -50 to +50 mV):		-8.2
pH 10 value before calibration:	Lot 21010667 2/22	10.01
pH 10 value after calibration:	25.23	10.00
pH 10 mV (range is -150 to -230 mV):		-177.5
pH 4.0 value before calibration:	Lot 20440203 2/22	4.01
pH 4.0 value after calibration:	25.24	4.00
pH 4.0 mV (range is 150 to 230 mV):		162.8

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 19460167 2/22	235.89
Theoretical Calibration standard (mV)	0.231−0.00135(25−T) x 1000 = mV (T is Temperature °C)	235.23
Reading before calibration (mV):		228.3
Reading after calibration (mV):		228.3

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot A0136 8/21	Before Cal:	After Cal:	20.0
100 NTU Turbidity Standard Lot A0139 8/21	Before Cal:	After Cal:	100.0
800 NTU Turbidity Standard Lot A0138 8/21	Before Cal:	After Cal:	804
10 NTU Turbidity Check STD	Before Cal:	After Cal:	10.2
____ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach 2100 Q ID: 18110C071494

Date: 8-18-24
Time: 800
Prepared By: Evan Gullen
Checked By: _____

Wood.
Project No. 6122201429

Pine Sonde ID: GE531
Pine Handset ID: AIRMAC24
Battery Voltage %: 100

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes No ✓ Date: Time:	
Current Air Temperature °C (meter reading):		24.59
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 360/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:	757.69 mmHg	
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	
DO concentration after Calibration (mg/L):		7.23
% Recovery (actual/theory x 100):	Range is 90 to 110% Recovery	
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.049363

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm):	19410 E+C	1.413
Temperature (°C):		25.32
Reading before Calibration (mS/cm):		1.777
Reading AFTER Calibration (mS/cm):		1.413
Conductivity Cell Constant (unitless):		0.709

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	210109EA 08/22	7.0
pH 7.0 value after calibration:		7.07
pH 7.0 mV (range is -50 to +50 mV):		0.9
pH 10 value before calibration:	210201B7 06/22	10.0
pH 10 value after calibration:		10.04
pH 10 mV (range is -130 to -230 mV):		-168.9
pH 4.0 value before calibration:	210203B3 08/22	4.0
pH 4.0 value after calibration:		4.03
pH 4.0 mV (range is 130 to 230 mV):		168.7

Note: Span between pH 4 and 7, and 7 and 10 should be between 162 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	19460167 07/22	24.62
Theoretical Calibration standard (mV)	0.231−0.0013(25-T) x 1000 = mV (T is Temperature °C)	238
Reading before calibration (mV):		240.6
Reading after calibration (mV):		239.73

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
10 NTU Turbidity Standard	Before Cal:	9.69	After Cal:	10.2
20 NTU Turbidity Standard	Before Cal:		After Cal:	18.3
100 NTU Turbidity Standard	Before Cal:		After Cal:	101
800 NTU Turbidity Check STD	Before Cal:		After Cal:	808
_____ NTU Turbidity Check STD	Before Cal:		After Cal:	
CALIBRATION SUCCESSFUL?				YES

Date: 8/19/21
Time: 0855
Prepared By: Daniel Howard
Checked By: _____

Wood.
Project No.
6122201429

Pine Sonde ID: 728566
Pine Handset ID: _____
Battery Voltage %: 69

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ___ No ✓ Date: ___ Time: ___	
Current Air Temperature °C (meter reading):		26.92
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 365/100 x 2.54 = 14.4 mm Hg	1009.4 mbar
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	7.86 7.86
DO concentration after Calibration (mg/L):		7.24
% Recovery (actual/theory x 100):	Range is 90 to 110% Recovery	99.01
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.08468

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 19410200	1.413
Temperature (°C)		26.28
Reading before Calibration (mS/cm)		1.315.1
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.043

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 19450117 2/22	7.01
pH 7.0 value after calibration:	26.60	7.00
pH 7.0 mV (range is -50 to +50 mV):		-8.9
pH 10 value before calibration:	Lot 21010067 2/22	9.99
pH 10 value after calibration:	26.51 26.58	10.02
pH 10 mV (range is -150 to -230 mV):		-179.9
pH 4.0 value before calibration:	Lot 20410203 2/22	4.04
pH 4.0 value after calibration:	26.45	4.00
pH 4.0 mV (range is 150 to 230 mV):		166.8

Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 19460167 2/22	26.42
Theoretical Calibration standard (mV)	0.231+0.001(25-T) x 1000 = mV (T is Temperature °C)	227.26
Reading before calibration (mV):		226.0
Reading after calibration (mV):		227.36

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
20 NTU Turbidity Standard	Lot A0136 8/21	Before Cal:	After Cal:	19.9
100 NTU Turbidity Standard	Lot A0139 8/21	Before Cal:	After Cal:	99.3
800 NTU Turbidity Standard	Lot A0139 8/21	Before Cal:	After Cal:	796
10 NTU Turbidity Check STD		Before Cal:	After Cal:	10.3
___ NTU Turbidity Check STD		Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?				

Hach 2100Q ID: 18110C071494

Date: 8-19-20
Time: 840
Prepared By: Evan Gullen
Checked By: _____

Wood
Project No. 6122201429

Pine Sonde ID: 643531
Pine Handset ID: Alliance 74
Battery Voltage %: 80

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes No ✓ Date: Time:	
Current Air Temperature °C (meter reading):		22.0
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):	1005.3 mbar	
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 365/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	
DO concentration after Calibration (mg/L):		7.50
% Recovery (actual/theory x 100):	Range is 90 to 110% Recovery	
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Contents	1.05397

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm):	19410260	1.413
Temperature (°C):		22.0
Reading before Calibration (mS/cm):		1.413
Reading AFTER Calibration (mS/cm):		1.413
Conductivity Cell Constant (unitless):		0.998

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	210100660 8/18	7.05
pH 7.0 value after calibration:		7.00
pH 7.0 mV (range is -50 to +50 mV):		-5.0
pH 10 value before calibration:	21080189 8/18	9.97
pH 10 value after calibration:		10.0
pH 10 mV (range is -130 to -230 mV):		-166.1
pH 4.0 value before calibration:	21070193 8/18	4.11
pH 4.0 value after calibration:		4.0
pH 4.0 mV (range is 130 to 230 mV):		156.3

Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	19460167 8/18	25.6
Theoretical Calibration standard (mV)	0.231-0.001(T-25)x 1000 = mV (T is Temperature °C)	228
Reading before calibration (mV):		228.0
Reading after calibration (mV):		228.3

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
10 NTU Turbidity Standard	Before Cal:	10.7	After Cal:	10.2
20 NTU Turbidity Standard	Before Cal:		After Cal:	19.7
100 NTU Turbidity Standard	Before Cal:		After Cal:	98.9
800 NTU Turbidity Check STD	Before Cal:		After Cal:	792
_____ NTU Turbidity Check STD	Before Cal:		After Cal:	
CALIBRATION SUCCESSFUL?				YES

Date: 8/20/21
Time: 0830
Prepared By:
Checked By:

Wood.
Project No.
6122201429

Pine Sonde ID: 723566
Pine Handset ID:
Battery Voltage %: 99

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ___ No ✓ Date: ___ Time: ___	
Current Air Temperature °C (meter reading):		24.84
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 365/100 x 2.54 = 14.4 mm Hg	1005.1 mbar
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.29
DO concentration after Calibration (mg/L):		7.56
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	100.97
DO Charge (DO ch):	Acceptable Range is 25 to 75	—
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.08623

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 19410200	1.413
Temperature (°C)		24.29
Reading before Calibration (mS/cm)		1.316
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.041

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 19450117 2/22	7.02
pH 7.0 value after calibration:	23.74	7.00
pH 7.0 mV (range is -50 to +50 mV):		-9.7
pH 10 value before calibration:	Lot 21010067 2/22	10.02
pH 10 value after calibration:	23.75	10.00
pH 10 mV (range is -130 to -230 mV):		-189.7
pH 4.0 value before calibration:	Lot 20440203 2/22	4.02
pH 4.0 value after calibration:	23.97	4.00
pH 4.0 mV (range is 130 to 230 mV):		163.7

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 19460167 2/22	24.15
Theoretical Calibration standard (mV)	0.231-0.001(25-T) x 1000 = mV (T is Temperature °C)	238.23
Reading before calibration (mV):		228.5
Reading after calibration (mV):		238.22

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot A0136 8/21	Before Cal:	After Cal:	19.9
100 NTU Turbidity Standard Lot A0139 8/21	Before Cal:	After Cal:	100
800 NTU Turbidity Standard Lot A0139 8/21	Before Cal:	After Cal:	802
10 NTU Turbidity Check STD	Before Cal:	After Cal:	10.2
___ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach 2100Q ID: 18110C071494

Date: 8-20-21
Time:
Prepared By: Brett Gullett
Checked By:

Wood
Project No. 6122201429

Pine Sonde ID: 642531
Pine Handset ID: Accelerac TX
Battery Voltage %:

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes No ✓ Date: Time:	
Current Air Temperature °C (meter reading):		23.99
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):	1005.7 mBar	
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	
DO concentration after Calibration (mg/L):		8.19
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.07594

Notes:

CONDUCTIVITY	Note: Calibrate buffer pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)	
Calibration standard used (mS/cm)		1.413
Temperature (°C)		29.67
Reading before Calibration (mS/cm)		1.432.5
Reading AFTER Calibration (mS/cm)		1.408.7
Conductivity Cell Constant (unitless):		0.991

Note: the wave conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:		7.03
pH 7.0 value after calibration:		7.0
pH 7.0 mV (**range is -50 to +50 mV**):		-6.3
pH 10 value before calibration:		10.04
pH 10 value after calibration:		10.0
pH 10 mV (**range is -130 to -250 mV**):		-168.8
pH 4.0 value before calibration:		4.02
pH 4.0 value after calibration:		4.0
pH 4.0 mV (**range is 130 to 230 mV**):		165.7

Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):		24.92
Theoretical Calibration standard (mV):	0.231 - 0.0013(25-T) x 1000 = mV (T is Temperature °C)	238
Reading before calibration (mV):		229.7
Reading after calibration (mV):		239.8

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY **Note: Lens wiper should be parked 180 degrees from the optics.**				
10 NTU Turbidity Standard	Before Cal:	10.0	After Cal:	
60 NTU Turbidity Standard	Before Cal:		After Cal:	59.2
100 NTU Turbidity Standard	Before Cal:		After Cal:	100
800 NTU Turbidity Check STD	Before Cal:		After Cal:	806
_____ NTU Turbidity Check STD	Before Cal:		After Cal:	
CALIBRATION SUCCESSFUL?				

Date: 8/23/21
Time: 1130
Prepared By: Daniel Howard
Checked By: _____

Wood.
Project No. 6122201429

Pine Sonde ID: 728566
Pine Handset ID: _____
Battery Voltage %: 79

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ____ No ✓ Date: ____ Time: ____	
Current Air Temperature °C (meter reading):		27.80
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	1089.5 mbar
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	7.78
DO concentration after Calibration (mg/L):		
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	99.96
DO Charge (DO ch):	Acceptable Range is 25 to 75	—
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.082

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 19410300	1.413
Temperature (°C)		26.79
Reading before Calibration (mS/cm)		1.357
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.052

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap wendy on table)

pH		
pH 7.0 value before calibration:	Lot 19450117 3/22	7.13
pH 7.0 value after calibration:	26.69	7.00
pH 7.0 mV (range is -50 to +50 mV):		-17.2
pH 10 value before calibration:	Lot 21010067 2/22	9.79
pH 10 value after calibration:	26.71	10.00
pH 10 mV (range is -130 to -230 mV):		-169.4
pH 4.0 value before calibration:	Lot 20440203 2/22	4.43
pH 4.0 value after calibration:	26.93	4.00
pH 4.0 mV (range is 130 to 230 mV):		141.0

Note: Span between pH 4 and 7, and 7 and 10 should be between 160 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 19460167 2/22	22.63
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	27.11
Reading before calibration (mV):		233.5
Reading after calibration (mV):		226.35

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot# A0186 8/21	Before Cal:	After Cal:	20.2
100 NTU Turbidity Standard Lot# A0134 8/21	Before Cal:	After Cal:	99.9
800 NTU Turbidity Standard Lot# A0134 8/21	Before Cal:	After Cal:	756
10 NTU Turbidity Check STD	Before Cal:	After Cal:	10.2
____ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach 2100Q ID: 18110C071494

Date: 10-26-21
Time:
Prepared By: Erik Guzman
Checked By:

Wood.
Project No.

~~Pre~~ Sonde ID: 883593
~~Pre~~ Handset ID: 77
Battery Voltage %: 98

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes No ✓ Date: Time:	
Current Air Temperature °C (meter reading):		17.31
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):	1001.7 mBar	
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg, subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.99
DO concentration after Calibration (mg/L):	8.61	8.93
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.013/8

Note:

CONDUCTIVITY Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive!)		
Calibration standard used (mS/cm)	19150175	1.413
Temperature (°C)		1.680
Reading before Calibration (mS/cm)	1.642	~~1.642~~ 1.642
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		0.932

Notes: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	~~Expire~~ 210906 B/22	7.07
pH 7.0 value after calibration:		7.00
pH 7.0 mV (range is -50 to +50 mV):		-18.5
pH 10 value before calibration:	2106A1.89 B/22	10.03
pH 10 value after calibration:		10.00
pH 10 mV (range is -150 to -230 mV):		-182.3
pH 4.0 value before calibration:	210701.95 B/22	7.11
pH 4.0 value after calibration:		4.00
pH 4.0 mV (range is 150 to 230 mV):		178.0

Notes: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	210402141 B/22	19.79
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	238.0
Reading before calibration (mV):		235.9
Reading after calibration (mV):		237.7

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
10 NTU Turbidity Standard	Before Cal:	10.1	After Cal:	10.1
20 NTU Turbidity Standard	Before Cal:		After Cal:	19.9
100 NTU Turbidity Standard	Before Cal:		After Cal:	98.5
800 NTU Turbidity Check STD	Before Cal:		After Cal:	789
NTU Turbidity Check STD	Before Cal:		After Cal:	
CALIBRATION SUCCESSFUL?				YES

2057

Date: 10-27-21
Time: 950
Prepared By: Evan Gallen
Checked By: _____

Wood.
Project No:

~~Pico~~ Sonde ID: #935 93
~~Pico~~ Handset ID: 22
Battery Voltage %: 100

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes No ✓ Date: Time:	
Current Air Temperature °C (meter reading):		15.86
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):	1005.6mb	
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 563/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	9.62
DO concentration after Calibration (mg/L):		10.34
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	
DO Charge (DO: ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.06711

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm):	1915 0151	1.413
Temperature (°C)		15.52
Reading before Calibration (mS/cm)		1.251
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		0.906

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	210 1 0044 8/22	7.07
pH 7.0 value after calibration:		7.0
pH 7.0 mV (range is -50 to +50 mV):		-11.3
pH 10 value before calibration:	210 7 0187 8/22	10.14
pH 10 value after calibration:		10.0
pH 10 mV (range is -130 to -230 mV):	-86.3	-186. replaced
pH 4.0 value before calibration:	210 8 0198 11/20/21 8/22	4.07
pH 4.0 value after calibration:		4.00
pH 4.0 mV (range is 130 to 230 mV):		152.1

Note: Span between ph 4 and 7, and 7 and 10 should be between 161 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	211 9 0191 8/22	16.78
Theoretical Calibration standard (mV)	0.231-(0.00[T-25)) x 1000 = mV (T is Temperature °C)	228.0
Reading before calibration (mV):		298.55
Reading after calibration (mV):		240.4

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
10 NTU Turbidity Standard	Before Cal:	10.8	After Cal:	10.4
50 NTU Turbidity Standard	Before Cal:		After Cal:	50.5
100 NTU Turbidity Standard	Before Cal:		After Cal:	99.2
800 NTU Turbidity Check STD	Before Cal:		After Cal:	788
NTU Turbidity Check STD	Before Cal:		After Cal:	
CALIBRATION SUCCESSFUL?				

Date: 10-28-21
Time: 830
Prepared By: Scott Gruber
Checked By: _____

Wood
Project No.

Pre/Sonde ID: 19355
Pre/Handset ID: 23
Battery Voltage %: 100

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes No ✓ Date: Time:	
Current Air Temperature °C (meter reading):		18.18
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):	935.17 MB	
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.33
DO concentration after Calibration (mg/L):		8.16
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	-
DO Charge (DO ch):	Acceptable Range is 25 to 75	-
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	1.082 mV

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	19150155	1.413
Temperature (°C)		18.57
Reading before Calibration (mS/cm)		1.427
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		0.806

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap probe on table)

pH		
pH 7.0 value before calibration:	210180KK 6/22	7.09
pH 7.0 value after calibration:		7.0
pH 7.0 mV (range is -50 to +50 mV):		-20.0
pH 10 value before calibration:	210210189 6/22	10.03
pH 10 value after calibration:		10.0
pH 10 mV (range is -130 to -230 mV):		-184.0
pH 4.0 value before calibration:	210210193 6/22	4.05
pH 4.0 value after calibration:		4.0
pH 4.0 mV (range is 130 to 230 mV):		172.6

Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	211210191 6/22	19.57
Theoretical Calibration standard (mV)	0.231-0.001(t25-t) x 1000 = mV (t is Temperature °C)	228.6
Reading before calibration (mV):		234.2
Reading after calibration (mV):		229.8

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
10 NTU Turbidity Standard	Before Cal:	10.8	After Cal:	10.3
44 NTU Turbidity Standard	Before Cal:		After Cal:	44.3
100 NTU Turbidity Standard	Before Cal:		After Cal:	99.1
800 NTU Turbidity Check STD	Before Cal:		After Cal:	787
_____ NTU Turbidity Check STD	Before Cal:		After Cal:	
CALIBRATION SUCCESSFUL?				YES

Date: 10-27-21
Time: 830
Prepared By: Evan Gullea
Checked By: _____

Wood
Project No.

Pre Sonde ID: 843573
Sonde Handset ID: 23
Battery Voltage %: 1012

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes No Date: Time:	
Current Air Temperature °C (meter reading):		15.14
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):	987.77 mbars	
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	(i.e.: 30.02 in. Hg x 25.4 = mm Hg; subtract 2.54 mm Hg for every 100 ft. above sea level: 365/100 x 2.54 = 14.4 mm Hg	
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	10.57
DO concentration after Calibration (mg/L):		9.51
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	0.03403

Note:

CONDUCTIVITY (Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive))		
Calibration standard used (mS/cm)	19150155	1.413
Temperature (°C)		15.57
Reading before Calibration (mS/cm)		1.379
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		0.842

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde or cable)

pH		
pH 7.0 value before calibration:	E10100E6 6/22	6.97
pH 7.0 value after calibration:		7.0
pH 7.0 mV (range is -50 to +50 mV):		-12.9
pH 10 value before calibration:	E10710189 6/22	10.09
pH 10 value after calibration:		10.0
pH 10 mV (range is -130 to -230 mV):		-165.6
pH 4.0 value before calibration:	E10710193 6/22	4.03
pH 4.0 value after calibration:		4.0
pH 4.0 mV (range is 130 to 230 mV):		169.7

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	E11420191 6/22	16.40
Theoretical Calibration standard (mV)	0.231-0.001(25-T) x 1000 = mV (T is Temperature °C)	228.8
Reading before calibration (mV):		240.36
Reading after calibration (mV):		241.4

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
10 NTU Turbidity Standard	Before Cal: 10.8	After Cal:	10.5
20 NTU Turbidity Standard	Before Cal:	After Cal:	19.9
100 NTU Turbidity Standard	Before Cal:	After Cal:	99.1
800 NTU Turbidity Check STD	Before Cal:	After Cal:	800
NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			YES

Date: 10/26/21
Time: 0940
Prepared By: Daniel Howard
Checked By: _____

Amec Foster Wheeler
Project No. 6122150235

Pine Sonde ID: _____
Pine Handset ID: 8.50767
Battery Voltage %: 91
Aquatrol

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ____ No ____ Date: ____ Time: ____	
Current Air Temperature °C (meter reading):		16.78
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	1002.5 mmHg
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	10.06
DO concentration after Calibration (mg/L):		10.46
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	104.81
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	0.912 mg/L

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 19130515-5	1.413
Temperature (°C)		18.06
Reading before Calibration (mS/cm)		1.3967
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.039

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 21810066 8/22	7.10
pH 7.0 value after calibration:	19.05°C	7.00
pH 7.0 mV (range is -50 to +50 mV):		-2.3
pH 10 value before calibration:	Lot 21810063 2/22	10.23
pH 10 value after calibration:	18.38°C	10.00
pH 10 mV (range is -150 to -230 mV):		-175.9
pH 4.0 value before calibration:	Lot 21270193 8/22	4.11
pH 4.0 value after calibration:	18.38°C	4.00
pH 4.0 mV (range is 150 to 230 mV):		169.6

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 19510216 2/22	18.17
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)	238.1
Reading before calibration (mV):		229.1
Reading after calibration (mV):		238.1

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.				
20 NTU Turbidity Standard	Lot #8838	12/21	Before Cal:	After Cal: 19.9
100 NTU Turbidity Standard	Lot #8817	11/21	Before Cal:	After Cal: 103
800 NTU Turbidity Standard	Lot —		Before Cal:	After Cal: 803
10 NTU Turbidity Check STD	Lot —		Before Cal:	After Cal: 9.87
____ NTU Turbidity Check STD			Before Cal:	After Cal:
CALIBRATION SUCCESSFUL?				

Hach2100Q: 1811C07499

Date: 10/26/21
Time: 0845
Prepared By: Daniel Haverd
Checked By: _____

Amec Foster Wheeler
Project No. 6122150235

Pine Sonde ID: _____
Pine Handset ID: 350767
Battery Voltage %: 82

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ___ No ✓ Date: ___ Time: ___	
Current Air Temperature °C (meter reading):		22.06
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	1004.3 mm Hg
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	94.747
DO concentration after Calibration (mg/L):		8.14
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	94.4
DO Charge (DO ch):	Acceptable Range is 25 to 75	
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	0.980391

Notes:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive!)]		
Calibration standard used (mS/cm)	Lot 191305155	1.413
Temperature (°C)		21.33
Reading before Calibration (mS/cm)		1.335.1
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.097

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

pH		
pH 7.0 value before calibration:	Lot 21018067 2/22	7.05
pH 7.0 value after calibration:	17.69	7.00
pH 7.0 mV (range is -50 to +50 mV):		-4.0
pH 10 value before calibration:	Lot 21076193 8/22	10.05
pH 10 value after calibration:	16.33	10.00
pH 10 mV (range is -130 to -230 mV):		-173.4
pH 4.0 value before calibration:	Lot 19960167 2/22	4.02
pH 4.0 value after calibration:	16.53	4.00
pH 4.0 mV (range is 130 to 230 mV):		168.8

Note: Span between ph 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)			
Calibration Temperature (°C):	Lot 19460167 2/22		16.47
Theoretical Calibration standard (mV)	0.231+0.0013(25-T) x 1000 = mV (T is Temperature °C)		240.2
Reading before calibration (mV):			241.1
Reading after calibration (mV):			240.2

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot #18123 12/21	Before Cal:	After Cal:	20.1
10.0 NTU Turbidity Standard Lot #18217 11/21	Before Cal:	After Cal:	10.1
800 NTU Turbidity Standard Lot # —	Before Cal:	After Cal:	801
10 NTU Turbidity Check STD Lot # —	Before Cal:	After Cal:	9.85
___ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Hach 2100 & 18110C#21194

Date: 10/28/21
Time: ~~0930~~ 1015
Prepared By: Daniel Hancock
Checked By: _____

Amec Foster Wheeler
Project No. 6122150235

Pine Sonde ID: _____
Pine Handset ID: 850767
Battery Voltage %: 74

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ___ No ✓ Date: ___ Time: ___	
Current Air Temperature °C (meter reading):		17.89
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	m.bar 994.21
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	9.96
DO concentration after Calibration (mg/L):		9.77
% Recovery (actual/theory x 100):	Range is 90 to 110% Recovery	101.1
DO Charge (DO ch):	Acceptable Range is 25 to 75	—
DO Gain (should be between -0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	693 mv

Note:

CONDUCTIVITY [Notes: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 191501S5	1.413
Temperature (°C)		17.32
Reading before Calibration (mS/cm)		1.469
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.056

Notes: Be sure conductivity cell is submerged and free of bubbles (gently tap inside on table)

pH		
pH 7.0 value before calibration:	Lot 21016067 2/22	7.02
pH 7.0 value after calibration:	17.17°C	7.00
pH 7.0 mV (range is -50 to +50 mV):		-4.1
pH 10 value before calibration:	Lot 21070193 3/22	10.03
pH 10 value after calibration:	17.09°C	10.00
pH 10 mV (range is -150 to -250 mV):		-176.3
pH 4.0 value before calibration:	Lot 19460167 2/22	4.00
pH 4.0 value after calibration:	17.14°C	4.00
pH 4.0 mV (range is 150 to 250 mV):		162.7

Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 19460167 2/22	17.14
Theoretical Calibration standard (mV)	0.231-0.001(25-T) x 1000 = mV (T = Temperature °C)	239.32
Reading before calibration (mV):		238.5
Reading after calibration (mV):		239.32

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot A035-5 8/21	Before Cal:	After Cal:	20.1
100 NTU Turbidity Standard Lot A021 8/21	Before Cal:	After Cal:	99.6
800 NTU Turbidity Standard —	Before Cal:	After Cal:	796
10 NTU Turbidity Check STD —	Before Cal:	After Cal:	9.94
___ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			

Date: 10/29/21
Time: 0515
Prepared By: Daniel Hewlett
Checked By: _____

Wood.
Project No.

Pine Sonde ID: _____
Pine Handset ID: 850767
Battery Voltage %: 100

CALIBRATION PRIOR TO SAMPLING

DISSOLVED OXYGEN (DO)		VALUE
Was DO membrane changed?	Yes ___ No ✓ Date: ___ Time: ___	
Current Air Temperature °C (meter reading):		24.18
Current Barometric Pressure (from Weather Channel or NOAA.gov, which is corrected to sea level):		
Elevation Corrected Barometric Pressure to enter into YSI DO calibration:	Ex.: 30.02 in. Hg x 25.4 = mm Hg; **subtract** 2.54 mm Hg for every 100 ft. above sea level: 565/100 x 2.54 = 14.4 mm Hg	mm Hg 985.81
Theoretical DO (mg/L) from DO table based on current temperature and elevation corrected pressure:		
DO concentration before Calibration (mg/L):	Depending on meter version, this may not be available.	8.12
DO concentration after Calibration (mg/L):		8.57
% Recovery (actual/theory x 100)	Range is 90 to 110% Recovery	99.60
DO Charge (DO ch):	Acceptable Range is 25 to 75	—
DO Gain (should be between 0.7 and 1.5):	Exit Calibration menu and go to Advanced/Cal Constants	0.958 slope

Note:

CONDUCTIVITY [Note: Calibrate before pH to avoid carry-over from pH standards (i.e. pH buffers are conductive)]		
Calibration standard used (mS/cm)	Lot 19150165	1.413
Temperature (°C)		23.92
Reading before Calibration (mS/cm)		1.3776
Reading AFTER Calibration (mS/cm)		1.413
Conductivity Cell Constant (unitless):		1.068

Note: Be sure conductivity cell is submerged and free of bubbles (gently tap sonde on table)

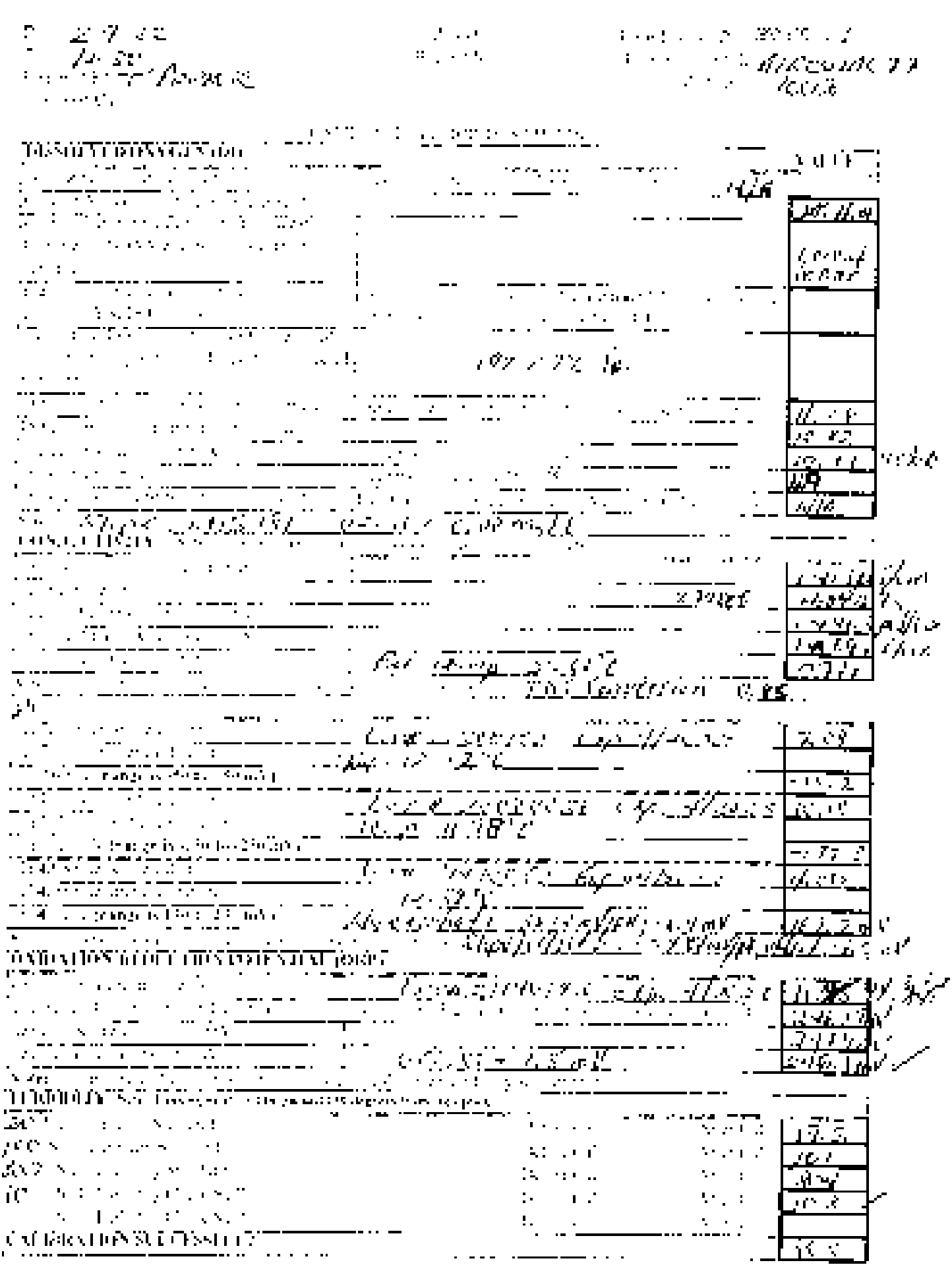
pH		
pH 7.0 value before calibration:	Lot 21010067 2/22	7.02
pH 7.0 value after calibration:	23.88°C	7.00
pH 7.0 mV (range is -50 to +50 mV):		-5.5
pH 10 value before calibration:	Lot 21070181 8/23	10.05
pH 10 value after calibration:	23.97°C	10.00
pH 10 mV (range is -150 to -250 mV):		-177.5
pH 4.0 value before calibration:	Lot 19460167 2/22	4.05
pH 4.0 value after calibration:	23.95°C	4.00
pH 4.0 mV (range is 150 to 250 mV):		168.8

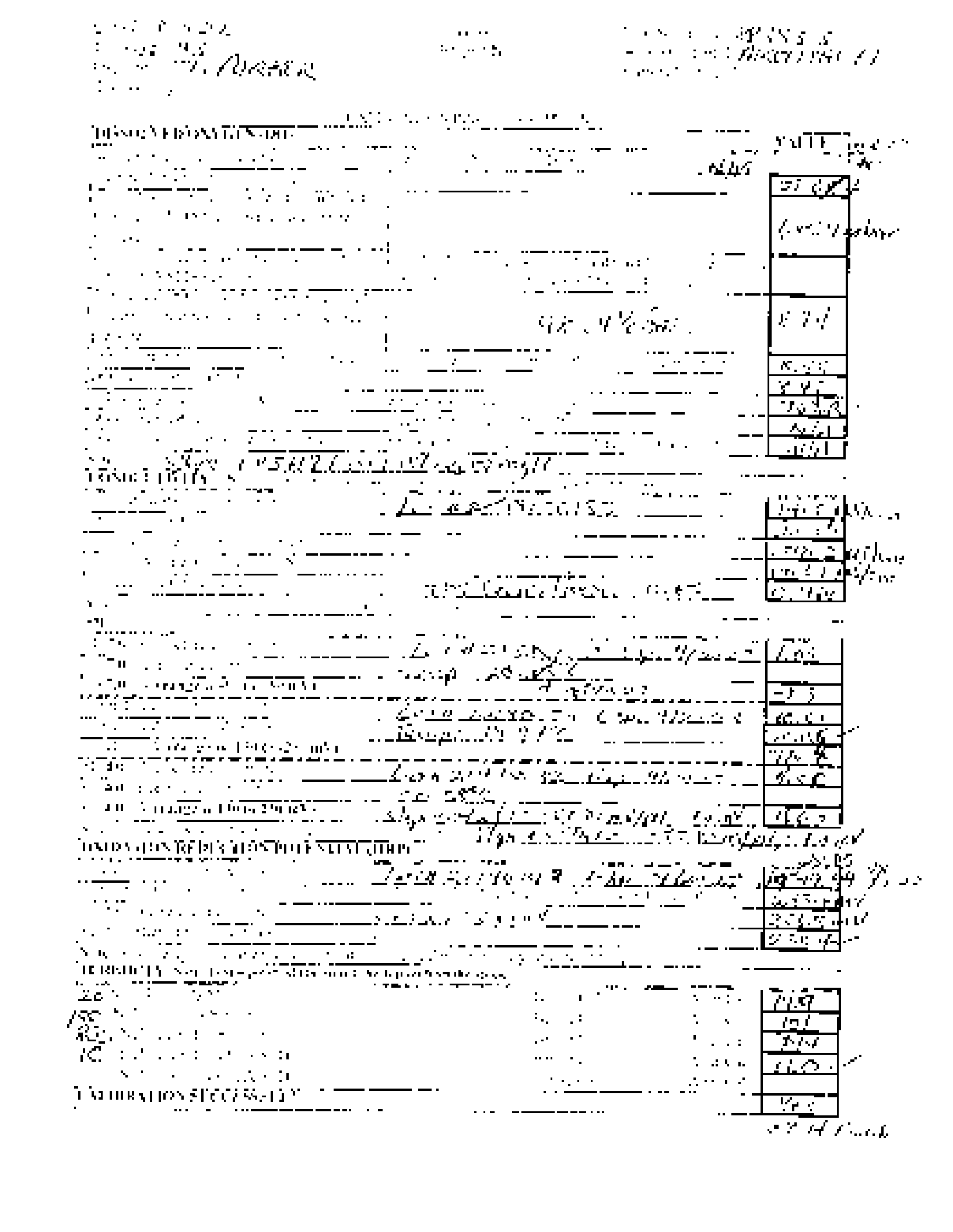
Note: Span between pH 4 and 7, and 7 and 10 should be between 165 to 180 mV

OXIDATION/REDUCTION POTENTIAL (ORP)		
Calibration Temperature (°C):	Lot 19460167 2/22	23.88
Theoretical Calibration standard (mV)	0.231-0.0013(25-T) x 1000 = mV (T is Temperature °C)	230.37
Reading before calibration (mV):		227.7
Reading after calibration (mV):		230.37

Note: mV theory will change with temperature, so calculate based on your current temp.

TURBIDITY Note: Lens wiper should be parked 180 degrees from the optics.			
20 NTU Turbidity Standard Lot A0255 12/21	Before Cal:	After Cal:	20.1
100 NTU Turbidity Standard Lot A0217 11/21	Before Cal:	After Cal:	101
800 NTU Turbidity Standard —	Before Cal:	After Cal:	799
10 NTU Turbidity Check STD —	Before Cal:	After Cal:	9.80
___ NTU Turbidity Check STD	Before Cal:	After Cal:	
CALIBRATION SUCCESSFUL?			





Equipment

Core Curriculum

DISSOLVED OXYGEN (DO)

CONDUCTIVITY

pH

CONFIRMATION REDUCTION TEST STRIPS

SULFIDE

CONFIRMATION SUCCESSFUL?

2/7/22

Daniel Howard

7385-41

9.71

slope

Hach 2100Q SN: 21050C017682

2/8/22
0530
Daniel Howard

7265 1
99

	25.67
	7.97
	7.86
	7.81
	11.0 mg/L

	1.413
	21.43
	1.32
	1.313
	1.258

	13.48
	9.00
	10.6
	9.50
	10.00
	194.1
	4.80
	4.00
	22.1

	23.65
	230.94
	237.9
	236.54

	20.4
	10.1
	8.03
	10.1

Hach 2100Q 1SN: 1105C017682

2/9/22
0530
Beach Road

72 94
91

	33.23
	Pbar 1006.1
	8.17
	8.13
	100.85
	60/64-15 sky
Lot 19150155	1.413
	72.5
	1.318
	1.413
	1.04
Lot 2138010Z 4/23	7.04
12.45	3.00
	-18.0
Lot 20890SC 4/24	10.08
12.54	10.00
	741.7
Lot 2147001Z 4/23	4.04
12.09	7.00
	120.0
Lot 2119043 4/23	2.77
	132.5
	213.3
	113.13
	30.1
	99.4
	74.7
	9.99

Hach 2100 Q : SN: 1205C017681

B.3 Groundwater & Surface Water Laboratory Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125939-1
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/7/2021 8:28:48 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Job ID: 180-125939-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125939-1

Comments
No additional comments.

Receipt
The samples were received on 8/19/2021 9:15 AM, 8/21/2021 9:30 AM and 8/24/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.1º C, 2.4º C, 3.6º C, 3.7º C, 4.1º C and 4.2º C.

GC Semi VOA
Method 300.0: The matrix spike and matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 180-370035 were low outside control limits for Sulfate: (180-126098-C-1 MS) and (180-126098-C-1 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125939-1	FB-1	Water	08/18/21 09:35	08/19/21 09:15
180-125939-2	EB-1	Water	08/18/21 09:45	08/19/21 09:15
180-125939-3	AP1PZ-7	Water	08/18/21 13:10	08/19/21 09:15
180-125939-4	AP1PZ-8	Water	08/18/21 16:38	08/19/21 09:15
180-125949-1	APIGWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125949-2	APIGWA-2	Water	08/18/21 11:55	08/19/21 09:15
180-125949-3	DUP-1	Water	08/18/21 00:00	08/19/21 09:15
180-126094-1	EB-2	Water	08/19/21 09:50	08/21/21 09:30
180-126094-2	AP1PZ-9	Water	08/19/21 16:50	08/21/21 09:30
180-126094-3	FB-2	Water	08/20/21 09:10	08/21/21 09:30
180-126094-4	AP1PZ-10	Water	08/20/21 11:30	08/21/21 09:30
180-126097-1	AP1PZ-4	Water	08/20/21 11:30	08/21/21 18:09
180-126097-2	AP1PZ-5	Water	08/20/21 14:40	08/21/21 18:09
180-126097-3	AP1PZ-11	Water	08/20/21 16:50	08/21/21 18:09
180-126098-1	AP1PZ-1	Water	08/18/21 18:15	08/21/21 09:30
180-126098-2	AP1PZ-2	Water	08/19/21 13:45	08/21/21 09:30
180-126098-3	DUP-2	Water	08/19/21 00:00	08/21/21 09:30
180-126098-4	AP1PZ-3	Water	08/19/21 16:45	08/21/21 09:30
180-126161-1	AP1PZ-6	Water	08/23/21 14:12	08/24/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: FB-1
Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 11:31	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368905	08/23/21 14:27	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 12:19	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368905	08/23/21 14:27	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-7
Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 13:06	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			369870	09/01/21 13:22	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368905	08/23/21 14:27	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 13:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 13:38	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			369870	09/01/21 13:54	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368908	08/23/21 14:46	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 16:38	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: APIGWA-1
Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 10:59	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368810	08/22/21 17:25	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/17/21 15:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIGWA-2
Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 11:15	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368908	08/23/21 14:46	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 11:55	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1
Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 12:34	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			369870	09/01/21 12:50	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368908	08/23/21 14:46	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 00:00	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 02:10	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-9

Lab Sample ID: 180-126094-2

Date Collected: 08/19/21 16:50

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 05:59	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			370188	09/04/21 06:15	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 16:50	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2

Lab Sample ID: 180-126094-3

Date Collected: 08/20/21 09:10

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 02:26	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-10

Lab Sample ID: 180-126094-4

Date Collected: 08/20/21 11:30

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 05:26	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			370188	09/04/21 05:43	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/20/21 11:30	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-4

Lab Sample ID: 180-126097-1

Date Collected: 08/20/21 11:30

Matrix: Water

Date Received: 08/21/21 18:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 03:32	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370188	09/04/21 03:48	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-4
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			369662	08/20/21 11:30	FDS	TAL PIT

Client Sample ID: AP1PZ-5
Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 04:05	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370188	09/04/21 04:21	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369662	08/20/21 14:40	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 02:43	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369500	08/27/21 16:12	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369662	08/20/21 16:50	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-1
Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 02:03	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/18/21 18:15	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-2

Lab Sample ID: 180-126098-2

Date Collected: 08/19/21 13:45

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 00:25	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370035	09/03/21 00:41	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 13:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-2

Lab Sample ID: 180-126098-3

Date Collected: 08/19/21 00:00

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 00:58	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370035	09/03/21 01:14	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 00:00	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-3

Lab Sample ID: 180-126098-4

Date Collected: 08/19/21 16:45

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 02:52	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370035	09/03/21 03:08	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 16:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-6

Lab Sample ID: 180-126161-1

Date Collected: 08/23/21 14:12

Matrix: Water

Date Received: 08/24/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			370187	09/04/21 02:00	J1T	TAL PIT
	Instrument ID: INTEGRION									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-6
Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		25			370187	09/04/21 02:18	J1T	TAL PIT
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	369553	08/29/21 17:57	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369662	08/23/21 14:12	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

FDS = Sampler Field
J1T = Jianwu Tang
KMM = Kendric Moore
SAB = Sharon Bacha

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: FB-1

Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 11:31	1
Fluoride	<0.026		0.10	0.026	mg/L			09/01/21 11:31	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: EB-1

Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 12:19	1
Fluoride	**0.031**	**J**	0.10	0.026	mg/L			09/01/21 12:19	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:27	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-7

Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		1.0	0.71	mg/L			09/01/21 13:06	1
Fluoride	0.18		0.10	0.026	mg/L			09/01/21 13:06	1
Sulfate	1300		10	7.6	mg/L			09/01/21 13:22	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2000		10	10	mg/L			08/23/21 14:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.41				SU			08/18/21 13:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-8

Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.6		1.0	0.71	mg/L			09/01/21 13:38	1
Fluoride	0.33		0.10	0.026	mg/L			09/01/21 13:38	1
Sulfate	580		10	7.6	mg/L			09/01/21 13:54	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	840		10	10	mg/L			08/23/21 14:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.74				SU			08/18/21 16:38	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: APIGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.71	mg/L			09/01/21 10:59	1
Fluoride	0.27		0.10	0.026	mg/L			09/01/21 10:59	1
Sulfate	62		1.0	0.76	mg/L			09/01/21 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		10	10	mg/L			08/22/21 17:25	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.23				SU			08/17/21 15:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: APIGWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		1.0	0.71	mg/L			09/01/21 11:15	1
Fluoride	0.071	J	0.10	0.026	mg/L			09/01/21 11:15	1
Sulfate	1.4		1.0	0.76	mg/L			09/01/21 11:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	82		10	10	mg/L			08/23/21 14:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.03				SU			08/18/21 11:55	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.7		1.0	0.71	mg/L			09/01/21 12:34	1
Fluoride	0.25		0.10	0.026	mg/L			09/01/21 12:34	1
Sulfate	570		10	7.6	mg/L			09/01/21 12:50	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10	10	mg/L			08/23/21 14:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.74				SU			08/18/21 00:00	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: EB-2

Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/04/21 02:10	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 02:10	1
Sulfate	<0.76		1.0	0.76	mg/L			09/04/21 02:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/26/21 15:32	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-9

Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		1.0	0.71	mg/L			09/04/21 05:59	1
Fluoride	0.45		0.10	0.026	mg/L			09/04/21 05:59	1
Sulfate	310		5.0	3.8	mg/L			09/04/21 06:15	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.77				SU			08/19/21 16:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: FB-2

Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/04/21 02:26	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 02:26	1
Sulfate	<0.76		1.0	0.76	mg/L			09/04/21 02:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/27/21 12:45	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-10

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.0		1.0	0.71	mg/L			09/04/21 05:26	1
Fluoride	0.48		0.10	0.026	mg/L			09/04/21 05:26	1
Sulfate	230		5.0	3.8	mg/L			09/04/21 05:43	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	520		10	10	mg/L			08/27/21 12:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.53				SU			08/20/21 11:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-4

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.4		1.0	0.71	mg/L			09/04/21 03:32	1
Fluoride	0.35		0.10	0.026	mg/L			09/04/21 03:32	1
Sulfate	1400		10	7.6	mg/L			09/04/21 03:48	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2000		10	10	mg/L			08/27/21 12:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.56				SU			08/20/21 11:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-5

Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.8		1.0	0.71	mg/L			09/04/21 04:05	1
Fluoride	0.40		0.10	0.026	mg/L			09/04/21 04:05	1
Sulfate	1300		10	7.6	mg/L			09/04/21 04:21	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2200		20	20	mg/L			08/27/21 12:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.60				SU			08/20/21 14:40	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-11

Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.71	mg/L			09/04/21 02:43	1
Fluoride	0.12		0.10	0.026	mg/L			09/04/21 02:43	1
Sulfate	57		1.0	0.76	mg/L			09/04/21 02:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		10	10	mg/L			08/27/21 16:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.71				SU			08/20/21 16:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-1

Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.0		1.0	0.71	mg/L			09/03/21 02:03	1
Fluoride	0.13		0.10	0.026	mg/L			09/03/21 02:03	1
Sulfate	100	F1	1.0	0.76	mg/L			09/03/21 02:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.59				SU			08/18/21 18:15	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-2

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.3		1.0	0.71	mg/L			09/03/21 00:25	1
Fluoride	0.13		0.10	0.026	mg/L			09/03/21 00:25	1
Sulfate	930		10	7.6	mg/L			09/03/21 00:41	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1500		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.84				SU			08/19/21 13:45	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: DUP-2

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.2		1.0	0.71	mg/L			09/03/21 00:58	1
Fluoride	0.14		0.10	0.026	mg/L			09/03/21 00:58	1
Sulfate	950		10	7.6	mg/L			09/03/21 01:14	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.84				SU			08/19/21 00:00	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-3

Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.0		1.0	0.71	mg/L			09/03/21 02:52	1
Fluoride	0.063	J	0.10	0.026	mg/L			09/03/21 02:52	1
Sulfate	1300		10	7.6	mg/L			09/03/21 03:08	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.60				SU			08/19/21 16:45	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-6

Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10		2.5	1.8	mg/L			09/04/21 02:00	2.5
Fluoride	0.25		0.25	0.065	mg/L			09/04/21 02:00	2.5
Sulfate	2200		25	19	mg/L			09/04/21 02:18	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3000		20	20	mg/L			08/29/21 17:57	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.50				SU			08/23/21 14:12	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-369870/7
Matrix: Water
Analysis Batch: 369870

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 09:24	1
Fluoride	<0.026		0.10	0.026	mg/L			09/01/21 09:24	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 09:24	1

Lab Sample ID: LCS 180-369870/6
Matrix: Water
Analysis Batch: 369870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.6		mg/L		99	90 - 110
Fluoride	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	48.7		mg/L		97	90 - 110

Lab Sample ID: MB 180-370035/44
Matrix: Water
Analysis Batch: 370035

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/02/21 19:52	1
Fluoride	<0.026		0.10	0.026	mg/L			09/02/21 19:52	1
Sulfate	<0.76		1.0	0.76	mg/L			09/02/21 19:52	1

Lab Sample ID: LCS 180-370035/43
Matrix: Water
Analysis Batch: 370035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.5		mg/L		101	90 - 110
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	48.9		mg/L		98	90 - 110

Lab Sample ID: 180-126098-1 MS
Matrix: Water
Analysis Batch: 370035

Client Sample ID: AP1PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.0		50.0	52.7		mg/L		99	90 - 110
Fluoride	0.13		2.50	2.69		mg/L		102	90 - 110
Sulfate	100	F1	50.0	144	F1	mg/L		84	90 - 110

Lab Sample ID: 180-126098-1 MSD
Matrix: Water
Analysis Batch: 370035

Client Sample ID: AP1PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.0		50.0	53.2		mg/L		101	90 - 110	1	20
Fluoride	0.13		2.50	2.69		mg/L		103	90 - 110	0	20
Sulfate	100	F1	50.0	146	F1	mg/L		87	90 - 110	1	20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-370187/50
Matrix: Water
Analysis Batch: 370187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 21:50	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 21:50	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 21:50	1

Lab Sample ID: MB 180-370187/6
Matrix: Water
Analysis Batch: 370187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 08:50	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 08:50	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 08:50	1

Lab Sample ID: LCS 180-370187/49
Matrix: Water
Analysis Batch: 370187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	47.7		mg/L		95	90 - 110
Fluoride	2.50	2.71		mg/L		108	90 - 110
Sulfate	50.0	50.4		mg/L		101	90 - 110

Lab Sample ID: MB 180-370188/38
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 19:05	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 19:05	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 19:05	1

Lab Sample ID: MB 180-370188/7
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 10:14	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 10:14	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 10:14	1

Lab Sample ID: LCS 180-370188/37
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.0		mg/L		100	90 - 110
Fluoride	2.50	2.69		mg/L		108	90 - 110
Sulfate	50.0	48.1		mg/L		96	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 180-370188/6
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	49.2		mg/L		98	90 - 110		
Fluoride			2.50	2.65		mg/L		106	90 - 110		
Sulfate			50.0	47.0		mg/L		94	90 - 110		

Lab Sample ID: 180-126097-3 MS
Matrix: Water
Analysis Batch: 370188

Client Sample ID: AP1PZ-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	3.1		50.0	55.9		mg/L		106	90 - 110		
Fluoride	0.12		2.50	2.83		mg/L		108	90 - 110		
Sulfate	57		50.0	107		mg/L		99	90 - 110		

Lab Sample ID: 180-126097-3 MSD
Matrix: Water
Analysis Batch: 370188

Client Sample ID: AP1PZ-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.1		50.0	54.9		mg/L		104	90 - 110	2	20
Fluoride	0.12		2.50	2.73		mg/L		104	90 - 110	4	20
Sulfate	57		50.0	104		mg/L		93	90 - 110	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-368810/2
Matrix: Water
Analysis Batch: 368810

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/22/21 17:25	1

Lab Sample ID: LCS 180-368810/1
Matrix: Water
Analysis Batch: 368810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	652		mg/L		95	80 - 120		

Lab Sample ID: MB 180-368905/2
Matrix: Water
Analysis Batch: 368905

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:27	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 180-368905/1
Matrix: Water
Analysis Batch: 368905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	672		mg/L		98	80 - 120

Lab Sample ID: MB 180-368908/2
Matrix: Water
Analysis Batch: 368908

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:46	1

Lab Sample ID: LCS 180-368908/1
Matrix: Water
Analysis Batch: 368908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	670		mg/L		98	80 - 120

Lab Sample ID: MB 180-369142/2
Matrix: Water
Analysis Batch: 369142

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 10:30	1

Lab Sample ID: LCS 180-369142/1
Matrix: Water
Analysis Batch: 369142

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	708		mg/L		103	80 - 120

Lab Sample ID: MB 180-369349/2
Matrix: Water
Analysis Batch: 369349

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/26/21 15:32	1

Lab Sample ID: LCS 180-369349/1
Matrix: Water
Analysis Batch: 369349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	684		mg/L		100	80 - 120

Lab Sample ID: MB 180-369476/2
Matrix: Water
Analysis Batch: 369476

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/27/21 12:45	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCS 180-369476/1
Matrix: Water
Analysis Batch: 369476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	654		mg/L		95	80 - 120		

Lab Sample ID: MB 180-369500/2
Matrix: Water
Analysis Batch: 369500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/27/21 16:12	1

Lab Sample ID: LCS 180-369500/1
Matrix: Water
Analysis Batch: 369500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	648		mg/L		95	80 - 120		

Lab Sample ID: 180-126097-3 DU
Matrix: Water
Analysis Batch: 369500

Client Sample ID: AP1PZ-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	200			195		mg/L				4	10

Lab Sample ID: MB 180-369553/2
Matrix: Water
Analysis Batch: 369553

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/29/21 17:57	1

Lab Sample ID: LCS 180-369553/1
Matrix: Water
Analysis Batch: 369553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	704		mg/L		103	80 - 120		

HPLC/IC

Analysis Batch: 369870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-125939-2	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-125939-3	AP1PZ-7	Total/NA	Water	EPA 300.0 R2.1	
180-125939-3	AP1PZ-7	Total/NA	Water	EPA 300.0 R2.1	
180-125939-4	AP1PZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-125939-4	AP1PZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-125949-1	APIGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-125949-2	APIGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-125949-3	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-125949-3	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-369870/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-369870/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-1	AP1PZ-1	Total/NA	Water	EPA 300.0 R2.1	
180-126098-2	AP1PZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-2	AP1PZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-3	DUP-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-3	DUP-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-4	AP1PZ-3	Total/NA	Water	EPA 300.0 R2.1	
180-126098-4	AP1PZ-3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370035/44	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370035/43	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126098-1 MS	AP1PZ-1	Total/NA	Water	EPA 300.0 R2.1	
180-126098-1 MSD	AP1PZ-1	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	EPA 300.0 R2.1	
180-126161-1	AP1PZ-6	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370187/50	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370187/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370187/49	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	EPA 300.0 R2.1	
180-126094-2	AP1PZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-126094-2	AP1PZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-126094-3	FB-2	Total/NA	Water	EPA 300.0 R2.1	
180-126094-4	AP1PZ-10	Total/NA	Water	EPA 300.0 R2.1	
180-126094-4	AP1PZ-10	Total/NA	Water	EPA 300.0 R2.1	
180-126097-1	AP1PZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-126097-1	AP1PZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-126097-2	AP1PZ-5	Total/NA	Water	EPA 300.0 R2.1	
180-126097-2	AP1PZ-5	Total/NA	Water	EPA 300.0 R2.1	
180-126097-3	AP1PZ-11	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370188/38	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370188/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370188/37	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

HPLC/IC (Continued)

Analysis Batch: 370188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-370188/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126097-3 MS	AP1PZ-11	Total/NA	Water	EPA 300.0 R2.1	
180-126097-3 MSD	AP1PZ-11	Total/NA	Water	EPA 300.0 R2.1	

General Chemistry

Analysis Batch: 368810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125949-1	APIGWA-1	Total/NA	Water	SM 2540C	
MB 180-368810/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-368810/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 368905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	SM 2540C	
180-125939-2	EB-1	Total/NA	Water	SM 2540C	
180-125939-3	AP1PZ-7	Total/NA	Water	SM 2540C	
MB 180-368905/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-368905/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 368908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-4	AP1PZ-8	Total/NA	Water	SM 2540C	
180-125949-2	APIGWA-2	Total/NA	Water	SM 2540C	
180-125949-3	DUP-1	Total/NA	Water	SM 2540C	
MB 180-368908/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-368908/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-1	AP1PZ-1	Total/NA	Water	SM 2540C	
MB 180-369142/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369142/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	SM 2540C	
180-126094-2	AP1PZ-9	Total/NA	Water	SM 2540C	
180-126098-2	AP1PZ-2	Total/NA	Water	SM 2540C	
180-126098-3	DUP-2	Total/NA	Water	SM 2540C	
180-126098-4	AP1PZ-3	Total/NA	Water	SM 2540C	
MB 180-369349/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369349/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-3	FB-2	Total/NA	Water	SM 2540C	
180-126094-4	AP1PZ-10	Total/NA	Water	SM 2540C	
180-126097-1	AP1PZ-4	Total/NA	Water	SM 2540C	
180-126097-2	AP1PZ-5	Total/NA	Water	SM 2540C	
MB 180-369476/2	Method Blank	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 369476 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-369476/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126097-3	AP1PZ-11	Total/NA	Water	SM 2540C	
MB 180-369500/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369500/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126097-3 DU	AP1PZ-11	Total/NA	Water	SM 2540C	

Analysis Batch: 369553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	SM 2540C	
MB 180-369553/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369553/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 369637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-3	AP1PZ-7	Total/NA	Water	Field Sampling	
180-125939-4	AP1PZ-8	Total/NA	Water	Field Sampling	
180-125949-1	APIGWA-1	Total/NA	Water	Field Sampling	
180-125949-2	APIGWA-2	Total/NA	Water	Field Sampling	
180-125949-3	DUP-1	Total/NA	Water	Field Sampling	

Analysis Batch: 369649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-2	AP1PZ-9	Total/NA	Water	Field Sampling	
180-126094-4	AP1PZ-10	Total/NA	Water	Field Sampling	
180-126098-1	AP1PZ-1	Total/NA	Water	Field Sampling	
180-126098-2	AP1PZ-2	Total/NA	Water	Field Sampling	
180-126098-3	DUP-2	Total/NA	Water	Field Sampling	
180-126098-4	AP1PZ-3	Total/NA	Water	Field Sampling	

Analysis Batch: 369662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126097-1	AP1PZ-4	Total/NA	Water	Field Sampling	
180-126097-2	AP1PZ-5	Total/NA	Water	Field Sampling	
180-126097-3	AP1PZ-11	Total/NA	Water	Field Sampling	
180-126161-1	AP1PZ-6	Total/NA	Water	Field Sampling	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 244-

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/Evan Guillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
FB-1	8/18/21	0935	G	W			X		X	X	X		3	
EB-1		0945	G	W			X		X	X	X		3	
AP1PZ-7		1310	G	W			X		X	X	X		3	
AP1PZ-8	↓	1638	G	W			X		X	X	X		3	

180-125939 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/18/21 1900		D Watson	8-19-21 9:15	EPAM
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 244

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EvanGuilen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~8 of 2~~
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
APIGWA-1	8/17/21	1510	G	W			X		X	X	X		3	
APIGWA-2	8/18/21	1155	G	W			X		X	X	X		3	
DUP-1	8/18/21	—	G	W			X		X	X	X		3	

180-125949 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
David Howard	8/18/21 1900		D Waters	8-19-21 9:15	Ke THI
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing America

ATLANTA 224-

Client Information	Sampler: DHoward/EGullen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	D									
EB-2	8/19/21	0950	G	W			X		X	X	X									3	
AP1PZ-9	8/19/21	1650	G	W			X		X	X	X									3	pH=5.77
FB-2	8/20/21	0910	G	W			X		X	X	X									3	
AP1PZ-10	8/20/21	1130	G	W			X		X	X	X									3	pH=6.53

180-126094 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel L Howard	8/20/21/1830		Duratur	8-21-21 930	ETAPLT
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: DHoward/EGwilkes	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 16 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	D	D		
AP1PZ-4	8/20/21	1130	G	W			X		X	X	X		3	pH=6.56
AP1PZ-5	↓	1440	G	W			X		X	X	X		3	pH=6.60
AP1PZ-11	↓	1650	G	W			X		X	X	X		3	pH=6.71

180-126097 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
David L Howard	8/20/21 1830		D Watson	8-21-21 9:30	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244-ATLANTA

eurofins Environment Testing America

Client Information	Sampler: DHoward/EGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	D	D	N	N	MD	MD									
AP1PZ-1	8/18/21	1815	G	W			X		X	X	X									3	pH=5.59
AP1PZ-2	8/19/21	1345	G	W			X		X	X	X									3	pH=5.84
DUP-2		-	G	W			X		X	X	X									3	pH=5.84
AP1PZ-3	↓	1645	G	W			X		X	X	X									3	pH=5.60

180-126098 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than ... nth)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D.L. Daniel Howard	8/20/21/1830		DWaters	8-21-21	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				9:30	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 24

Eurofins Environment Testing America

Client Information	Sampler: D Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	D	N	N	W	X	
AP1PZ-6	8/23/21	1412	G	W		X		X	X	X		3	pH=5.50

180-126161 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel R Howard	8/23/21 1545		D Water	8-24-21	ERTH
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

ORIGIN ID:MCNA (404) 273-0418
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.80 LB
CAD: 6994493/SSFE2220
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7068

INV:
PO:
REF:
DEPT:

RT 98
FZ
1
10:30 A
7077
08.19

FedEx Express

2 of 2
MPS# 0681 2827 2332 7077
Mstr# 8121 9394 4282

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US
0215

NA AGCA

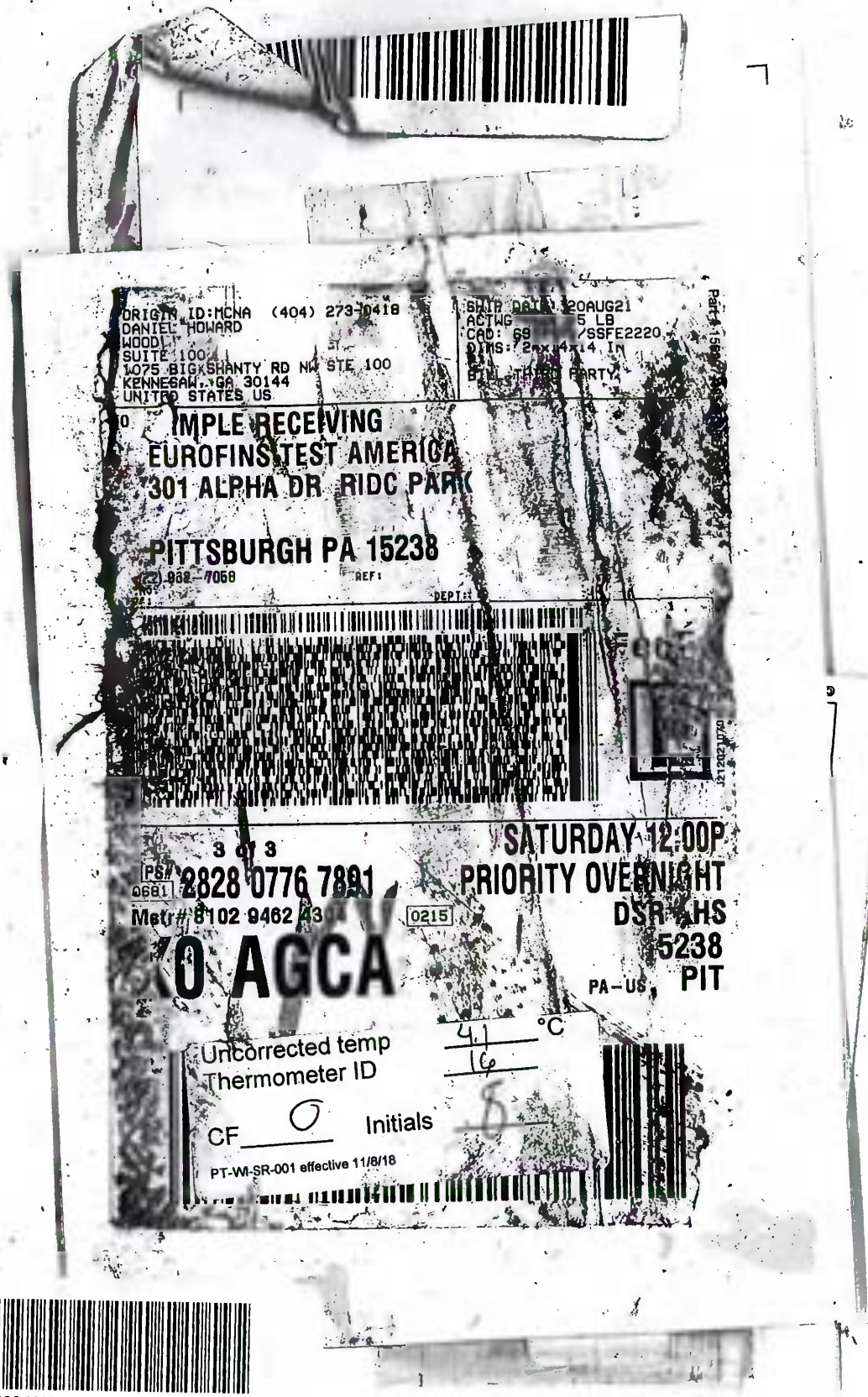
Uncorrected temp 20.2 °C
Thermometer ID 16
CF 0 Initials 8

PT-WI-SR-001 effective 11/8/18

180-125939 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E &
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
NA AGCA
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
0215
NA AGCA
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill



180-126094 Waybill

FedEx®

180-126097 Waybill

ORIGIN ID:MCNA
DANIEL HOWARD
(404) 273-0318
WOOD
SUITE 100
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 20AUG21
ACTWGT: 57.95 LB
CAD: 6994493/SSFE2220
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDGE PARK
RITTSBURGH PA 15238
(412) 963-7058

REF
PO

FedEx Express

2 of 3
MPS# 2828 0776 7880
Mstr# 8102 9462 4304
0681
021S

SATURDAY 12:00
PRIORITY OVERNIGH
DSR AH
1523
PI
PA-US

XO AGCA

Uncorrected Temp
Thermometer

CF
PT-WI-SR-001 effective

als

FedEx Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR AHS
15238 PIT
PA-US
XO AGCA
8102 9462 4304
1 of 3
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18
TO SAMPLE RECEIVING
EUROFINS TEST AMER
ALPHA DR RIDC P
PITTSBURGH PA 1523
(412) 963-7068
ORIGIN
DONALD HOWARD
(404) -0418
180-126098 Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx Express

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E&I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO

PITTSBURGH PA 15238

(412) 963-7068
REF:
DEPT:

FedEx Express

TRK# 0215 8121 9394 4591

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

NA AGCA

Uncorrected temp 4.2 °C
Thermometer ID 14
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-126161 Waybill

Part # 156297-436 PRTR FXE 06/22

1 From
Date
Sender's Name DEEAN
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
City KENNESAW State GA ZIP 30144-3652
Dept/Floor/Suite/Room

2 Your Internal Billing Reference

3 To
Recipient's Name Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

fedex.com 1.800.GoFedEx 1.800.463.3339

4 Express Package Service* *To most locations.
Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day
FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.
FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.
FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required
Package may be left without obtaining a signature for delivery.
Direct Signature
Someone at recipient's address may sign for delivery.
Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.
No
Yes
As per attached Shipper's Declaration not required.
Yes
Shipper's Declaration not required.
Dry Ice
Dry Ice, 9, UN 1845 x kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide.
Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.
Sender
Acct. No. in Section 1 will be billed
Recipient
Third Party
Credit Card
Cash/Check

Part # 156297-435 RRDB EXP 06/22

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E& I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT:
INV:
PO:

FedEx Express

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238 PIT
PA-US

TRK# 0215 8121 9394 4591

NA AGCA

Uncorrected temp 42 °C
Thermometer ID 16
CF 0 Initials
PT-WI-SR-001 effective 11/8/18

180-12616i Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

00033
00200

FedEx Express

Tracking Number

ID No.

1 From
Date
Sender's Name
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
Dept/Floor/Suite/Room
City KENNESAW State GA ZIP 30144-3652

2 Your Internal Billing Reference

3 To
Recipient's Name
Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept./Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service * To most locations.
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day
- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.
FedEx Envelope* | FedEx Pak* | FedEx Box | FedEx Tube | Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required — Package may be left without obtaining a signature for delivery.
Direct Signature — Someone at recipient's address may sign for delivery.
Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.
No | Yes — As per attached Shipper's Declaration. | Yes — Shipper's Declaration not required. | Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide.
Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.
Sender Acct. No. in Section 1 will be billed. | Recipient | Third Party | Credit Card | Cash/Check

fedex.com 1.800.GoFedEx 1.800.463.3339

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 125939
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 125949
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126094
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126097
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126098
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126161
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125939-2
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/29/2021 11:59:08 AM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-125939-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125939-2

Comments
No additional comments.

Receipt
The samples were received on 8/19/2021 9:15 AM, 8/21/2021 9:30 AM and 8/24/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.1º C, 2.4º C, 3.6º C, 3.7º C, 4.1º C and 4.2º C.

RAD
Methods 903.0, 9315: Radium 226 prep batch 160-524072
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FB-1 (180-125939-1), EB-1 (180-125939-2), AP1PZ-7 (180-125939-3), AP1PZ-8 (180-125939-4), (LCS 160-524072/1-A) and (MB 160-524072/24-A)

Methods 903.0, 9315: Radium 226 prep batch 160-524328
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. APIGWA-1 (180-125949-1), APIGWA-2 (180-125949-2), DUP-1 (180-125949-3), (LCS 160-524328/1-A) and (MB 160-524328/23-A)

Method 9315: Radium-226 Batch 524659
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2), DUP-2 (180-126098-3), (LCS 160-524659/1-A), (LCSD 160-524659/2-A) and (MB 160-524659/23-A)

Methods 903.0, 9315: Radium-226 Batch 525034
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-3 (180-126098-4), (LCS 160-525034/1-A) and (MB 160-525034/23-A)

Methods 904.0, 9320: Radium 228 prep batch 160-524342
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. APIGWA-1 (180-125949-1), APIGWA-2 (180-125949-2), DUP-1 (180-125949-3), (LCS 160-524342/1-A) and (MB 160-524342/23-A)

Methods 904.0, 9320: Radium 228 prep batch 160-524081
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FB-1 (180-125939-1), EB-1 (180-125939-2), AP1PZ-7 (180-125939-3), AP1PZ-8 (180-125939-4), (LCS 160-524081/1-A) and (MB 160-524081/24-A)

Method 9320: Radium-228 Batch 524669
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2), DUP-2 (180-126098-3), (LCS 160-524669/1-A), (LCSD 160-524669/2-A) and (MB 160-524669/23-A)

Job ID: 180-125939-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

Methods 904.0, 9320: Radium-228 Batch 525041
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-3 (180-126098-4), (LCS 160-525041/1-A) and (MB 160-525041/23-A)

Method PrecSep_0: Ra-228 Batch 160-524669:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2) and DUP-2 (180-126098-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Ra-226 Batch 160-524659:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2) and DUP-2 (180-126098-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125939-1	FB-1	Water	08/18/21 09:35	08/19/21 09:15
180-125939-2	EB-1	Water	08/18/21 09:45	08/19/21 09:15
180-125939-3	AP1PZ-7	Water	08/18/21 13:10	08/19/21 09:15
180-125939-4	AP1PZ-8	Water	08/18/21 16:38	08/19/21 09:15
180-125949-1	APIGWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125949-2	APIGWA-2	Water	08/18/21 11:55	08/19/21 09:15
180-125949-3	DUP-1	Water	08/18/21 00:00	08/19/21 09:15
180-126094-1	EB-2	Water	08/19/21 09:50	08/21/21 09:30
180-126094-2	AP1PZ-9	Water	08/19/21 16:50	08/21/21 09:30
180-126094-3	FB-2	Water	08/20/21 09:10	08/21/21 09:30
180-126094-4	AP1PZ-10	Water	08/20/21 11:30	08/21/21 09:30
180-126097-1	AP1PZ-4	Water	08/20/21 11:30	08/21/21 18:09
180-126097-2	AP1PZ-5	Water	08/20/21 14:40	08/21/21 18:09
180-126097-3	AP1PZ-11	Water	08/20/21 16:50	08/21/21 18:09
180-126098-1	AP1PZ-1	Water	08/18/21 18:15	08/21/21 09:30
180-126098-2	AP1PZ-2	Water	08/19/21 13:45	08/21/21 09:30
180-126098-3	DUP-2	Water	08/19/21 00:00	08/21/21 09:30
180-126098-4	AP1PZ-3	Water	08/19/21 16:45	08/21/21 09:30
180-126161-1	AP1PZ-6	Water	08/23/21 14:12	08/24/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: FB-1
Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.72 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527396	09/16/21 21:24	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.72 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527452	09/16/21 11:50	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.61 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527396	09/16/21 21:24	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.61 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527452	09/16/21 11:51	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-7
Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.43 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527396	09/16/21 21:24	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.43 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527452	09/16/21 11:51	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.10 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527397	09/16/21 21:20	ANW	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-8

Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.10 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527379	09/16/21 11:55	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APIGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.45 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 13:36	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.45 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APIGWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.99 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			528286	09/21/21 13:39	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.99 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.77 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			528286	09/21/21 13:39	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.77 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-1
Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.74 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:14	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.74 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:05	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-9
Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.73 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:14	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.73 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:05	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2
Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.34 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:14	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.34 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:10	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-10
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.80 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			999.80 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-4
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.53 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.53 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-5
Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.94 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.94 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:12	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.04 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.04 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-1
Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.17 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:19	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-2
Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.05 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:19	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.05 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:12	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.86 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:19	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.86 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:12	FLC	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL

Client Sample ID: AP1PZ-3
Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.33 mL	1.0 g	525034	09/01/21 09:33	MJ	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	528519	09/23/21 16:46	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.33 mL	1.0 g	525041	09/01/21 10:24	MJ	TAL SL
Total/NA	Analysis	9320		1			528515	09/23/21 13:57	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/24/21 16:09	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-6
Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.23 mL	1.0 g	525267	09/02/21 14:12	MJ	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	528891	09/26/21 19:53	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.23 mL	1.0 g	525276	09/02/21 15:19	MJ	TAL SL
Total/NA	Analysis	9320		1			528688	09/23/21 13:44	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			529094	09/27/21 17:29	FLC	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:
TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:
Lab: TAL SL
- Batch Type: Prep
  - MJ = Mary Johns
- Batch Type: Analysis
  - ANW = Aamber Woods
  - FLC = Fernando Cruz
  - SCB = Sarah Bernsen

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: FB-1

Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0308	U	0.193	0.193	1.00	0.401	pCi/L	08/25/21 12:41	09/16/21 21:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.394	U	0.298	0.301	1.00	0.470	pCi/L	08/25/21 13:37	09/16/21 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:50*	*1*
Y Carrier	*83.7*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:50*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.363	U	0.355	0.358	5.00	0.470	pCi/L		09/24/21 15:26	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.205	U	0.260	0.260	1.00	0.432	pCi/L	08/25/21 12:41	09/16/21 21:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0163	U	0.235	0.235	1.00	0.419	pCi/L	08/25/21 13:37	09/16/21 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*
Y Carrier	*86.4*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.221	U	0.350	0.350	5.00	0.432	pCi/L		09/24/21 15:26	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-7

Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.385	U	0.285	0.287	1.00	0.423	pCi/L	08/25/21 12:41	09/16/21 21:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.328	U	0.268	0.270	1.00	0.427	pCi/L	08/25/21 13:37	09/16/21 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*
Y Carrier	*84.9*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.713**		0.391	0.394	5.00	0.427	pCi/L		09/24/21 15:26	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.703		0.301	0.308	1.00	0.364	pCi/L	08/25/21 12:41	09/16/21 21:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.749		0.300	0.308	1.00	0.422	pCi/L	08/25/21 13:37	09/16/21 11:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.45		0.425	0.436	5.00	0.422	pCi/L		09/24/21 15:26	1

Client Sample ID: APIGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.199**		0.132	0.134	1.00	0.193	pCi/L	08/27/21 10:49	09/21/21 13:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.353	U	0.337	0.339	1.00	0.547	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*70.7*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.552**		0.362	0.365	5.00	0.547	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: APIGWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.102	0.103	1.00	0.164	pCi/L	08/27/21 10:49	09/21/21 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.231	U	0.253	0.254	1.00	0.415	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*83.4*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.333	U	0.273	0.274	5.00	0.415	pCi/L		09/23/21 16:11	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.335		0.129	0.132	1.00	0.146	pCi/L	08/27/21 10:49	09/21/21 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.472		0.264	0.267	1.00	0.396	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*84.5*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.807		0.294	0.298	5.00	0.396	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00798	U	0.192	0.192	1.00	0.378	pCi/L	08/30/21 12:33	09/22/21 20:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0239	U	0.199	0.199	1.00	0.358	pCi/L	08/30/21 13:46	09/22/21 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*
Y Carrier	*84.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0159	U	0.277	0.277	5.00	0.378	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-9

Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.270	U	0.287	0.288	1.00	0.462	pCi/L	08/30/21 12:33	09/22/21 20:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.507**		0.311	0.314	1.00	0.471	pCi/L	08/30/21 13:46	09/22/21 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*
Y Carrier	*84.5*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.777**		0.423	0.426	5.00	0.471	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: FB-2

Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0289	U	0.233	0.233	1.00	0.440	pCi/L	08/30/21 12:33	09/22/21 20:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.670**		0.299	0.305	1.00	0.426	pCi/L	08/30/21 13:46	09/22/21 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:10*	*1*
Y Carrier	*82.6*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:10*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.699**		0.379	0.384	5.00	0.440	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-10

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.457	U	0.496	0.498	1.00	0.804	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*43.7*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.317	U	0.550	0.551	1.00	0.930	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*43.7*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*86.7*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.774	U	0.741	0.743	5.00	0.930	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-4

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.130	U	0.196	0.196	1.00	0.335	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.4*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.120	U	0.240	0.240	1.00	0.409	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.4*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*87.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.251	U	0.310	0.310	5.00	0.409	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-5

Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.643**		0.283	0.289	1.00	0.333	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.4*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.383	U	0.277	0.279	1.00	0.434	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.4*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*86.7*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.03**		0.396	0.402	5.00	0.434	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-11

Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00433	U	0.157	0.157	1.00	0.322	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.317	U	0.261	0.263	1.00	0.416	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*88.6*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.321	U	0.305	0.306	5.00	0.416	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-1

Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0935	U	0.185	0.185	1.00	0.403	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.105	U	0.194	0.194	1.00	0.373	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*87.5*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.198	U	0.268	0.268	5.00	0.403	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-2

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.263	U	0.247	0.248	1.00	0.385	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.326	U	0.298	0.299	1.00	0.480	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*88.6*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.589**		0.387	0.388	5.00	0.480	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0487	U	0.203	0.203	1.00	0.380	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0274	U	0.227	0.227	1.00	0.404	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*89.0*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0761	U	0.305	0.305	5.00	0.404	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-3

Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.116	U	0.245	0.245	1.00	0.433	pCi/L	09/01/21 09:33	09/23/21 16:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*09/01/21 09:33*	*09/23/21 16:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.790**		0.287	0.296	1.00	0.387	pCi/L	09/01/21 10:24	09/23/21 13:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:57*	*1*
Y Carrier	*84.1*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:57*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.906**		0.377	0.384	5.00	0.433	pCi/L		09/24/21 16:09	1

Client Sample ID: AP1PZ-6

Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.153	U	0.154	0.154	1.00	0.246	pCi/L	09/02/21 14:12	09/26/21 19:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*09/02/21 14:12*	*09/26/21 19:53*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.364	U	0.311	0.312	1.00	0.496	pCi/L	09/02/21 15:19	09/23/21 13:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:44*	*1*
Y Carrier	*84.1*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:44*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.517**		0.347	0.348	5.00	0.496	pCi/L		09/27/21 17:29	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-524072/24-A
Matrix: Water
Analysis Batch: 527397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524072

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08951	U	0.238	0.238	1.00	0.429	pCi/L	08/25/21 12:41	09/16/21 23:02	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*08/25/21 12:41*	*09/16/21 23:02*	*1*

Lab Sample ID: LCS 160-524072/1-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524072

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.32		1.46	1.00	0.372	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.2*		*40 - 110*

Lab Sample ID: MB 160-524328/23-A
Matrix: Water
Analysis Batch: 527825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524328

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1190	U	0.126	0.126	1.00	0.203	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/27/21 10:49*	*09/21/21 15:26*	*1*

Lab Sample ID: LCS 160-524328/1-A
Matrix: Water
Analysis Batch: 528287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524328

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.81		1.29	1.00	0.202	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.7*		*40 - 110*

Lab Sample ID: MB 160-524659/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524659

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1098	U	0.243	0.243	1.00	0.433	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-524659/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524659

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110	08/30/21 12:33	09/22/21 20:19	1

Lab Sample ID: LCS 160-524659/1-A
Matrix: Water
Analysis Batch: 528478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524659

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.76		1.42	1.00	0.396	pCi/L	95	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	83.1		40 - 110

Lab Sample ID: LCSD 160-524659/2-A
Matrix: Water
Analysis Batch: 528478

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524659

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	10.50		1.41	1.00	0.378	pCi/L	93	75 - 125	0.09	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	82.1		40 - 110

Lab Sample ID: MB 160-525034/23-A
Matrix: Water
Analysis Batch: 528519

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525034

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07005	U	0.233	0.233	1.00	0.426	pCi/L	09/01/21 09:33	09/23/21 18:50	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110	09/01/21 09:33	09/23/21 18:50	1

Lab Sample ID: LCS 160-525034/1-A
Matrix: Water
Analysis Batch: 528519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525034

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.04		1.53	1.00	0.556	pCi/L	97	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	69.8		40 - 110

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-525267/25-A
Matrix: Water
Analysis Batch: 528892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525267

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.4165		0.193	0.196	1.00	0.249	pCi/L	09/02/21 14:12	09/26/21 21:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*40 - 110*	*09/02/21 14:12*	*09/26/21 21:59*	*1*

Lab Sample ID: LCS 160-525267/1-A
Matrix: Water
Analysis Batch: 528891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525267

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.33		1.27	1.00	0.232	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.4*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-524081/24-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524081

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5380		0.312	0.316	1.00	0.473	pCi/L	08/25/21 13:37	09/16/21 12:06	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*08/25/21 13:37*	*09/16/21 12:06*	*1*
Y Carrier	*86.7*		*40 - 110*	*08/25/21 13:37*	*09/16/21 12:06*	*1*

Lab Sample ID: LCS 160-524081/1-A
Matrix: Water
Analysis Batch: 527452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524081

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.33	7.639		1.01	1.00	0.555	pCi/L	82	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.2*		*40 - 110*
Y Carrier	*82.2*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-524342/23-A
Matrix: Water
Analysis Batch: 527397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524342

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1554	U	0.251	0.251	1.00	0.424	pCi/L	08/27/21 12:08	09/16/21 12:20	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*

Lab Sample ID: LCS 160-524342/1-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524342

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.33	9.679		1.22	1.00	0.510	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.7*		*40 - 110*
Y Carrier	*79.3*		*40 - 110*

Lab Sample ID: MB 160-524669/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524669

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.05024	U	0.282	0.282	1.00	0.507	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*87.9*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Lab Sample ID: LCS 160-524669/1-A
Matrix: Water
Analysis Batch: 528313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524669

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.31	9.135		1.13	1.00	0.530	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*83.1*		*40 - 110*
Y Carrier	*83.0*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCSD 160-524669/2-A
Matrix: Water
Analysis Batch: 528313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524669

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.31	9.261		1.13	1.00	0.499	pCi/L	99	75 - 125	0.06	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*82.1*		*40 - 110*
Y Carrier	*84.9*		*40 - 110*

Lab Sample ID: MB 160-525041/23-A
Matrix: Water
Analysis Batch: 528517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525041

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.06242	U	0.282	0.282	1.00	0.508	pCi/L	09/01/21 10:24	09/23/21 13:56	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:56*	*1*
Y Carrier	*85.2*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:56*	*1*

Lab Sample ID: LCS 160-525041/1-A
Matrix: Water
Analysis Batch: 528515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525041

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.31	10.24		1.29	1.00	0.621	pCi/L	110	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*69.8*		*40 - 110*
Y Carrier	*83.0*		*40 - 110*

Lab Sample ID: MB 160-525276/25-A
Matrix: Water
Analysis Batch: 528515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525276

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1022	U	0.285	0.285	1.00	0.523	pCi/L	09/02/21 15:19	09/23/21 13:46	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:46*	*1*
Y Carrier	*83.0*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:46*	*1*

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-525276/1-A
Matrix: Water
Analysis Batch: 528688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525276

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.31	10.16		1.25	1.00	0.557	pCi/L	109	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.4*		*40 - 110*
Y Carrier	*84.1*		*40 - 110*

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Prep Batch: 524072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	PrecSep-21	
180-125939-2	EB-1	Total/NA	Water	PrecSep-21	
180-125939-3	AP1PZ-7	Total/NA	Water	PrecSep-21	
180-125939-4	AP1PZ-8	Total/NA	Water	PrecSep-21	
MB 160-524072/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524072/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 524081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	PrecSep_0	
180-125939-2	EB-1	Total/NA	Water	PrecSep_0	
180-125939-3	AP1PZ-7	Total/NA	Water	PrecSep_0	
180-125939-4	AP1PZ-8	Total/NA	Water	PrecSep_0	
MB 160-524081/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524081/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 524328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125949-1	APIGWA-1	Total/NA	Water	PrecSep-21	
180-125949-2	APIGWA-2	Total/NA	Water	PrecSep-21	
180-125949-3	DUP-1	Total/NA	Water	PrecSep-21	
MB 160-524328/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524328/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 524342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125949-1	APIGWA-1	Total/NA	Water	PrecSep_0	
180-125949-2	APIGWA-2	Total/NA	Water	PrecSep_0	
180-125949-3	DUP-1	Total/NA	Water	PrecSep_0	
MB 160-524342/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524342/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 524659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	PrecSep-21	
180-126094-2	AP1PZ-9	Total/NA	Water	PrecSep-21	
180-126094-3	FB-2	Total/NA	Water	PrecSep-21	
180-126094-4	AP1PZ-10	Total/NA	Water	PrecSep-21	
180-126097-1	AP1PZ-4	Total/NA	Water	PrecSep-21	
180-126097-2	AP1PZ-5	Total/NA	Water	PrecSep-21	
180-126097-3	AP1PZ-11	Total/NA	Water	PrecSep-21	
180-126098-1	AP1PZ-1	Total/NA	Water	PrecSep-21	
180-126098-2	AP1PZ-2	Total/NA	Water	PrecSep-21	
180-126098-3	DUP-2	Total/NA	Water	PrecSep-21	
MB 160-524659/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524659/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-524659/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 524669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 524669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-2	AP1PZ-9	Total/NA	Water	PrecSep_0	
180-126094-3	FB-2	Total/NA	Water	PrecSep_0	
180-126094-4	AP1PZ-10	Total/NA	Water	PrecSep_0	
180-126097-1	AP1PZ-4	Total/NA	Water	PrecSep_0	
180-126097-2	AP1PZ-5	Total/NA	Water	PrecSep_0	
180-126097-3	AP1PZ-11	Total/NA	Water	PrecSep_0	
180-126098-1	AP1PZ-1	Total/NA	Water	PrecSep_0	
180-126098-2	AP1PZ-2	Total/NA	Water	PrecSep_0	
180-126098-3	DUP-2	Total/NA	Water	PrecSep_0	
MB 160-524669/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524669/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-524669/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 525034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-4	AP1PZ-3	Total/NA	Water	PrecSep-21	
MB 160-525034/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-525034/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 525041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-4	AP1PZ-3	Total/NA	Water	PrecSep_0	
MB 160-525041/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-525041/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 525267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	PrecSep-21	
MB 160-525267/25-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-525267/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 525276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	PrecSep_0	
MB 160-525276/25-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-525276/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244- ATLANTA

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/Evan Guillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes:
City: Atlanta	TAT Requested (days): Standard			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
FB-1	8/18/21	0935	G	W			X		X	X	X		3	
EB-1		0945	G	W			X		X	X	X		3	
AP1PZ-7		1310	G	W			X		X	X	X		3	
AP1PZ-8		1638	G	W			X		X	X	X		3	

180-125939 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/18/21 1900		D Watson	8-19-21 9:15	EA Pitt
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244 - ATLANTA

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EvanGuilen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury							Total Number of containers	Special Instructions/Note:
Preservation Code:							D	D	N	N	N	N								
APIGWA-1	8/17/21	1510	G	W			X		X	X	X								3	
APIGWA-2	8/18/21	1155	G	W			X		X	X	X								3	
DUP-1	8/18/21	—	G	W			X		X	X	X								3	

180-125949 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	David Howard	8/18/21 / 1900		D Waters	8-19-21	Kettle
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:15	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing America

ATLANTA-224

Client Information	Sampler: DHoward/EGullen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	D									
EB-2	8/19/21	0950	G	W			X		X	X	X									3	
AP1PZ-9	8/19/21	1650	G	W			X		X	X	X									3	pH=5.77
FB-2	8/20/21	0910	G	W			X		X	X	X									3	
AP1PZ-10	8/20/21	1130	G	W			X		X	X	X									3	pH=6.53

180-126094 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Daniel L Howard	8/20/21/1830		Duratek	8-21-21 930	ETAPlt
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: DHoward/EGwilkey	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 16 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	XD	XD		
AP1PZ-4	8/20/21	1130	G	W			X		X	X	X		3	pH=6.56
AP1PZ-5	↓	1440	G	W			X		X	X	X		3	pH=6.60
AP1PZ-11	↓	1650	G	W			X		X	X	X		3	pH=6.71

180-126097 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
David L Howard	8/20/21 1830		D Watson	8-21-21	EGI
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244-ATLANTA

eurofins Environment Testing America

Client Information	Sampler: DHoward/EGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	D	D	N	N	MD	MD									
AP1PZ-1	8/18/21	1815	G	W			X		X	X	X									3	pH=5.59
AP1PZ-2	8/19/21	1345	G	W			X		X	X	X									3	pH=5.84
DUP-2		-	G	W			X		X	X	X									3	pH=5.84
AP1PZ-3	↓	1645	G	W			X		X	X	X									3	pH=5.60

180-126098 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than ... nth)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/20/21 1830		DWatson	8-21-21	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				9:30	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 24

Eurofins Environment Testing America

Client Information	Sampler: D Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	D	N	N	W	X	
AP1PZ-6	8/23/21	1412	G	W		X		X	X	X		3	pH=5.50

180-126161 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel R Howard	8/23/21 1545		D Water	8-24-21	EHHT
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

ORIGIN ID:MCNA (404) 273-0418
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.80 LB
CAD: 6994493/SSFE2220
DIMS: 24x13x14 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7068
INV:
PO:
REF:
DEPT:

RT 98
FZ
1
10:30 A
7077
08.19

FedEx Express

2 of 2
MPS# 0681 2827 2332 7077
Mstr# 8121 9394 4282 0215

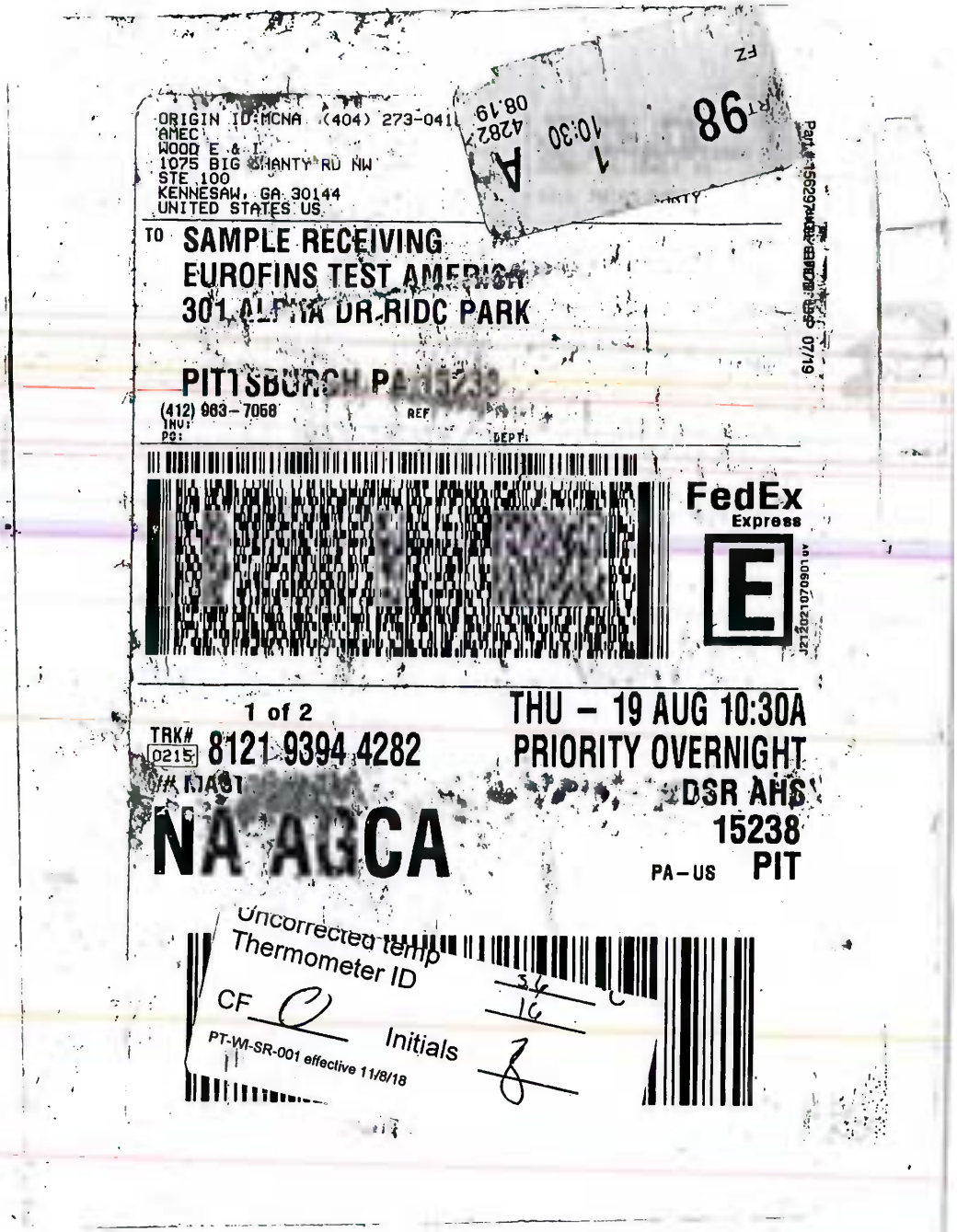
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

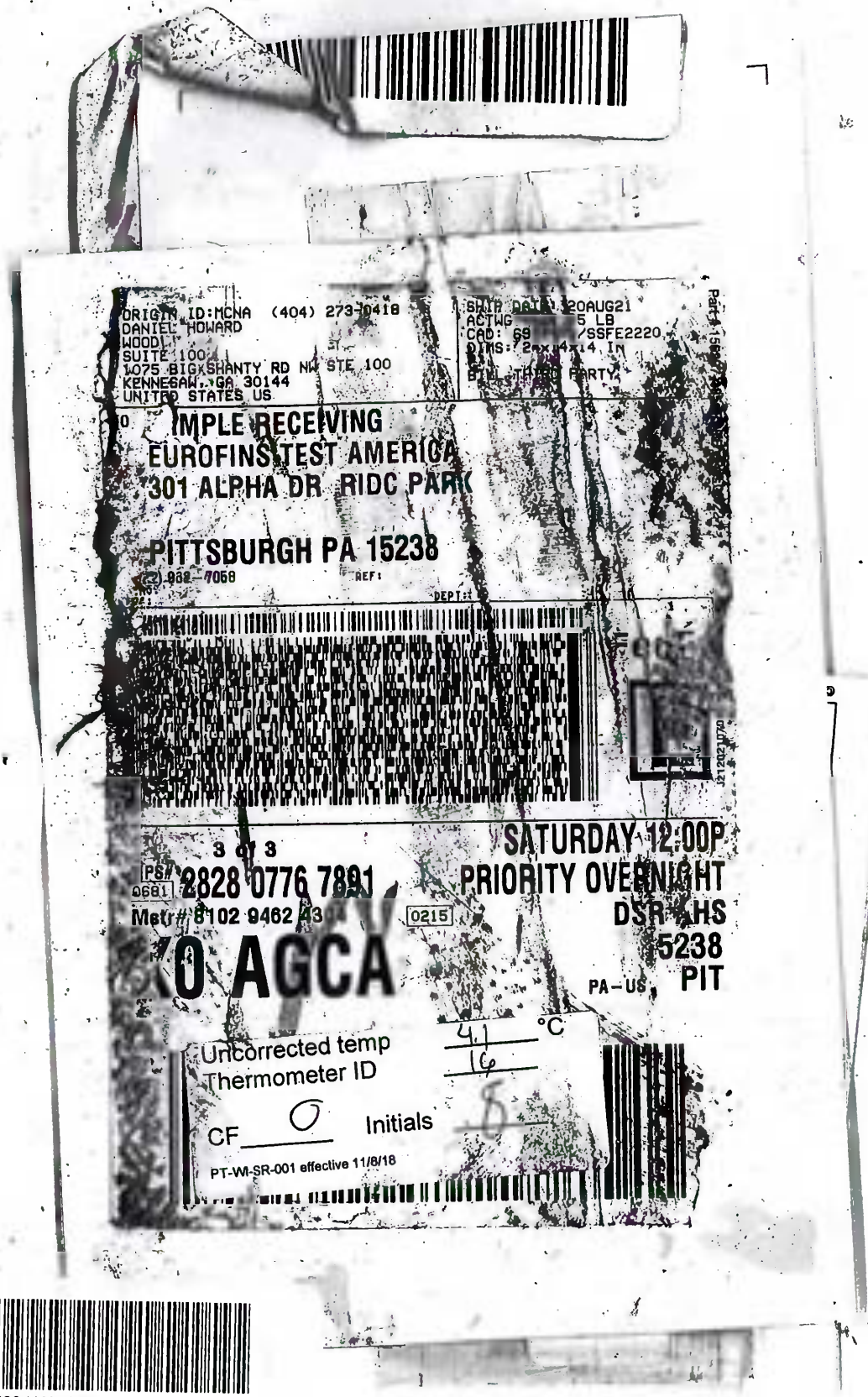
NA AGCA

Uncorrected temp 8.2 °C
Thermometer ID 16
CF 0 Initials 8
PT-WI-SR-001 effective 11/8/18

180-125939 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E &
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
NA AGCA
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
0215
NA AGCA
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill



180-126094 Waybill

FedEx®

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
WOOD
SUITE 100
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 20AUG21
ACTWGT: 57.95 LB
CAD: 6994493/SSFE2220
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7058

REF:
INV:
PO:
DEPT:

FedEx
Express

2 of 3
MPS# 2828 0776 7880
0681
Mstr# 8102 9462 4304
0215

SATURDAY 12:00
PRIORITY OVERNIGH
DSR AH
1523
PI
PA-US

XO AGCA

Uncorrected temp
Thermometer ID
CF 0
°C
Initials
PT-WI-SR-001 effective 11/20

9/29/2021

Page 2 of 2


ORIGIN D:MCNA (404) -0418
DANIEL HOWARD
SUITE 100
1900 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US
TE: 2 UG21
62.80 LB
94493/SSFE2220
24x14x14 IN
BILL THIRD PARTY
TO SAMPLE RECEIVING
EUROFINS TEST AMER
301 ALPHA DR RIDC P
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT
FedEx
Express
1 of 3
TRK# 0215 8102 9462 4304
MASTER
XO AGCA
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18


180-126098 Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx Express

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E&I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO

PITTSBURGH PA 15238

(412) 963-7068
REF:
DEPT:

180-126161 Waybill

FedEx Express

J212021070901an

TRK# 0215 8121 9394 4591

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

NA AGCA

Uncorrected temp 4.2 °C
Thermometer ID 14
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

Part # 156297-436 PRTR FXE 06/22

1 From
Date
Sender's Name DEEAN
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
City KENNESAW State GA ZIP 30144-3652
Dept/Floor/Suite/Room

2 Your Internal Billing Reference

3 To
Recipient's Name Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address
REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address
REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

fedex.com 1.800.GoFedEx 1.800.463.3339

7 Payment Bill to:
Sender
Acct No. in Section 1 will be billed
Recipient
Third Party
Credit Card
Cash/Check
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.

Does this shipment contain dangerous goods?
One box must be checked.
No
Yes
As per attached Shipper's Declaration
Yes
Shipper's Declaration not required
Dry Ice
Dry ice, 9, UN 1845 x kg
Cargo Aircraft Only
Restrictions apply for dangerous goods — see the current FedEx Service Guide.

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required
Package may be left without obtaining a signature for delivery.
Direct Signature
Someone at recipient's address may sign for delivery.
Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

5 Packaging *Declared value limit $500.
FedEx Envelope*
FedEx Pak*
FedEx Box
FedEx Tube
Other

Next Business Day
FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.
FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

FedEx Express Package Service
* To most locations.
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Recipient Copy

Part # 156297-435 RRDB EXP 06/22

FedEx Express

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E& I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT:
INV:
PO:

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238 PIT
PA-US

TRK# 8121 9394 4591
0215

NA AGCA

Uncorrected temp 42 °C
Thermometer ID 16
CF 0 Initials
PT-WI-SR-001 effective 11/8/18

180-12616i Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

00033
00200

FedEx Express

Tracking Number 8121 9394 4591

ID No.

1 From
Date
Sender's Name DEEA DPI 770 1-3
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
Dept./Floor/Suite/Room
City KENNESAW State GA ZIP 30144-3652

2 Your Internal Billing Reference

3 To
Recipient's Name Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept./Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service * To most locations.
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day
- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.
FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required — Package may be left without obtaining a signature for delivery.
Direct Signature — Someone at recipient's address may sign for delivery.
Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.
No Yes As per attached Shipper's Declaration. Yes Shipper's Declaration not required. Dry Ice Dry ice, 9, UN 1845 ____ x ____ kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide.
Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.
Sender Acct. No. in Section 1 will be billed. Recipient Third Party Credit Card Cash/Check

fedex.com 1.800.GoFedEx 1.800.463.3339

9/29/2021

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442319.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-125939-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/1/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
FB-1 (180-125939-1)	8/18/21	09:35 Eastern		Water			X	X	X	2	
EB-1 (180-125939-2)	8/18/21	09:45 Eastern		Water			X	X	X	2	
AP1PZ-7 (180-125939-3)	8/18/21	13:10 Eastern		Water			X	X	X	2	
AP1PZ-8 (180-125939-4)	8/18/21	16:38 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 8/20/21 1700	Company	Received by: FED EX	Date/Time:	Company		
Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: 8/21/21 0842	Company ETA SJC		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442319.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-125949-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/1/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APIGWA-1 (180-125949-1)	8/17/21	15:10 Eastern		Water			X	X	X	2	
APIGWA-2 (180-125949-2)	8/18/21	11:55 Eastern		Water			X	X	X	2	
DUP-1 (180-125949-3)	8/18/21	Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: FED EX	Date/Time: 8/20/21 1700	Company	Received by: FED EX	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8/21/21 0842	Company STA SRR	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126094-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/6/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
EB-2 (180-126094-1)	8/19/21	09:50 Eastern		Water			X	X	X	2	
AP1PZ-9 (180-126094-2)	8/19/21	16:50 Eastern		Water			X	X	X	2	
FB-2- (180-126094-3)	8/20/21	09:10 Eastern		Water			X	X	X	2	
AP1PZ-10 (180-126094-4)	8/20/21	11:30 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	ME	8/23/21 1700	ETA STL	FE		
	FE			Micha Konrings	08/24/2021 09:35	ETA STL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126097-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/26/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
AP1PZ-4 (180-126097-1)	8/20/21	11:30 Eastern		Water			X	X	X	2	
AP1PZ-5 (180-126097-2)	8/20/21	14:40 Eastern		Water			X	X	X	2	
AP1PZ-11 (180-126097-3)	8/20/21	16:50 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: ERT	Received by: FE	Date/Time:	Company	
Relinquished by: FE	Date/Time:	Company	Received by: Micha Koinzhing	Date/Time: 8/24/21 09:35	Company: ETA SR	
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126098-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/26/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
AP1PZ-1 (180-126098-1)	8/18/21	18:15 Eastern		Water			X	X	X	2	
AP1PZ-2 (180-126098-2)	8/19/21	13:45 Eastern		Water			X	X	X	2	
DUP-2 (180-126098-3)	8/19/21	Eastern		Water			X	X	X	2	
AP1PZ-3 (180-126098-4)	8/19/21	16:45 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: ERTH	Received by: FE	Date/Time:	Company	
Relinquished by: FE	Date/Time:	Company	Received by: Micha Kerrington	Date/Time: 8/24/21 09:35	Company: ETA SDG	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125939
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125939
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/21/21 12:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125949
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125949
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/21/21 12:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126094
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126094
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126097
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126097
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126098
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126098
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126161
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126161
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/27/21 09:55 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125940-1
Client Project/Site: Plant Arkwright AP-1
Revision: 1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
8/27/2021 12:51:36 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Job ID: 180-125940-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125940-1

Comments
082721 Revised to include three samples from 180-195428-1. This report replaces the report previously issued on 082621.

Receipt
The samples were received on 8/19/2021 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.1º C and 3.6º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125940-1	FB-1	Water	08/18/21 09:35	08/19/21 09:15
180-125940-2	EB-1	Water	08/18/21 09:45	08/19/21 09:15
180-125940-3	AP1PZ-7	Water	08/18/21 13:10	08/19/21 09:15
180-125940-4	AP1PZ-8	Water	08/18/21 16:38	08/19/21 09:15
180-125948-1	AP1GWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125948-2	AP1GWA-2	Water	08/18/21 11:55	08/19/21 09:15
180-125948-3	DUP-1	Water	08/18/21 00:00	08/19/21 09:15

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: FB-1
Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:28	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:32	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:32	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:33	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-7
Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:35	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:34	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:39	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:35	KEM	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1GWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:54	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:27	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1GWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:57	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:28	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 13:01	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:31	KEM	TAL PIT
	Instrument ID: HGZ									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

TLP = Tara Peterson

Batch Type: Analysis

KEM = Kimberly Mahoney

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: FB-1

Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:28	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:28	1
Barium	<0.0016		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:28	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:28	1
Boron	**0.054**	**J**	0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:28	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:28	1
Calcium	<0.13		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:28	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:28	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:28	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:28	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:28	1
Thallium	**0.00027**	**J**	0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:28	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:32	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: EB-1

Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:32	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:32	1
Barium	<0.0016		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:32	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:32	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:32	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:32	1
Calcium	<0.13		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:32	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:32	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:32	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:32	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:32	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:32	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:32	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:33	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1PZ-7

Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00041**	**J**	0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:35	1
Arsenic	**0.0020**		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:35	1
Barium	**0.097**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:35	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:35	1
Boron	**2.1**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:35	1
Calcium	**330**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:35	1
Chromium	**0.0015**	**J**	0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:35	1
Cobalt	**0.0085**		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:35	1
Lead	**0.00013**	**J**	0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:35	1
Lithium	**0.0038**	**J**	0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:35	1
Molybdenum	**0.011**	**J**	0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:35	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:34	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1PZ-8

Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-4

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:39	1
Arsenic	**0.0016**		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:39	1
Barium	**0.085**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:39	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:39	1
Boron	**2.4**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:39	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:39	1
Calcium	**250**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:39	1
Cobalt	**0.00090**	**J**	0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:39	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:39	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:39	1
Molybdenum	**0.41**		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:39	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:39	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:39	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:35	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1GWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:54	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:54	1
Barium	**0.059**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:54	1
Beryllium	**0.0019**	**J**	0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:54	1
Boron	**0.14**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:54	1
Cadmium	**0.00040**	**J**	0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:54	1
Calcium	**18**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:54	1
Chromium	**0.0038**		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:54	1
Cobalt	**0.0084**		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:54	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:54	1
Lithium	**0.011**		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:54	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:54	1
Selenium	**0.0030**	**J**	0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:54	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:54	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1GWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:57	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:57	1
Barium	**0.044**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:57	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:57	1
Boron	**0.066**	**J**	0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:57	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:57	1
Calcium	**6.4**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:57	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:57	1
Cobalt	**0.0082**		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:57	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:57	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:57	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:57	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:57	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:57	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:28	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 13:01	1
Arsenic	**0.0017**		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 13:01	1
Barium	**0.084**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 13:01	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 13:01	1
Boron	**2.3**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 13:01	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 13:01	1
Calcium	**250**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 13:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 13:01	1
Cobalt	**0.0010**	**J**	0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 13:01	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 13:01	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 13:01	1
Molybdenum	**0.41**		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 13:01	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 13:01	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 13:01	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:31	1

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-368732/1-A
Matrix: Water
Analysis Batch: 368942

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 368732

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:21	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:21	1
Barium	<0.0016		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:21	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:21	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:21	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:21	1
Calcium	<0.13		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:21	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:21	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:21	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:21	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:21	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:21	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:21	1

Lab Sample ID: LCS 180-368732/2-A
Matrix: Water
Analysis Batch: 368942

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 368732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.239		mg/L		95	80 - 120
Arsenic	1.00	0.993		mg/L		99	80 - 120
Barium	1.00	1.00		mg/L		100	80 - 120
Beryllium	0.500	0.502		mg/L		100	80 - 120
Boron	1.25	1.24		mg/L		99	80 - 120
Cadmium	0.500	0.506		mg/L		101	80 - 120
Calcium	25.0	25.5		mg/L		102	80 - 120
Chromium	0.500	0.501		mg/L		100	80 - 120
Cobalt	0.500	0.496		mg/L		99	80 - 120
Lead	0.500	0.506		mg/L		101	80 - 120
Lithium	0.500	0.490		mg/L		98	80 - 120
Molybdenum	0.500	0.506		mg/L		101	80 - 120
Selenium	1.00	1.00		mg/L		100	80 - 120
Thallium	1.00	1.01		mg/L		101	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-368676/1-A
Matrix: Water
Analysis Batch: 368918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:16	1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-368676/2-A
Matrix: Water
Analysis Batch: 368918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00212		mg/L		85	80 - 120

QC Association Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Metals

Prep Batch: 368676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total/NA	Water	7470A	
180-125940-2	EB-1	Total/NA	Water	7470A	
180-125940-3	AP1PZ-7	Total/NA	Water	7470A	
180-125940-4	AP1PZ-8	Total/NA	Water	7470A	
180-125948-1	AP1GWA-1	Total/NA	Water	7470A	
180-125948-2	AP1GWA-2	Total/NA	Water	7470A	
180-125948-3	DUP-1	Total/NA	Water	7470A	
MB 180-368676/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-368676/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 368732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total Recoverable	Water	3005A	
180-125940-2	EB-1	Total Recoverable	Water	3005A	
180-125940-3	AP1PZ-7	Total Recoverable	Water	3005A	
180-125940-4	AP1PZ-8	Total Recoverable	Water	3005A	
180-125948-1	AP1GWA-1	Total Recoverable	Water	3005A	
180-125948-2	AP1GWA-2	Total Recoverable	Water	3005A	
180-125948-3	DUP-1	Total Recoverable	Water	3005A	
MB 180-368732/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-368732/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 368918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total/NA	Water	EPA 7470A	368676
180-125940-2	EB-1	Total/NA	Water	EPA 7470A	368676
180-125940-3	AP1PZ-7	Total/NA	Water	EPA 7470A	368676
180-125940-4	AP1PZ-8	Total/NA	Water	EPA 7470A	368676
180-125948-1	AP1GWA-1	Total/NA	Water	EPA 7470A	368676
180-125948-2	AP1GWA-2	Total/NA	Water	EPA 7470A	368676
180-125948-3	DUP-1	Total/NA	Water	EPA 7470A	368676
MB 180-368676/1-A	Method Blank	Total/NA	Water	EPA 7470A	368676
LCS 180-368676/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	368676

Analysis Batch: 368942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total Recoverable	Water	EPA 6020B	368732
180-125940-2	EB-1	Total Recoverable	Water	EPA 6020B	368732
180-125940-3	AP1PZ-7	Total Recoverable	Water	EPA 6020B	368732
180-125940-4	AP1PZ-8	Total Recoverable	Water	EPA 6020B	368732
180-125948-1	AP1GWA-1	Total Recoverable	Water	EPA 6020B	368732
180-125948-2	AP1GWA-2	Total Recoverable	Water	EPA 6020B	368732
180-125948-3	DUP-1	Total Recoverable	Water	EPA 6020B	368732
MB 180-368732/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	368732
LCS 180-368732/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	368732

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 224

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EvanGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): 5 days			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
EB-1	8/18/21	0935	G	W				X				X	1	
EB-1		0945	G	W				X				X	1	
AP1PZ-7		1310	G	W				X				X	1	
AP1PZ-8		1638	G	W				X				X	1	

180-125940 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/18/21 1900		D Watts	8-19-21 9:15	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA-224 — eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EverGreen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): 5 days			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver) + Li, Mo	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
APIGWA-1	8/17/21	1510	G	W				X				X	1	
APIGWA-2	8/18/21	1155	G	W				X					1	
DUP-1	8/18/21	—	G	W				X				X	1	

180-125948 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Daniel H Daniel Howard	8/18/21 1900		D Watson	8-19-21 9:15	ETAPIT
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

ORIGIN ID:MCNA (404) 273-0418
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.80 LB
CAD: 6994493/SSFE2220
DIMS: 24x13x14 IN
BILL THIRD PARTY

Part # 156027

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7058
INV:
PO:
REF:
DEPT:

RT 98 FZ
1
10:30 A
7077
08.19

FedEx Express

2 of 2
MPS# 0681 2827 2332 7077
Mstr# 8121 9394 4282

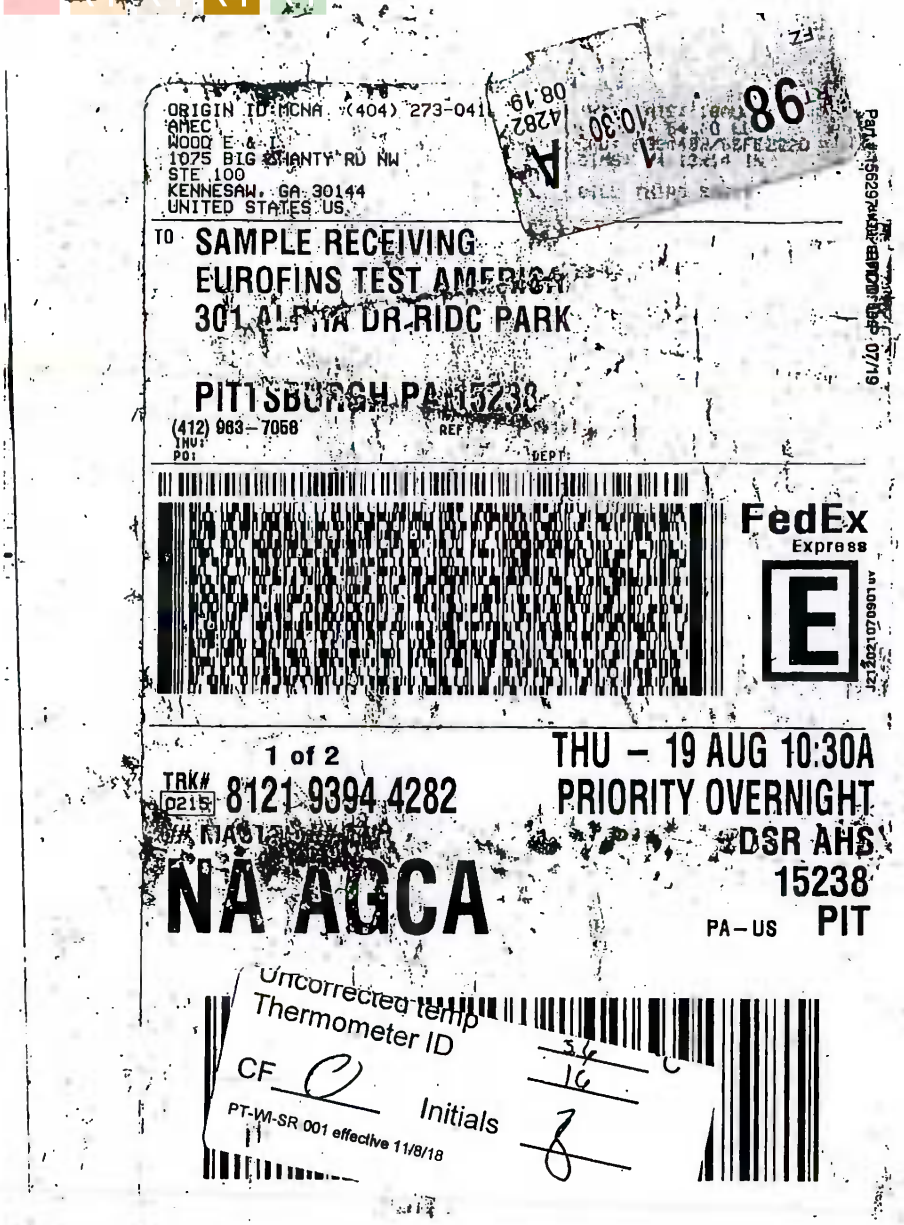
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US
0215

NA AGCA

Uncorrected temp 20.2 °C
Thermometer ID 14
CF 0 Initials 8

PT-WI-SR-001 effective 11/8/18

180-125940 Waybill



180-125948 Waybill

ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E &
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH P
(412) 963-7058
REF:
INV:
PO:
DEPT:

FedEx Express

1 of 2
TRK# 8121 9394 4282
NA AGCA

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT

Uncorrected temp
Thermometer ID
CF
Initials
PT-WI SR-001 effective 11/8/18

180-125948 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125940-1

Login Number: 125940
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125940-1

Login Number: 125948
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-126095-1
Client Project/Site: Plant Arkwright AP-1
Revision: 1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/1/2021 10:35:40 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Job ID: 180-126095-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-126095-1

Comments
090121 Revised report to include case narrative page. This report replaces the report previously issued on 083021.

Receipt
The samples were received on 8/21/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.4º C, 3.7º C and 4.1º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	08-31-21
Georgia	State	PA 02-00416	08-31-21
Illinois	NELAP	004375	08-31-21
Kansas	NELAP	E-10350	08-31-21
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	08-31-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	08-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	08-31-21
New York	NELAP	11182	08-31-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	08-31-21
Oregon	NELAP	PA-2151	08-31-21
Pennsylvania	NELAP	02-00416	08-31-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	08-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	08-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	08-31-21
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-126095-1	EB-2	Water	08/19/21 09:50	08/21/21 09:30
180-126095-2	AP1PZ-9	Water	08/19/21 16:50	08/21/21 09:30
180-126095-3	FB-2	Water	08/20/21 09:10	08/21/21 09:30
180-126095-4	AP1PZ-10	Water	08/20/21 11:30	08/21/21 09:30
180-126096-1	AP1PZ-4	Water	08/20/21 11:30	08/21/21 09:30
180-126096-2	AP1PZ-5	Water	08/20/21 14:40	08/21/21 09:30
180-126096-3	AP1PZ-11	Water	08/20/21 16:50	08/21/21 09:30
180-126099-1	AP1PZ-1	Water	08/18/21 18:15	08/21/21 09:30
180-126099-2	AP1PZ-2	Water	08/19/21 13:45	08/21/21 09:30
180-126099-3	DUP-2	Water	08/19/21 00:00	08/21/21 09:30
180-126099-4	AP1PZ-3	Water	08/19/21 16:45	08/21/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 11:06	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369512	08/27/21 09:35	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:40	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-9
Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Dissolved	Analysis	EPA 6020B		1			369225	08/25/21 12:13	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:09	RSK	TAL PIT
	Instrument ID: A									
Dissolved	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Dissolved	Analysis	EPA 7470A		1			369353	08/26/21 15:44	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:41	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: FB-2
Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:23	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:42	KEM	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-10
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:45	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:43	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-4
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:49	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:30	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-5
Date Collected: 08/20/21 14:40
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:04	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:31	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:18	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:32	KEM	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-1
Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:22	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:45	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:23	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-2
Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:25	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:45	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:27	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:29	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:28	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-3
Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:33	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:29	KEM	TAL PIT
	Instrument ID: HGZ									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

TLP = Tara Peterson

Batch Type: Analysis

KEM = Kimberly Mahoney

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: EB-2

Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 11:06	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 11:06	1
Barium	<0.0016		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 11:06	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 11:06	1
Boron	<0.039		0.080	0.039	mg/L		08/24/21 10:44	08/27/21 09:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 11:06	1
Calcium	<0.13		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 11:06	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 11:06	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 11:06	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 11:06	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 11:06	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 11:06	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 11:06	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 11:06	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:40	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-9

Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00070	J	0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:09	1
Arsenic	0.00041	J	0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:09	1
Barium	0.047		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:09	1
Beryllium	0.00028	J	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:09	1
Boron	0.80		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:09	1
Cadmium	0.00064	J	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:09	1
Calcium	76		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:09	1
Cobalt	0.057		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:09	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:09	1
Lithium	0.073		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:09	1
Molybdenum	0.0021	J	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:09	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:09	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:09	1

Method: EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:13	1
Arsenic	0.00036	J	0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:13	1
Barium	0.047		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:13	1
Beryllium	0.00023	J	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:13	1
Boron	0.80		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:13	1
Cadmium	0.00057	J	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:13	1
Calcium	75		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:13	1
Cobalt	0.055		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:13	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:13	1
Lithium	0.070		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:13	1
Molybdenum	0.0022	J	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:13	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:13	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:13	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:41	1

Method: EPA 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:44	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: FB-2

Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:23	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:23	1
Barium	<0.0016		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:23	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:23	1
Boron	**0.061**	**J**	0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:23	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:23	1
Calcium	<0.13		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:23	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:23	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:23	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:23	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:23	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:23	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:23	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:23	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:42	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-10

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-4

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:45	1
Arsenic	**0.0032**		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:45	1
Barium	**0.045**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:45	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:45	1
Boron	**0.40**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:45	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:45	1
Calcium	**99**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:45	1
Chromium	**0.0036**		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:45	1
Cobalt	**0.0023**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:45	1
Lithium	**0.012**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:45	1
Molybdenum	**0.0050**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:45	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:43	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-4

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:49	1
Arsenic	**0.00055**	**J**	0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:49	1
Barium	**0.090**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:49	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:49	1
Boron	**3.5**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:49	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:49	1
Calcium	**380**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:49	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:49	1
Cobalt	**0.0016**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:49	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:49	1
Lithium	**0.0059**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:49	1
Molybdenum	**0.022**		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:49	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:49	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:49	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-5

Date Collected: 08/20/21 14:40
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00040**	**J**	0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:04	1
Arsenic	**0.0013**		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:04	1
Barium	**0.10**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:04	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:04	1
Boron	**4.7**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:04	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:04	1
Calcium	**450**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:04	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:04	1
Cobalt	**0.0098**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:04	1
Lead	**0.00023**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:04	1
Lithium	**0.067**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:04	1
Molybdenum	**0.044**		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:04	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:04	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:04	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:31	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-11

Date Collected: 08/20/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:18	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:18	1
Barium	**0.021**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:18	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:18	1
Boron	**0.20**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:18	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:18	1
Calcium	**28**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:18	1
Cobalt	**0.0013**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:18	1
Lead	**0.00023**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:18	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:18	1
Molybdenum	**0.0023**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:18	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:18	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:32	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-1

Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:22	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:22	1
Barium	**0.059**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:22	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:22	1
Boron	**0.40**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:22	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:22	1
Calcium	**35**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:22	1
Cobalt	**0.00065**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:22	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:22	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:22	1
Molybdenum	**0.0015**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:22	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:22	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:45	08/26/21 15:23	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-2

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:25	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:25	1
Barium	**0.035**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:25	1
Beryllium	**0.00071**	**J**	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:25	1
Boron	**0.57**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:25	1
Cadmium	**0.0014**	**J**	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:25	1
Calcium	**240**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:25	1
Cobalt	**0.30**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:25	1
Lead	**0.00035**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:25	1
Lithium	**0.028**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:25	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:25	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:25	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:45	08/26/21 15:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: DUP-2

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:29	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:29	1
Barium	**0.035**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:29	1
Beryllium	**0.00071**	**J**	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:29	1
Boron	**0.56**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:29	1
Cadmium	**0.0015**	**J**	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:29	1
Calcium	**240**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:29	1
Cobalt	**0.30**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:29	1
Lead	**0.00033**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:29	1
Lithium	**0.028**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:29	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:29	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:29	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:28	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-3

Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-4

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:33	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:33	1
Barium	**0.036**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:33	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:33	1
Boron	**1.5**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:33	1
Cadmium	**0.00050**	**J**	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:33	1
Calcium	**400**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:33	1
Cobalt	**0.052**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:33	1
Lithium	**0.053**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:33	1
Molybdenum	**0.0014**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:33	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:29	1

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-368990/1-A
Matrix: Water
Analysis Batch: 369225

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 10:37	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 10:37	1
Barium	<0.0016		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 10:37	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 10:37	1
Boron	<0.039		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 10:37	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 10:37	1
Calcium	<0.13		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 10:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 10:37	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 10:37	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 10:37	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 10:37	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 10:37	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 10:37	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 10:37	1

Lab Sample ID: LCS 180-368990/2-A
Matrix: Water
Analysis Batch: 369225

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.244		mg/L		97	80 - 120
Arsenic	1.00	1.05		mg/L		105	80 - 120
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.503		mg/L		101	80 - 120
Boron	1.25	1.25		mg/L		100	80 - 120
Cadmium	0.500	0.523		mg/L		105	80 - 120
Calcium	25.0	27.2		mg/L		109	80 - 120
Chromium	0.500	0.520		mg/L		104	80 - 120
Cobalt	0.500	0.513		mg/L		103	80 - 120
Lead	0.500	0.525		mg/L		105	80 - 120
Lithium	0.500	0.493		mg/L		99	80 - 120
Molybdenum	0.500	0.519		mg/L		104	80 - 120
Selenium	1.00	1.04		mg/L		104	80 - 120
Thallium	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: 180-126095-1 MS
Matrix: Water
Analysis Batch: 369225

Client Sample ID: EB-2
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00038		0.250	0.245		mg/L		98	75 - 125
Arsenic	<0.00031		1.00	1.02		mg/L		102	75 - 125
Barium	<0.0016		1.00	1.04		mg/L		104	75 - 125
Beryllium	<0.00018		0.500	0.488		mg/L		98	75 - 125
Cadmium	<0.00022		0.500	0.519		mg/L		104	75 - 125
Calcium	<0.13		25.0	26.9		mg/L		108	75 - 125
Chromium	<0.0015		0.500	0.517		mg/L		103	75 - 125
Cobalt	<0.00013		0.500	0.509		mg/L		102	75 - 125
Lead	<0.00013		0.500	0.523		mg/L		105	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-126095-1 MS
Matrix: Water
Analysis Batch: 369225

Client Sample ID: EB-2
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	<0.0034		0.500	0.499		mg/L		100	75 - 125
Molybdenum	<0.00061		0.500	0.518		mg/L		104	75 - 125
Selenium	<0.0015		1.00	1.03		mg/L		103	75 - 125
Thallium	<0.00015		1.00	1.03		mg/L		103	75 - 125

Lab Sample ID: 180-126095-1 MSD
Matrix: Water
Analysis Batch: 369225

Client Sample ID: EB-2
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00038		0.250	0.243		mg/L		97	75 - 125	1	20
Arsenic	<0.00031		1.00	1.04		mg/L		104	75 - 125	1	20
Barium	<0.0016		1.00	1.03		mg/L		103	75 - 125	1	20
Beryllium	<0.00018		0.500	0.477		mg/L		95	75 - 125	2	20
Cadmium	<0.00022		0.500	0.511		mg/L		102	75 - 125	2	20
Calcium	<0.13		25.0	27.6		mg/L		110	75 - 125	2	20
Chromium	<0.0015		0.500	0.527		mg/L		105	75 - 125	2	20
Cobalt	<0.00013		0.500	0.510		mg/L		102	75 - 125	0	20
Lead	<0.00013		0.500	0.526		mg/L		105	75 - 125	0	20
Lithium	<0.0034		0.500	0.497		mg/L		99	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.521		mg/L		104	75 - 125	0	20
Selenium	<0.0015		1.00	1.03		mg/L		103	75 - 125	0	20
Thallium	<0.00015		1.00	1.05		mg/L		105	75 - 125	1	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-369187/1-A
Matrix: Water
Analysis Batch: 369353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:45	08/26/21 15:21	1

Lab Sample ID: LCS 180-369187/2-A
Matrix: Water
Analysis Batch: 369353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00259		mg/L		104	80 - 120

Lab Sample ID: 180-126099-1 MS
Matrix: Water
Analysis Batch: 369353

Client Sample ID: AP1PZ-1
Prep Type: Total/NA
Prep Batch: 369187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00013		0.00100	0.00113		mg/L		113	75 - 125

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 180-126099-1 MSD
Matrix: Water
Analysis Batch: 369353

Client Sample ID: AP1PZ-1
Prep Type: Total/NA
Prep Batch: 369187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.00106		mg/L		106	75 - 125	6	20

Metals

Prep Batch: 368990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total Recoverable	Water	3005A	
180-126095-2	AP1PZ-9	Dissolved	Water	3005A	
180-126095-2	AP1PZ-9	Total Recoverable	Water	3005A	
180-126095-3	FB-2	Total Recoverable	Water	3005A	
180-126095-4	AP1PZ-10	Total Recoverable	Water	3005A	
180-126096-1	AP1PZ-4	Total Recoverable	Water	3005A	
180-126096-2	AP1PZ-5	Total Recoverable	Water	3005A	
180-126096-3	AP1PZ-11	Total Recoverable	Water	3005A	
180-126099-1	AP1PZ-1	Total Recoverable	Water	3005A	
180-126099-2	AP1PZ-2	Total Recoverable	Water	3005A	
180-126099-3	DUP-2	Total Recoverable	Water	3005A	
180-126099-4	AP1PZ-3	Total Recoverable	Water	3005A	
MB 180-368990/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-368990/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-126095-1 MS	EB-2	Total Recoverable	Water	3005A	
180-126095-1 MSD	EB-2	Total Recoverable	Water	3005A	

Prep Batch: 369187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total/NA	Water	7470A	
180-126095-2	AP1PZ-9	Dissolved	Water	7470A	
180-126095-2	AP1PZ-9	Total/NA	Water	7470A	
180-126095-3	FB-2	Total/NA	Water	7470A	
180-126095-4	AP1PZ-10	Total/NA	Water	7470A	
180-126096-1	AP1PZ-4	Total/NA	Water	7470A	
180-126096-2	AP1PZ-5	Total/NA	Water	7470A	
180-126096-3	AP1PZ-11	Total/NA	Water	7470A	
180-126099-1	AP1PZ-1	Total/NA	Water	7470A	
180-126099-2	AP1PZ-2	Total/NA	Water	7470A	
180-126099-3	DUP-2	Total/NA	Water	7470A	
180-126099-4	AP1PZ-3	Total/NA	Water	7470A	
MB 180-369187/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369187/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-126099-1 MS	AP1PZ-1	Total/NA	Water	7470A	
180-126099-1 MSD	AP1PZ-1	Total/NA	Water	7470A	

Analysis Batch: 369225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total Recoverable	Water	EPA 6020B	368990
180-126095-2	AP1PZ-9	Dissolved	Water	EPA 6020B	368990
180-126095-2	AP1PZ-9	Total Recoverable	Water	EPA 6020B	368990
180-126095-3	FB-2	Total Recoverable	Water	EPA 6020B	368990
180-126095-4	AP1PZ-10	Total Recoverable	Water	EPA 6020B	368990
180-126096-1	AP1PZ-4	Total Recoverable	Water	EPA 6020B	368990
180-126096-2	AP1PZ-5	Total Recoverable	Water	EPA 6020B	368990
180-126096-3	AP1PZ-11	Total Recoverable	Water	EPA 6020B	368990
180-126099-1	AP1PZ-1	Total Recoverable	Water	EPA 6020B	368990
180-126099-2	AP1PZ-2	Total Recoverable	Water	EPA 6020B	368990
180-126099-3	DUP-2	Total Recoverable	Water	EPA 6020B	368990
180-126099-4	AP1PZ-3	Total Recoverable	Water	EPA 6020B	368990
MB 180-368990/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	368990

Metals (Continued)

Analysis Batch: 369225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-368990/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	368990
180-126095-1 MS	EB-2	Total Recoverable	Water	EPA 6020B	368990
180-126095-1 MSD	EB-2	Total Recoverable	Water	EPA 6020B	368990

Analysis Batch: 369353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total/NA	Water	EPA 7470A	369187
180-126095-2	AP1PZ-9	Dissolved	Water	EPA 7470A	369187
180-126095-2	AP1PZ-9	Total/NA	Water	EPA 7470A	369187
180-126095-3	FB-2	Total/NA	Water	EPA 7470A	369187
180-126095-4	AP1PZ-10	Total/NA	Water	EPA 7470A	369187
180-126096-1	AP1PZ-4	Total/NA	Water	EPA 7470A	369187
180-126096-2	AP1PZ-5	Total/NA	Water	EPA 7470A	369187
180-126096-3	AP1PZ-11	Total/NA	Water	EPA 7470A	369187
180-126099-1	AP1PZ-1	Total/NA	Water	EPA 7470A	369187
180-126099-2	AP1PZ-2	Total/NA	Water	EPA 7470A	369187
180-126099-3	DUP-2	Total/NA	Water	EPA 7470A	369187
180-126099-4	AP1PZ-3	Total/NA	Water	EPA 7470A	369187
MB 180-369187/1-A	Method Blank	Total/NA	Water	EPA 7470A	369187
LCS 180-369187/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369187
180-126099-1 MS	AP1PZ-1	Total/NA	Water	EPA 7470A	369187
180-126099-1 MSD	AP1PZ-1	Total/NA	Water	EPA 7470A	369187

Analysis Batch: 369512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total Recoverable	Water	EPA 6020B	368990

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

Client Information	Sampler: D Howard/E Gullen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Diss 6020B - Custom 15 App III/AppIV+Silver	Diss 7470A - Mercury						Total Number of containers	Special Instructions/Note:
Preservation Code:							D	D	N	N	ND	ND	D	D							
EB-2	8/19/21	0950	G	W				X				X								1	
AP1PZ-9	8/19/21	1650	G	W	Y			X				X	X	X						2	pH=5.77
FB-2	8/20/21	0910	G	W				X				X								1	
AP1PZ-10	8/20/21	1130	G	W				X				X								1	pH=6.53

180-126095 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Daniel L Howard	Date/Time: 8/20/21 1830	Company	Received by: Division	Date/Time: 8-21-21 9:30	Company: APPLIED
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244- ATLANTA

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Client Information	Sampler: D Howard/EGwillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	~~D~~	~~D~~		
AP1PZ-4	8/20/21	1130	G	W				X				X	1	pH=6.56
AP1PZ-5	↓	1440	G	W				X				X	1	pH=6.60
AP1PZ-11	↓	1650	G	W				X				X	1	pH=6.71

180-126096 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: David R Howard	8/20/21 / 1830			8-21-21	EA PH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 930	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244-ATLANTA

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Client Information	Sampler: DHoward/EGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	XD	XD		
AP1PZ-1	8/18/21	1815	G	W				X				X	1	pH = 6.59
AP1PZ-2	8/19/21	1345	G	W				X				X	1	pH = 5.84
DUP-2	↓	—	G	W				X				X	1	pH = 5.84
AP1PZ-3	↓	1645	G	W				X				X	1	pH = 5.60

180-126099 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

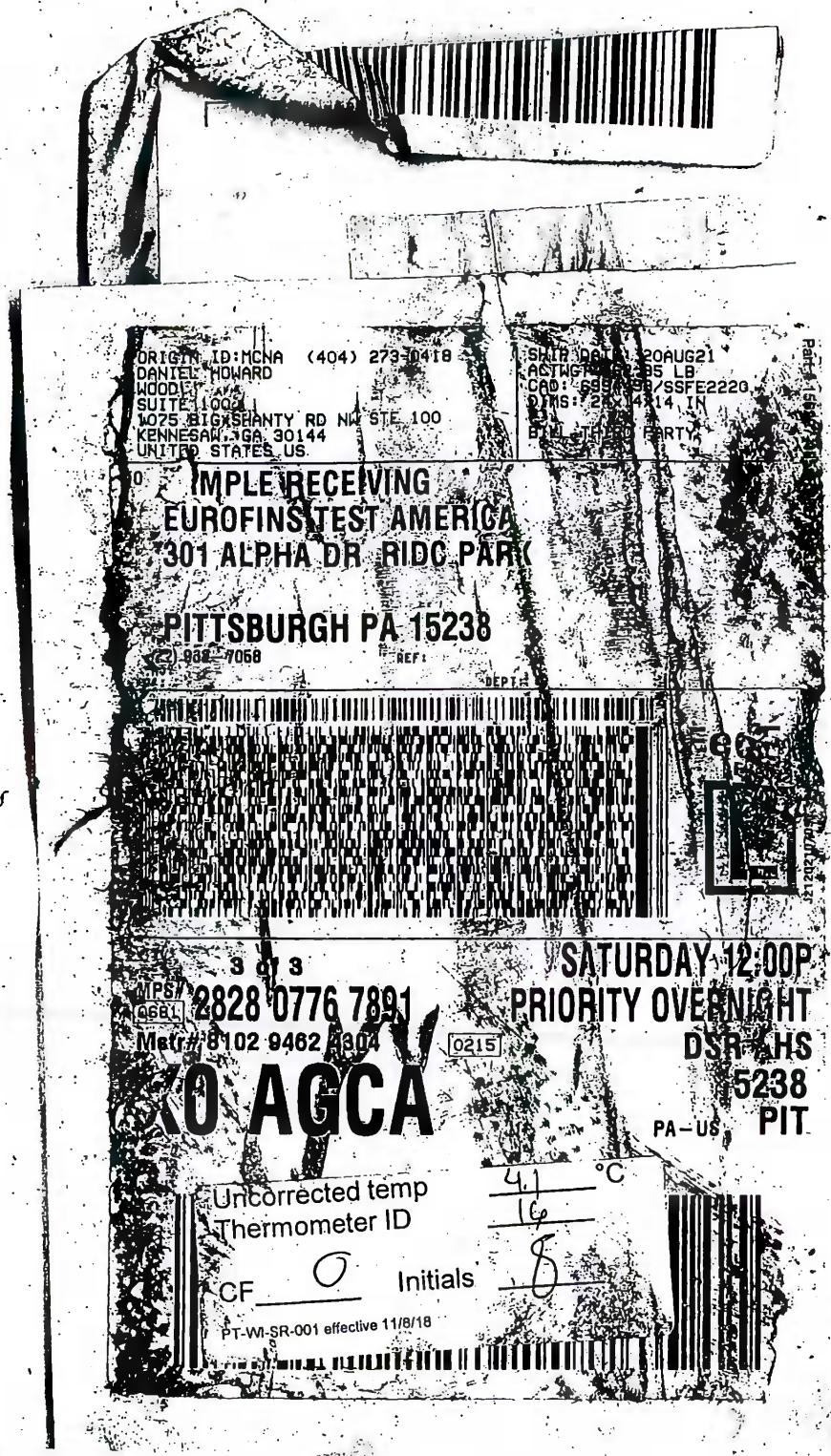
Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	David L Howard	8/20/21 1830		pWatson	8-21-21	ETA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:



180-126095 Waybill

FedEx®

180-126096 Waybill

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
WOOD
SUITE 100
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 20AUG21
ACTWGT: 57.95 LB
CAD: 6994493/SSFE2220
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7058

REF:
INV:
PO:
DEPT:

FedEx Express

2 of 3
MPS# 0691 2828 0776 7880
Mstr# 8102 9462 4304

SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

0215

XO AGCA

Uncorrected
Thermometer
CF 0
°C
PT-WI-SR-001 effective 1
als

Part # 156297-491-ACSC1 REV 06/22


ORIGIN ID:MCNA (404) 423-0418
DANIEL HOWARD
SHE-TOO
2600 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US
TE: 20AUG21
62.80 LB
94493/SSFE2220
24x14x14 IN
THIRD PARTY
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
FedEx
Express
1 of 3
TRK# 8102 9462 4304
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR-AHS
15238-
PIT
PA-US
MASTER
XO AGCA
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18


180-126099 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126095-1

Login Number: 126095
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126095-1

Login Number: 126096
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126095-1

Login Number: 126099
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-126160-1
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
8/31/2021 2:42:35 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Job ID: 180-126160-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-126160-1

Comments
No additional comments.

Receipt
The sample was received on 8/24/2021 9:30 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2º C.

Metals
Method 7470A: The laboratory control sample (LCS) for 369283 recovered outside control limits for the following analytes: mercury. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 7470A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-369283 and analytical batch 180-369660 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Qualifiers

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-126160-1	AP1PZ-6	Water	08/23/21 14:12	08/24/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Client Sample ID: AP1PZ-6
Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126160-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369320	08/26/21 12:26	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369512	08/27/21 09:38	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			50 mL	50 mL	369283	08/26/21 09:40	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369660	08/30/21 14:05	KEM	TAL PIT
	Instrument ID: HGY									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

TLP = Tara Peterson

Batch Type: Analysis

KEM = Kimberly Mahoney

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Client Sample ID: AP1PZ-6

Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126160-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:26	08/27/21 09:38	1
Arsenic	**0.0015**		0.0010	0.00031	mg/L		08/26/21 12:26	08/27/21 09:38	1
Barium	**0.035**		0.010	0.0016	mg/L		08/26/21 12:26	08/27/21 09:38	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:26	08/27/21 09:38	1
Boron	**6.9**		0.080	0.039	mg/L		08/26/21 12:26	08/27/21 09:38	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:26	08/27/21 09:38	1
Calcium	**470**		0.50	0.13	mg/L		08/26/21 12:26	08/27/21 09:38	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:26	08/27/21 09:38	1
Cobalt	**0.35**		0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 09:38	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:26	08/27/21 09:38	1
Lithium	**0.0064**		0.0050	0.0034	mg/L		08/26/21 12:26	08/27/21 09:38	1
Molybdenum	**0.0013**	**J**	0.015	0.00061	mg/L		08/26/21 12:26	08/27/21 09:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:26	08/27/21 09:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:26	08/27/21 09:38	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	F2 F1 *+	0.00020	0.00013	mg/L		08/26/21 09:40	08/30/21 14:05	1

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-369320/1-A
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:26	08/27/21 09:21	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:26	08/27/21 09:21	1
Barium	<0.0016		0.010	0.0016	mg/L		08/26/21 12:26	08/27/21 09:21	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:26	08/27/21 09:21	1
Boron	<0.039		0.080	0.039	mg/L		08/26/21 12:26	08/27/21 09:21	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:26	08/27/21 09:21	1
Calcium	<0.13		0.50	0.13	mg/L		08/26/21 12:26	08/27/21 09:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:26	08/27/21 09:21	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 09:21	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:26	08/27/21 09:21	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:26	08/27/21 09:21	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:26	08/27/21 09:21	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:26	08/27/21 09:21	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:26	08/27/21 09:21	1

Lab Sample ID: LCS 180-369320/2-A
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.242		mg/L		97	80 - 120
Arsenic	1.00	1.03		mg/L		103	80 - 120
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.511		mg/L		102	80 - 120
Boron	1.25	1.20		mg/L		96	80 - 120
Cadmium	0.500	0.512		mg/L		102	80 - 120
Calcium	25.0	28.6		mg/L		114	80 - 120
Chromium	0.500	0.508		mg/L		102	80 - 120
Cobalt	0.500	0.508		mg/L		102	80 - 120
Lead	0.500	0.505		mg/L		101	80 - 120
Lithium	0.500	0.501		mg/L		100	80 - 120
Molybdenum	0.500	0.519		mg/L		104	80 - 120
Selenium	1.00	1.03		mg/L		103	80 - 120
Thallium	1.00	1.09		mg/L		109	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-369283/1-A
Matrix: Water
Analysis Batch: 369660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/26/21 09:40	08/30/21 14:03	1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-369283/2-A
Matrix: Water
Analysis Batch: 369660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369283

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00125	0.00237	*+	mg/L		189	80 - 120		

Lab Sample ID: 180-126160-1 MS
Matrix: Water
Analysis Batch: 369660

Client Sample ID: AP1PZ-6
Prep Type: Total/NA
Prep Batch: 369283

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.00013	F2 F1 *+	0.000500	0.000647	F1	mg/L		129	75 - 125		

Lab Sample ID: 180-126160-1 MSD
Matrix: Water
Analysis Batch: 369660

Client Sample ID: AP1PZ-6
Prep Type: Total/NA
Prep Batch: 369283

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013	F2 F1 *+	0.000500	0.000484	F2	mg/L		97	75 - 125	29	20

QC Association Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Metals

Prep Batch: 369283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total/NA	Water	7470A	
MB 180-369283/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369283/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-126160-1 MS	AP1PZ-6	Total/NA	Water	7470A	
180-126160-1 MSD	AP1PZ-6	Total/NA	Water	7470A	

Prep Batch: 369320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total Recoverable	Water	3005A	
MB 180-369320/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369320/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 369512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total Recoverable	Water	EPA 6020B	369320
MB 180-369320/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369320
LCS 180-369320/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369320

Analysis Batch: 369660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total/NA	Water	EPA 7470A	369283
MB 180-369283/1-A	Method Blank	Total/NA	Water	EPA 7470A	369283
LCS 180-369283/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369283
180-126160-1 MS	AP1PZ-6	Total/NA	Water	EPA 7470A	369283
180-126160-1 MSD	AP1PZ-6	Total/NA	Water	EPA 7470A	369283

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 244

Eurofins Environment Testing America

Client Information	Sampler: D Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	D	N	N	XD	XD								X	
AP1PZ-6	8/23/21	1412	G	W				X				X								1	pH=5.50

180-126160 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel L Howard	8/23/21 1545		D Watts	8-24-21	ESTA
2	Relinquished by:	Date/Time:	Company	Received by	Date/Time: 1:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

fedex.com 1800.GoFedEx 1800.463.3339

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E&I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO

PITTSBURGH PA 15238

(412) 963-7058

REF:

DEPT:

FedEx Express

J212021070901US

TRK# 0215 8121 9394 4591

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT

DSR AHS
15238
PIT

PA-US

NA AGCA

Uncorrected temp 4.2 °C
Thermometer ID 16
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-126160 Waybill

Part # 156297-496 PRPP FXE 06/22

1 From
Date
Sender's Name DEEA
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
City KENNESAW State GA ZIP 30144-3652

2 Your Internal Billing Reference

3 To
Recipient's Name
Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

fedex.com 1800.GoFedEx 1800.463.3339

5 Packaging *Declared value limit $500.
FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery
No Signature Required
Direct Signature
Indirect Signature
Does this shipment contain dangerous goods?
No Yes Dry Ice 9, UN 1845 kg
Cargo Aircraft Only

7 Payment Bill to:
Sender
Recipient
Third Party
Credit Card
Cash/Check
Obtain recip. Acct. No.

Express Package Service* *To most locations
Next Business Day
2 or 3 Business Days
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

FedEx First Overnight
FedEx Priority Overnight
FedEx Standard Overnight
FedEx 2Day A.M.
Second Business morning. Saturday Delivery NOT available.
FedEx 2Day
FedEx Express Saver
Third business day. Saturday Delivery NOT available.

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126160-1

Login Number: 126160
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125939-1
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/7/2021 8:28:48 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Job ID: 180-125939-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125939-1

Comments
No additional comments.

Receipt
The samples were received on 8/19/2021 9:15 AM, 8/21/2021 9:30 AM and 8/24/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.1º C, 2.4º C, 3.6º C, 3.7º C, 4.1º C and 4.2º C.

GC Semi VOA
Method 300.0: The matrix spike and matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 180-370035 were low outside control limits for Sulfate: (180-126098-C-1 MS) and (180-126098-C-1 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125939-1	FB-1	Water	08/18/21 09:35	08/19/21 09:15
180-125939-2	EB-1	Water	08/18/21 09:45	08/19/21 09:15
180-125939-3	AP1PZ-7	Water	08/18/21 13:10	08/19/21 09:15
180-125939-4	AP1PZ-8	Water	08/18/21 16:38	08/19/21 09:15
180-125949-1	APIGWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125949-2	APIGWA-2	Water	08/18/21 11:55	08/19/21 09:15
180-125949-3	DUP-1	Water	08/18/21 00:00	08/19/21 09:15
180-126094-1	EB-2	Water	08/19/21 09:50	08/21/21 09:30
180-126094-2	AP1PZ-9	Water	08/19/21 16:50	08/21/21 09:30
180-126094-3	FB-2	Water	08/20/21 09:10	08/21/21 09:30
180-126094-4	AP1PZ-10	Water	08/20/21 11:30	08/21/21 09:30
180-126097-1	AP1PZ-4	Water	08/20/21 11:30	08/21/21 18:09
180-126097-2	AP1PZ-5	Water	08/20/21 14:40	08/21/21 18:09
180-126097-3	AP1PZ-11	Water	08/20/21 16:50	08/21/21 18:09
180-126098-1	AP1PZ-1	Water	08/18/21 18:15	08/21/21 09:30
180-126098-2	AP1PZ-2	Water	08/19/21 13:45	08/21/21 09:30
180-126098-3	DUP-2	Water	08/19/21 00:00	08/21/21 09:30
180-126098-4	AP1PZ-3	Water	08/19/21 16:45	08/21/21 09:30
180-126161-1	AP1PZ-6	Water	08/23/21 14:12	08/24/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: FB-1
Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 11:31	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368905	08/23/21 14:27	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 12:19	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368905	08/23/21 14:27	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-7
Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 13:06	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			369870	09/01/21 13:22	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368905	08/23/21 14:27	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 13:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 13:38	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			369870	09/01/21 13:54	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368908	08/23/21 14:46	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 16:38	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: APIGWA-1
Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 10:59	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368810	08/22/21 17:25	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/17/21 15:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIGWA-2
Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 11:15	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368908	08/23/21 14:46	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 11:55	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1
Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			369870	09/01/21 12:34	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			369870	09/01/21 12:50	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	368908	08/23/21 14:46	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369637	08/18/21 00:00	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 02:10	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-9

Lab Sample ID: 180-126094-2

Date Collected: 08/19/21 16:50

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 05:59	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			370188	09/04/21 06:15	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 16:50	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2

Lab Sample ID: 180-126094-3

Date Collected: 08/20/21 09:10

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 02:26	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-10

Lab Sample ID: 180-126094-4

Date Collected: 08/20/21 11:30

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 05:26	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			370188	09/04/21 05:43	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/20/21 11:30	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-4

Lab Sample ID: 180-126097-1

Date Collected: 08/20/21 11:30

Matrix: Water

Date Received: 08/21/21 18:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 03:32	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370188	09/04/21 03:48	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-4
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			369662	08/20/21 11:30	FDS	TAL PIT

Client Sample ID: AP1PZ-5
Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 04:05	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370188	09/04/21 04:21	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	369476	08/27/21 12:45	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369662	08/20/21 14:40	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370188	09/04/21 02:43	SAB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369500	08/27/21 16:12	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369662	08/20/21 16:50	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-1
Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 02:03	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369142	08/25/21 10:30	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/18/21 18:15	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-2

Lab Sample ID: 180-126098-2

Date Collected: 08/19/21 13:45

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 00:25	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370035	09/03/21 00:41	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 13:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-2

Lab Sample ID: 180-126098-3

Date Collected: 08/19/21 00:00

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 00:58	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370035	09/03/21 01:14	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 00:00	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-3

Lab Sample ID: 180-126098-4

Date Collected: 08/19/21 16:45

Matrix: Water

Date Received: 08/21/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370035	09/03/21 02:52	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			370035	09/03/21 03:08	J1T	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369349	08/26/21 15:32	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369649	08/19/21 16:45	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-6

Lab Sample ID: 180-126161-1

Date Collected: 08/23/21 14:12

Matrix: Water

Date Received: 08/24/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			370187	09/04/21 02:00	J1T	TAL PIT
	Instrument ID: INTEGRION									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-6
Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		25			370187	09/04/21 02:18	J1T	TAL PIT
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	369553	08/29/21 17:57	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			369662	08/23/21 14:12	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

FDS = Sampler Field
J1T = Jianwu Tang
KMM = Kendric Moore
SAB = Sharon Bacha

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: FB-1

Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 11:31	1
Fluoride	<0.026		0.10	0.026	mg/L			09/01/21 11:31	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: EB-1

Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 12:19	1
Fluoride	**0.031**	**J**	0.10	0.026	mg/L			09/01/21 12:19	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:27	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-7

Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		1.0	0.71	mg/L			09/01/21 13:06	1
Fluoride	0.18		0.10	0.026	mg/L			09/01/21 13:06	1
Sulfate	1300		10	7.6	mg/L			09/01/21 13:22	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2000		10	10	mg/L			08/23/21 14:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.41				SU			08/18/21 13:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-8

Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.6		1.0	0.71	mg/L			09/01/21 13:38	1
Fluoride	0.33		0.10	0.026	mg/L			09/01/21 13:38	1
Sulfate	580		10	7.6	mg/L			09/01/21 13:54	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	840		10	10	mg/L			08/23/21 14:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.74				SU			08/18/21 16:38	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: APIGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.71	mg/L			09/01/21 10:59	1
Fluoride	0.27		0.10	0.026	mg/L			09/01/21 10:59	1
Sulfate	62		1.0	0.76	mg/L			09/01/21 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		10	10	mg/L			08/22/21 17:25	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.23				SU			08/17/21 15:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: APIGWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		1.0	0.71	mg/L			09/01/21 11:15	1
Fluoride	0.071	J	0.10	0.026	mg/L			09/01/21 11:15	1
Sulfate	1.4		1.0	0.76	mg/L			09/01/21 11:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	82		10	10	mg/L			08/23/21 14:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.03				SU			08/18/21 11:55	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.7		1.0	0.71	mg/L			09/01/21 12:34	1
Fluoride	0.25		0.10	0.026	mg/L			09/01/21 12:34	1
Sulfate	570		10	7.6	mg/L			09/01/21 12:50	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10	10	mg/L			08/23/21 14:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.74				SU			08/18/21 00:00	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: EB-2

Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/04/21 02:10	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 02:10	1
Sulfate	<0.76		1.0	0.76	mg/L			09/04/21 02:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/26/21 15:32	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-9

Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		1.0	0.71	mg/L			09/04/21 05:59	1
Fluoride	0.45		0.10	0.026	mg/L			09/04/21 05:59	1
Sulfate	310		5.0	3.8	mg/L			09/04/21 06:15	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.77				SU			08/19/21 16:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: FB-2

Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/04/21 02:26	1
Fluoride	<0.026		0.10	0.026	mg/L			09/04/21 02:26	1
Sulfate	<0.76		1.0	0.76	mg/L			09/04/21 02:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/27/21 12:45	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-10

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.0		1.0	0.71	mg/L			09/04/21 05:26	1
Fluoride	0.48		0.10	0.026	mg/L			09/04/21 05:26	1
Sulfate	230		5.0	3.8	mg/L			09/04/21 05:43	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	520		10	10	mg/L			08/27/21 12:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.53				SU			08/20/21 11:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-4

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.4		1.0	0.71	mg/L			09/04/21 03:32	1
Fluoride	0.35		0.10	0.026	mg/L			09/04/21 03:32	1
Sulfate	1400		10	7.6	mg/L			09/04/21 03:48	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2000		10	10	mg/L			08/27/21 12:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.56				SU			08/20/21 11:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-5

Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.8		1.0	0.71	mg/L			09/04/21 04:05	1
Fluoride	0.40		0.10	0.026	mg/L			09/04/21 04:05	1
Sulfate	1300		10	7.6	mg/L			09/04/21 04:21	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	2200		20	20	mg/L			08/27/21 12:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.60				SU			08/20/21 14:40	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-11

Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.71	mg/L			09/04/21 02:43	1
Fluoride	0.12		0.10	0.026	mg/L			09/04/21 02:43	1
Sulfate	57		1.0	0.76	mg/L			09/04/21 02:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		10	10	mg/L			08/27/21 16:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.71				SU			08/20/21 16:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-1

Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.0		1.0	0.71	mg/L			09/03/21 02:03	1
Fluoride	0.13		0.10	0.026	mg/L			09/03/21 02:03	1
Sulfate	100	F1	1.0	0.76	mg/L			09/03/21 02:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		10	10	mg/L			08/25/21 10:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.59				SU			08/18/21 18:15	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-2

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.3		1.0	0.71	mg/L			09/03/21 00:25	1
Fluoride	0.13		0.10	0.026	mg/L			09/03/21 00:25	1
Sulfate	930		10	7.6	mg/L			09/03/21 00:41	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1500		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.84				SU			08/19/21 13:45	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: DUP-2

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.2		1.0	0.71	mg/L			09/03/21 00:58	1
Fluoride	0.14		0.10	0.026	mg/L			09/03/21 00:58	1
Sulfate	950		10	7.6	mg/L			09/03/21 01:14	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.84				SU			08/19/21 00:00	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-3

Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.0		1.0	0.71	mg/L			09/03/21 02:52	1
Fluoride	0.063	J	0.10	0.026	mg/L			09/03/21 02:52	1
Sulfate	1300		10	7.6	mg/L			09/03/21 03:08	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1900		10	10	mg/L			08/26/21 15:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.60				SU			08/19/21 16:45	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-1

Client Sample ID: AP1PZ-6

Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10		2.5	1.8	mg/L			09/04/21 02:00	2.5
Fluoride	0.25		0.25	0.065	mg/L			09/04/21 02:00	2.5
Sulfate	2200		25	19	mg/L			09/04/21 02:18	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3000		20	20	mg/L			08/29/21 17:57	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.50				SU			08/23/21 14:12	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-369870/7
Matrix: Water
Analysis Batch: 369870

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/01/21 09:24	1
Fluoride	<0.026		0.10	0.026	mg/L			09/01/21 09:24	1
Sulfate	<0.76		1.0	0.76	mg/L			09/01/21 09:24	1

Lab Sample ID: LCS 180-369870/6
Matrix: Water
Analysis Batch: 369870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.6		mg/L		99	90 - 110
Fluoride	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	48.7		mg/L		97	90 - 110

Lab Sample ID: MB 180-370035/44
Matrix: Water
Analysis Batch: 370035

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/02/21 19:52	1
Fluoride	<0.026		0.10	0.026	mg/L			09/02/21 19:52	1
Sulfate	<0.76		1.0	0.76	mg/L			09/02/21 19:52	1

Lab Sample ID: LCS 180-370035/43
Matrix: Water
Analysis Batch: 370035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.5		mg/L		101	90 - 110
Fluoride	2.50	2.74		mg/L		109	90 - 110
Sulfate	50.0	48.9		mg/L		98	90 - 110

Lab Sample ID: 180-126098-1 MS
Matrix: Water
Analysis Batch: 370035

Client Sample ID: AP1PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.0		50.0	52.7		mg/L		99	90 - 110
Fluoride	0.13		2.50	2.69		mg/L		102	90 - 110
Sulfate	100	F1	50.0	144	F1	mg/L		84	90 - 110

Lab Sample ID: 180-126098-1 MSD
Matrix: Water
Analysis Batch: 370035

Client Sample ID: AP1PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.0		50.0	53.2		mg/L		101	90 - 110	1	20
Fluoride	0.13		2.50	2.69		mg/L		103	90 - 110	0	20
Sulfate	100	F1	50.0	146	F1	mg/L		87	90 - 110	1	20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-370187/50
Matrix: Water
Analysis Batch: 370187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 21:50	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 21:50	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 21:50	1

Lab Sample ID: MB 180-370187/6
Matrix: Water
Analysis Batch: 370187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 08:50	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 08:50	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 08:50	1

Lab Sample ID: LCS 180-370187/49
Matrix: Water
Analysis Batch: 370187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	47.7		mg/L		95	90 - 110
Fluoride	2.50	2.71		mg/L		108	90 - 110
Sulfate	50.0	50.4		mg/L		101	90 - 110

Lab Sample ID: MB 180-370188/38
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 19:05	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 19:05	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 19:05	1

Lab Sample ID: MB 180-370188/7
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/03/21 10:14	1
Fluoride	<0.026		0.10	0.026	mg/L			09/03/21 10:14	1
Sulfate	<0.76		1.0	0.76	mg/L			09/03/21 10:14	1

Lab Sample ID: LCS 180-370188/37
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.0		mg/L		100	90 - 110
Fluoride	2.50	2.69		mg/L		108	90 - 110
Sulfate	50.0	48.1		mg/L		96	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 180-370188/6
Matrix: Water
Analysis Batch: 370188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			50.0	49.2		mg/L		98	90 - 110		
Fluoride			2.50	2.65		mg/L		106	90 - 110		
Sulfate			50.0	47.0		mg/L		94	90 - 110		

Lab Sample ID: 180-126097-3 MS
Matrix: Water
Analysis Batch: 370188

Client Sample ID: AP1PZ-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	3.1		50.0	55.9		mg/L		106	90 - 110		
Fluoride	0.12		2.50	2.83		mg/L		108	90 - 110		
Sulfate	57		50.0	107		mg/L		99	90 - 110		

Lab Sample ID: 180-126097-3 MSD
Matrix: Water
Analysis Batch: 370188

Client Sample ID: AP1PZ-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.1		50.0	54.9		mg/L		104	90 - 110	2	20
Fluoride	0.12		2.50	2.73		mg/L		104	90 - 110	4	20
Sulfate	57		50.0	104		mg/L		93	90 - 110	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-368810/2
Matrix: Water
Analysis Batch: 368810

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/22/21 17:25	1

Lab Sample ID: LCS 180-368810/1
Matrix: Water
Analysis Batch: 368810

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	652		mg/L		95	80 - 120		

Lab Sample ID: MB 180-368905/2
Matrix: Water
Analysis Batch: 368905

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:27	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 180-368905/1
Matrix: Water
Analysis Batch: 368905

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	672		mg/L		98	80 - 120

Lab Sample ID: MB 180-368908/2
Matrix: Water
Analysis Batch: 368908

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/23/21 14:46	1

Lab Sample ID: LCS 180-368908/1
Matrix: Water
Analysis Batch: 368908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	670		mg/L		98	80 - 120

Lab Sample ID: MB 180-369142/2
Matrix: Water
Analysis Batch: 369142

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/25/21 10:30	1

Lab Sample ID: LCS 180-369142/1
Matrix: Water
Analysis Batch: 369142

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	708		mg/L		103	80 - 120

Lab Sample ID: MB 180-369349/2
Matrix: Water
Analysis Batch: 369349

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/26/21 15:32	1

Lab Sample ID: LCS 180-369349/1
Matrix: Water
Analysis Batch: 369349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	685	684		mg/L		100	80 - 120

Lab Sample ID: MB 180-369476/2
Matrix: Water
Analysis Batch: 369476

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/27/21 12:45	1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LCS 180-369476/1
Matrix: Water
Analysis Batch: 369476

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	654		mg/L		95	80 - 120		

Lab Sample ID: MB 180-369500/2
Matrix: Water
Analysis Batch: 369500

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/27/21 16:12	1

Lab Sample ID: LCS 180-369500/1
Matrix: Water
Analysis Batch: 369500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	648		mg/L		95	80 - 120		

Lab Sample ID: 180-126097-3 DU
Matrix: Water
Analysis Batch: 369500

Client Sample ID: AP1PZ-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	200			195		mg/L				4	10

Lab Sample ID: MB 180-369553/2
Matrix: Water
Analysis Batch: 369553

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			08/29/21 17:57	1

Lab Sample ID: LCS 180-369553/1
Matrix: Water
Analysis Batch: 369553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			685	704		mg/L		103	80 - 120		

HPLC/IC

Analysis Batch: 369870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-125939-2	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-125939-3	AP1PZ-7	Total/NA	Water	EPA 300.0 R2.1	
180-125939-3	AP1PZ-7	Total/NA	Water	EPA 300.0 R2.1	
180-125939-4	AP1PZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-125939-4	AP1PZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-125949-1	APIGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-125949-2	APIGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-125949-3	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-125949-3	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-369870/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-369870/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-1	AP1PZ-1	Total/NA	Water	EPA 300.0 R2.1	
180-126098-2	AP1PZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-2	AP1PZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-3	DUP-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-3	DUP-2	Total/NA	Water	EPA 300.0 R2.1	
180-126098-4	AP1PZ-3	Total/NA	Water	EPA 300.0 R2.1	
180-126098-4	AP1PZ-3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370035/44	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370035/43	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126098-1 MS	AP1PZ-1	Total/NA	Water	EPA 300.0 R2.1	
180-126098-1 MSD	AP1PZ-1	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	EPA 300.0 R2.1	
180-126161-1	AP1PZ-6	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370187/50	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370187/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370187/49	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 370188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	EPA 300.0 R2.1	
180-126094-2	AP1PZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-126094-2	AP1PZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-126094-3	FB-2	Total/NA	Water	EPA 300.0 R2.1	
180-126094-4	AP1PZ-10	Total/NA	Water	EPA 300.0 R2.1	
180-126094-4	AP1PZ-10	Total/NA	Water	EPA 300.0 R2.1	
180-126097-1	AP1PZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-126097-1	AP1PZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-126097-2	AP1PZ-5	Total/NA	Water	EPA 300.0 R2.1	
180-126097-2	AP1PZ-5	Total/NA	Water	EPA 300.0 R2.1	
180-126097-3	AP1PZ-11	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370188/38	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370188/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370188/37	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

HPLC/IC (Continued)

Analysis Batch: 370188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-370188/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126097-3 MS	AP1PZ-11	Total/NA	Water	EPA 300.0 R2.1	
180-126097-3 MSD	AP1PZ-11	Total/NA	Water	EPA 300.0 R2.1	

General Chemistry

Analysis Batch: 368810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125949-1	APIGWA-1	Total/NA	Water	SM 2540C	
MB 180-368810/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-368810/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 368905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	SM 2540C	
180-125939-2	EB-1	Total/NA	Water	SM 2540C	
180-125939-3	AP1PZ-7	Total/NA	Water	SM 2540C	
MB 180-368905/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-368905/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 368908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-4	AP1PZ-8	Total/NA	Water	SM 2540C	
180-125949-2	APIGWA-2	Total/NA	Water	SM 2540C	
180-125949-3	DUP-1	Total/NA	Water	SM 2540C	
MB 180-368908/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-368908/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-1	AP1PZ-1	Total/NA	Water	SM 2540C	
MB 180-369142/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369142/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	SM 2540C	
180-126094-2	AP1PZ-9	Total/NA	Water	SM 2540C	
180-126098-2	AP1PZ-2	Total/NA	Water	SM 2540C	
180-126098-3	DUP-2	Total/NA	Water	SM 2540C	
180-126098-4	AP1PZ-3	Total/NA	Water	SM 2540C	
MB 180-369349/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369349/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-3	FB-2	Total/NA	Water	SM 2540C	
180-126094-4	AP1PZ-10	Total/NA	Water	SM 2540C	
180-126097-1	AP1PZ-4	Total/NA	Water	SM 2540C	
180-126097-2	AP1PZ-5	Total/NA	Water	SM 2540C	
MB 180-369476/2	Method Blank	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 369476 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-369476/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 369500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126097-3	AP1PZ-11	Total/NA	Water	SM 2540C	
MB 180-369500/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369500/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126097-3 DU	AP1PZ-11	Total/NA	Water	SM 2540C	

Analysis Batch: 369553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	SM 2540C	
MB 180-369553/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369553/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 369637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-3	AP1PZ-7	Total/NA	Water	Field Sampling	
180-125939-4	AP1PZ-8	Total/NA	Water	Field Sampling	
180-125949-1	APIGWA-1	Total/NA	Water	Field Sampling	
180-125949-2	APIGWA-2	Total/NA	Water	Field Sampling	
180-125949-3	DUP-1	Total/NA	Water	Field Sampling	

Analysis Batch: 369649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-2	AP1PZ-9	Total/NA	Water	Field Sampling	
180-126094-4	AP1PZ-10	Total/NA	Water	Field Sampling	
180-126098-1	AP1PZ-1	Total/NA	Water	Field Sampling	
180-126098-2	AP1PZ-2	Total/NA	Water	Field Sampling	
180-126098-3	DUP-2	Total/NA	Water	Field Sampling	
180-126098-4	AP1PZ-3	Total/NA	Water	Field Sampling	

Analysis Batch: 369662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126097-1	AP1PZ-4	Total/NA	Water	Field Sampling	
180-126097-2	AP1PZ-5	Total/NA	Water	Field Sampling	
180-126097-3	AP1PZ-11	Total/NA	Water	Field Sampling	
180-126161-1	AP1PZ-6	Total/NA	Water	Field Sampling	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 244-

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/Evan Guillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
FB-1	8/18/21	0935	G	W			X		X	X	X		3	
EB-1		0945	G	W			X		X	X	X		3	
AP1PZ-7		1310	G	W			X		X	X	X		3	
AP1PZ-8	↓	1638	G	W			X		X	X	X		3	

180-125939 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/18/21 1900		D Watson	8-19-21 9:15	EPAM
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 244

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EvanGuilen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~8 of 2~~
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
APIGWA-1	8/17/21	1510	G	W			X		X	X	X		3	
APIGWA-2	8/18/21	1155	G	W			X		X	X	X		3	
DUP-1	8/18/21	—	G	W			X		X	X	X		3	

180-125949 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
David Howard	8/18/21 1900		D Waters	8-19-21 9:15	Ke THI
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing America

ATLANTA 224-

Client Information	Sampler: DHoward/EGullen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	D									
EB-2	8/19/21	0950	G	W			X		X	X	X									3	
AP1PZ-9	8/19/21	1650	G	W			X		X	X	X									3	pH=5.77
FB-2	8/20/21	0910	G	W			X		X	X	X									3	
AP1PZ-10	8/20/21	1130	G	W			X		X	X	X									3	pH=6.53

180-126094 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel L Howard	8/20/21/1830		Duratur	8-21-21 930	ETAPLT
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: DHoward/EGwilkes	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 16 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	D	D		
AP1PZ-4	8/20/21	1130	G	W			X		X	X	X		3	pH=6.56
AP1PZ-5	↓	1440	G	W			X		X	X	X		3	pH=6.60
AP1PZ-11	↓	1650	G	W			X		X	X	X		3	pH=6.71

180-126097 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
David L Howard	8/20/21 1830		D Watson	8-21-21 9:30	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244-ATLANTA

eurofins Environment Testing America

Client Information	Sampler: DHoward/EGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	D	D	N	N	MD	MD									
AP1PZ-1	8/18/21	1815	G	W			X		X	X	X									3	pH=5.59
AP1PZ-2	8/19/21	1345	G	W			X		X	X	X									3	pH=5.84
DUP-2		-	G	W			X		X	X	X									3	pH=5.84
AP1PZ-3	↓	1645	G	W			X		X	X	X									3	pH=5.60

180-126098 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than ... nth)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D.L. Daniel Howard	8/20/21/1830		DWaters	8-21-21	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				9:30	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 24

Eurofins Environment Testing America

Client Information	Sampler: D Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	D	N	N	W	X	
AP1PZ-6	8/23/21	1412	G	W		X		X	X	X		3	pH=5.50

180-126161 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel R Howard	8/23/21 1545		D Water	8-24-21	ERTH
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

ORIGIN ID:MCNA (404) 273-0418
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.80 LB
CAD: 6994493/SSFE2220
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7068

INV:
PO:
REF:
DEPT:

RT 98
FZ
1
10:30 A
7077
08.19

FedEx Express

2 of 2
MPS# 0681 2827 2332 7077
Mstr# 8121 9394 4282

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US
0215

NA AGCA

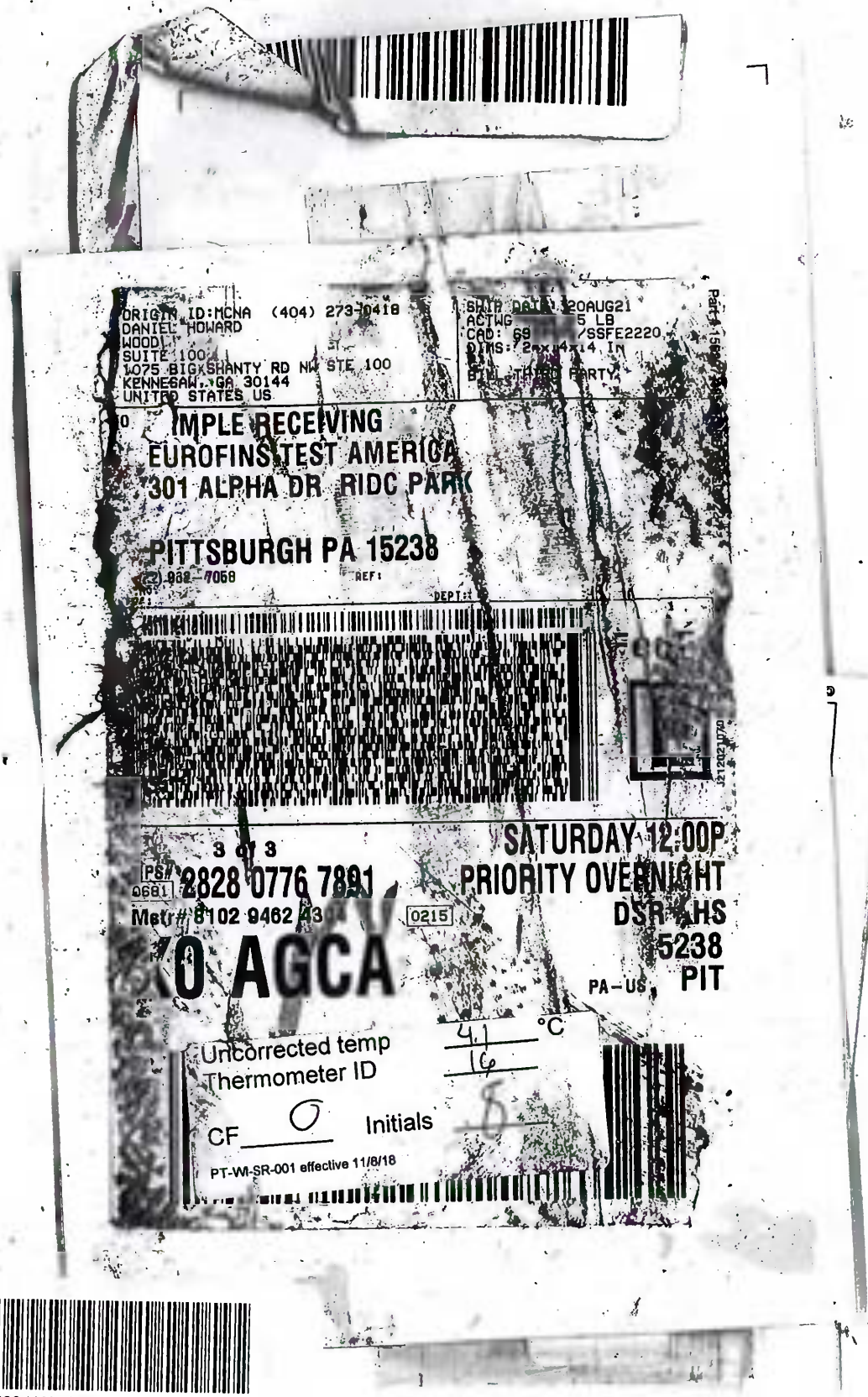
Uncorrected temp 20.2 °C
Thermometer ID 16
CF 0 Initials 8

PT-WI-SR-001 effective 11/8/18

180-125939 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E &
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
NA AGCA
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
0215
NA AGCA
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill



180-126094 Waybill

FedEx®

180-126097 Waybill

ORIGIN ID:MCNA
DANIEL HOWARD
(404) 273-0318
WOOD
SUITE 100
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 20AUG21
ACTWGT: 57.95 LB
CAD: 6994493/SSFE2220
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDGE PARK
RITTSBURGH PA 15238
(412) 963-7058

REF
PO

FedEx Express

2 of 3
MPS# 2828 0776 7880
Mstr# 8102 9462 4304
0681
021S

SATURDAY 12:00
PRIORITY OVERNIGH
DSR AH
1523
PI
PA-US

XO AGCA

Uncorrected Temp
Thermometer

CF
PT-WI-SR-001 effective

als

FedEx Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR AHS
15238 PIT
PA-US
XO AGCA
8102 9462 4304
1 of 3
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18
TO SAMPLE RECEIVING
EUROFINS TEST AMER
ALPHA DR RIDC P
PITTSBURGH PA 1523
(412) 963-7068
ORIGIN
DONALD HOWARD
(404) -0418
180-126098 Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx Express

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E&I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO

PITTSBURGH PA 15238

(412) 963-7068
REF:
DEPT:

FedEx Express

TRK# 0215 8121 9394 4591

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

NA AGCA

Uncorrected temp 4.2 °C
Thermometer ID 14
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-126161 Waybill

Part # 156297-436 PRTR FXE 06/22

1 From
Date
Sender's Name DEEAN
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
City KENNESAW State GA ZIP 30144-3652
Dept/Floor/Suite/Room

2 Your Internal Billing Reference

3 To
Recipient's Name Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

fedex.com 1.800.GoFedEx 1.800.463.3339

4 Express Package Service* *To most locations.
Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day
FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.
FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.
FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required
Package may be left without obtaining a signature for delivery.
Direct Signature
Someone at recipient's address may sign for delivery.
Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.
No
Yes
As per attached Shipper's Declaration not required.
Yes
Shipper's Declaration not required.
Dry Ice
Dry Ice, 9, UN 1845 x kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide.
Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.
Sender
Acct. No. in Section 1 will be billed
Recipient
Third Party
Credit Card
Cash/Check

Part # 156297-435 RRDB EXP 06/22

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E& I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT:
INV:
PO:

FedEx Express

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238 PIT
PA-US

TRK# 0215 8121 9394 4591

NA AGCA

Uncorrected temp 42 °C
Thermometer ID 16
CF 0 Initials
PT-WI-SR-001 effective 11/8/18

180-12616i Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

00033
00200

FedEx Express

Tracking Number

ID No.

1 From
Date
Sender's Name
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
Dept/Floor/Suite/Room
City KENNESAW State GA ZIP 30144-3652

2 Your Internal Billing Reference

3 To
Recipient's Name
Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept./Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service * To most locations.
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day
- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.
FedEx Envelope* | FedEx Pak* | FedEx Box | FedEx Tube | Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required — Package may be left without obtaining a signature for delivery.
Direct Signature — Someone at recipient's address may sign for delivery.
Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.
No | Yes — As per attached Shipper's Declaration. | Yes — Shipper's Declaration not required. | Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide.
Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.
Sender Acct. No. in Section 1 will be billed. | Recipient | Third Party | Credit Card | Cash/Check

fedex.com 1.800.GoFedEx 1.800.463.3339

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 125939
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 125949
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126094
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126097
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126098
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-1

Login Number: 126161
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125939-2
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/29/2021 11:59:08 AM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-125939-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125939-2

Comments
No additional comments.

Receipt
The samples were received on 8/19/2021 9:15 AM, 8/21/2021 9:30 AM and 8/24/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.1º C, 2.4º C, 3.6º C, 3.7º C, 4.1º C and 4.2º C.

RAD
Methods 903.0, 9315: Radium 226 prep batch 160-524072
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FB-1 (180-125939-1), EB-1 (180-125939-2), AP1PZ-7 (180-125939-3), AP1PZ-8 (180-125939-4), (LCS 160-524072/1-A) and (MB 160-524072/24-A)

Methods 903.0, 9315: Radium 226 prep batch 160-524328
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. APIGWA-1 (180-125949-1), APIGWA-2 (180-125949-2), DUP-1 (180-125949-3), (LCS 160-524328/1-A) and (MB 160-524328/23-A)

Method 9315: Radium-226 Batch 524659
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2), DUP-2 (180-126098-3), (LCS 160-524659/1-A), (LCSD 160-524659/2-A) and (MB 160-524659/23-A)

Methods 903.0, 9315: Radium-226 Batch 525034
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-3 (180-126098-4), (LCS 160-525034/1-A) and (MB 160-525034/23-A)

Methods 904.0, 9320: Radium 228 prep batch 160-524342
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. APIGWA-1 (180-125949-1), APIGWA-2 (180-125949-2), DUP-1 (180-125949-3), (LCS 160-524342/1-A) and (MB 160-524342/23-A)

Methods 904.0, 9320: Radium 228 prep batch 160-524081
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FB-1 (180-125939-1), EB-1 (180-125939-2), AP1PZ-7 (180-125939-3), AP1PZ-8 (180-125939-4), (LCS 160-524081/1-A) and (MB 160-524081/24-A)

Method 9320: Radium-228 Batch 524669
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2), DUP-2 (180-126098-3), (LCS 160-524669/1-A), (LCSD 160-524669/2-A) and (MB 160-524669/23-A)

Job ID: 180-125939-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

Methods 904.0, 9320: Radium-228 Batch 525041
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-3 (180-126098-4), (LCS 160-525041/1-A) and (MB 160-525041/23-A)

Method PrecSep_0: Ra-228 Batch 160-524669:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2) and DUP-2 (180-126098-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Ra-226 Batch 160-524659:
Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: EB-2 (180-126094-1), AP1PZ-9 (180-126094-2), FB-2 (180-126094-3), AP1PZ-10 (180-126094-4), AP1PZ-4 (180-126097-1), AP1PZ-5 (180-126097-2), AP1PZ-11 (180-126097-3), AP1PZ-1 (180-126098-1), AP1PZ-2 (180-126098-2) and DUP-2 (180-126098-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125939-1	FB-1	Water	08/18/21 09:35	08/19/21 09:15
180-125939-2	EB-1	Water	08/18/21 09:45	08/19/21 09:15
180-125939-3	AP1PZ-7	Water	08/18/21 13:10	08/19/21 09:15
180-125939-4	AP1PZ-8	Water	08/18/21 16:38	08/19/21 09:15
180-125949-1	APIGWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125949-2	APIGWA-2	Water	08/18/21 11:55	08/19/21 09:15
180-125949-3	DUP-1	Water	08/18/21 00:00	08/19/21 09:15
180-126094-1	EB-2	Water	08/19/21 09:50	08/21/21 09:30
180-126094-2	AP1PZ-9	Water	08/19/21 16:50	08/21/21 09:30
180-126094-3	FB-2	Water	08/20/21 09:10	08/21/21 09:30
180-126094-4	AP1PZ-10	Water	08/20/21 11:30	08/21/21 09:30
180-126097-1	AP1PZ-4	Water	08/20/21 11:30	08/21/21 18:09
180-126097-2	AP1PZ-5	Water	08/20/21 14:40	08/21/21 18:09
180-126097-3	AP1PZ-11	Water	08/20/21 16:50	08/21/21 18:09
180-126098-1	AP1PZ-1	Water	08/18/21 18:15	08/21/21 09:30
180-126098-2	AP1PZ-2	Water	08/19/21 13:45	08/21/21 09:30
180-126098-3	DUP-2	Water	08/19/21 00:00	08/21/21 09:30
180-126098-4	AP1PZ-3	Water	08/19/21 16:45	08/21/21 09:30
180-126161-1	AP1PZ-6	Water	08/23/21 14:12	08/24/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: FB-1
Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.72 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527396	09/16/21 21:24	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.72 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527452	09/16/21 11:50	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.61 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527396	09/16/21 21:24	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.61 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527452	09/16/21 11:51	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-7
Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.43 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527396	09/16/21 21:24	ANW	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.43 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527452	09/16/21 11:51	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.10 mL	1.0 g	524072	08/25/21 12:41	MJ	TAL SL
Total/NA	Analysis	9315		1			527397	09/16/21 21:20	ANW	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-8

Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.10 mL	1.0 g	524081	08/25/21 13:37	MJ	TAL SL
Total/NA	Analysis	9320		1			527379	09/16/21 11:55	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			528856	09/24/21 15:26	FLC	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APIGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.45 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			527825	09/21/21 13:36	SCB	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.45 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: APIGWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.99 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			528286	09/21/21 13:39	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.99 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.77 mL	1.0 g	524328	08/27/21 10:49	MJ	TAL SL
Total/NA	Analysis	9315		1			528286	09/21/21 13:39	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.77 mL	1.0 g	524342	08/27/21 12:08	MJ	TAL SL
Total/NA	Analysis	9320		1			527397	09/16/21 12:19	ANW	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-1
Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			528682	09/23/21 16:11	SCB	TAL SL

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.74 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:14	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.74 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:05	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-9
Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.73 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:14	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.73 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528313	09/22/21 14:05	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2
Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.34 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528313	09/22/21 20:14	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.34 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:10	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-10
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.80 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			999.80 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-4
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.53 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.53 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-5
Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.94 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.94 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:12	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.04 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528478	09/22/21 19:52	ANW	TAL SL
	Instrument ID: GFPCRED									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.04 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-1
Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.17 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:19	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:11	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-2
Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.05 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:19	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.05 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:12	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.86 mL	1.0 g	524659	08/30/21 12:33	MJ	TAL SL
Total/NA	Analysis	9315		1			528321	09/22/21 20:19	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.86 mL	1.0 g	524669	08/30/21 13:46	MJ	TAL SL
Total/NA	Analysis	9320		1			528321	09/22/21 14:12	FLC	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			528687	09/23/21 16:58	SCB	TAL SL

Client Sample ID: AP1PZ-3
Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.33 mL	1.0 g	525034	09/01/21 09:33	MJ	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	528519	09/23/21 16:46	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.33 mL	1.0 g	525041	09/01/21 10:24	MJ	TAL SL
Total/NA	Analysis	9320		1			528515	09/23/21 13:57	ANW	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			528687	09/24/21 16:09	SCB	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-6
Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.23 mL	1.0 g	525267	09/02/21 14:12	MJ	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	528891	09/26/21 19:53	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.23 mL	1.0 g	525276	09/02/21 15:19	MJ	TAL SL
Total/NA	Analysis	9320		1			528688	09/23/21 13:44	ANW	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			529094	09/27/21 17:29	FLC	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:
TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:
Lab: TAL SL
- Batch Type: Prep
  - MJ = Mary Johns
- Batch Type: Analysis
  - ANW = Aamber Woods
  - FLC = Fernando Cruz
  - SCB = Sarah Bernsen

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: FB-1

Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0308	U	0.193	0.193	1.00	0.401	pCi/L	08/25/21 12:41	09/16/21 21:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.394	U	0.298	0.301	1.00	0.470	pCi/L	08/25/21 13:37	09/16/21 11:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.6*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:50*	*1*
Y Carrier	*83.7*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:50*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.363	U	0.355	0.358	5.00	0.470	pCi/L		09/24/21 15:26	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.205	U	0.260	0.260	1.00	0.432	pCi/L	08/25/21 12:41	09/16/21 21:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0163	U	0.235	0.235	1.00	0.419	pCi/L	08/25/21 13:37	09/16/21 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*
Y Carrier	*86.4*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.221	U	0.350	0.350	5.00	0.432	pCi/L		09/24/21 15:26	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-7

Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.385	U	0.285	0.287	1.00	0.423	pCi/L	08/25/21 12:41	09/16/21 21:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.328	U	0.268	0.270	1.00	0.427	pCi/L	08/25/21 13:37	09/16/21 11:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*
Y Carrier	*84.9*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:51*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.713**		0.391	0.394	5.00	0.427	pCi/L		09/24/21 15:26	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125939-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.703		0.301	0.308	1.00	0.364	pCi/L	08/25/21 12:41	09/16/21 21:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/25/21 12:41*	*09/16/21 21:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.749		0.300	0.308	1.00	0.422	pCi/L	08/25/21 13:37	09/16/21 11:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/25/21 13:37*	*09/16/21 11:55*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.45		0.425	0.436	5.00	0.422	pCi/L		09/24/21 15:26	1

Client Sample ID: APIGWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.199**		0.132	0.134	1.00	0.193	pCi/L	08/27/21 10:49	09/21/21 13:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.353	U	0.337	0.339	1.00	0.547	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*70.7*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.552**		0.362	0.365	5.00	0.547	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: APIGWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.102	0.103	1.00	0.164	pCi/L	08/27/21 10:49	09/21/21 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.231	U	0.253	0.254	1.00	0.415	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*83.4*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.333	U	0.273	0.274	5.00	0.415	pCi/L		09/23/21 16:11	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125949-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.335		0.129	0.132	1.00	0.146	pCi/L	08/27/21 10:49	09/21/21 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*08/27/21 10:49*	*09/21/21 13:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.472		0.264	0.267	1.00	0.396	pCi/L	08/27/21 12:08	09/16/21 12:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*
Y Carrier	*84.5*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:19*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.807		0.294	0.298	5.00	0.396	pCi/L		09/23/21 16:11	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-1
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00798	U	0.192	0.192	1.00	0.378	pCi/L	08/30/21 12:33	09/22/21 20:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0239	U	0.199	0.199	1.00	0.358	pCi/L	08/30/21 13:46	09/22/21 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*
Y Carrier	*84.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0159	U	0.277	0.277	5.00	0.378	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-9

Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.270	U	0.287	0.288	1.00	0.462	pCi/L	08/30/21 12:33	09/22/21 20:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.507**		0.311	0.314	1.00	0.471	pCi/L	08/30/21 13:46	09/22/21 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*
Y Carrier	*84.5*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:05*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.777**		0.423	0.426	5.00	0.471	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: FB-2

Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0289	U	0.233	0.233	1.00	0.440	pCi/L	08/30/21 12:33	09/22/21 20:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.670**		0.299	0.305	1.00	0.426	pCi/L	08/30/21 13:46	09/22/21 14:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:10*	*1*
Y Carrier	*82.6*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:10*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.699**		0.379	0.384	5.00	0.440	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-10

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126094-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.457	U	0.496	0.498	1.00	0.804	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*43.7*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.317	U	0.550	0.551	1.00	0.930	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*43.7*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*86.7*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.774	U	0.741	0.743	5.00	0.930	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-4

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.130	U	0.196	0.196	1.00	0.335	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.4*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.120	U	0.240	0.240	1.00	0.409	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.4*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*87.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.251	U	0.310	0.310	5.00	0.409	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-5

Date Collected: 08/20/21 14:40
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.643**		0.283	0.289	1.00	0.333	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.4*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.383	U	0.277	0.279	1.00	0.434	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.4*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*86.7*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.03**		0.396	0.402	5.00	0.434	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-11

Date Collected: 08/20/21 16:50
Date Received: 08/21/21 18:09

Lab Sample ID: 180-126097-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00433	U	0.157	0.157	1.00	0.322	pCi/L	08/30/21 12:33	09/22/21 19:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/30/21 12:33*	*09/22/21 19:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.317	U	0.261	0.263	1.00	0.416	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.1*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*88.6*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.321	U	0.305	0.306	5.00	0.416	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-1

Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0935	U	0.185	0.185	1.00	0.403	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.105	U	0.194	0.194	1.00	0.373	pCi/L	08/30/21 13:46	09/22/21 14:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*
Y Carrier	*87.5*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:11*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.198	U	0.268	0.268	5.00	0.403	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-2

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.263	U	0.247	0.248	1.00	0.385	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.326	U	0.298	0.299	1.00	0.480	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*88.6*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.589**		0.387	0.388	5.00	0.480	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0487	U	0.203	0.203	1.00	0.380	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*08/30/21 12:33*	*09/22/21 20:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0274	U	0.227	0.227	1.00	0.404	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*89.0*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0761	U	0.305	0.305	5.00	0.404	pCi/L		09/23/21 16:58	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Client Sample ID: AP1PZ-3

Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126098-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.116	U	0.245	0.245	1.00	0.433	pCi/L	09/01/21 09:33	09/23/21 16:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*09/01/21 09:33*	*09/23/21 16:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.790**		0.287	0.296	1.00	0.387	pCi/L	09/01/21 10:24	09/23/21 13:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.7*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:57*	*1*
Y Carrier	*84.1*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:57*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.906**		0.377	0.384	5.00	0.433	pCi/L		09/24/21 16:09	1

Client Sample ID: AP1PZ-6

Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126161-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.153	U	0.154	0.154	1.00	0.246	pCi/L	09/02/21 14:12	09/26/21 19:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*09/02/21 14:12*	*09/26/21 19:53*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.364	U	0.311	0.312	1.00	0.496	pCi/L	09/02/21 15:19	09/23/21 13:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.0*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:44*	*1*
Y Carrier	*84.1*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:44*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.517**		0.347	0.348	5.00	0.496	pCi/L		09/27/21 17:29	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-524072/24-A
Matrix: Water
Analysis Batch: 527397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524072

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08951	U	0.238	0.238	1.00	0.429	pCi/L	08/25/21 12:41	09/16/21 23:02	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*08/25/21 12:41*	*09/16/21 23:02*	*1*

Lab Sample ID: LCS 160-524072/1-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524072

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.32		1.46	1.00	0.372	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.2*		*40 - 110*

Lab Sample ID: MB 160-524328/23-A
Matrix: Water
Analysis Batch: 527825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524328

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1190	U	0.126	0.126	1.00	0.203	pCi/L	08/27/21 10:49	09/21/21 15:26	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/27/21 10:49*	*09/21/21 15:26*	*1*

Lab Sample ID: LCS 160-524328/1-A
Matrix: Water
Analysis Batch: 528287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524328

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.81		1.29	1.00	0.202	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.7*		*40 - 110*

Lab Sample ID: MB 160-524659/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524659

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1098	U	0.243	0.243	1.00	0.433	pCi/L	08/30/21 12:33	09/22/21 20:19	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-524659/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524659

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110	08/30/21 12:33	09/22/21 20:19	1

Lab Sample ID: LCS 160-524659/1-A
Matrix: Water
Analysis Batch: 528478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524659

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.76		1.42	1.00	0.396	pCi/L	95	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	83.1		40 - 110

Lab Sample ID: LCSD 160-524659/2-A
Matrix: Water
Analysis Batch: 528478

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524659

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	10.50		1.41	1.00	0.378	pCi/L	93	75 - 125	0.09	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	82.1		40 - 110

Lab Sample ID: MB 160-525034/23-A
Matrix: Water
Analysis Batch: 528519

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525034

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07005	U	0.233	0.233	1.00	0.426	pCi/L	09/01/21 09:33	09/23/21 18:50	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110	09/01/21 09:33	09/23/21 18:50	1

Lab Sample ID: LCS 160-525034/1-A
Matrix: Water
Analysis Batch: 528519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525034

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.04		1.53	1.00	0.556	pCi/L	97	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	69.8		40 - 110

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-525267/25-A
Matrix: Water
Analysis Batch: 528892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525267

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.4165		0.193	0.196	1.00	0.249	pCi/L	09/02/21 14:12	09/26/21 21:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*40 - 110*	*09/02/21 14:12*	*09/26/21 21:59*	*1*

Lab Sample ID: LCS 160-525267/1-A
Matrix: Water
Analysis Batch: 528891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525267

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.33		1.27	1.00	0.232	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.4*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-524081/24-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524081

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5380		0.312	0.316	1.00	0.473	pCi/L	08/25/21 13:37	09/16/21 12:06	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*08/25/21 13:37*	*09/16/21 12:06*	*1*
Y Carrier	*86.7*		*40 - 110*	*08/25/21 13:37*	*09/16/21 12:06*	*1*

Lab Sample ID: LCS 160-524081/1-A
Matrix: Water
Analysis Batch: 527452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524081

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.33	7.639		1.01	1.00	0.555	pCi/L	82	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.2*		*40 - 110*
Y Carrier	*82.2*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-524342/23-A
Matrix: Water
Analysis Batch: 527397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524342

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1554	U	0.251	0.251	1.00	0.424	pCi/L	08/27/21 12:08	09/16/21 12:20	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*
Y Carrier	*85.2*		*40 - 110*	*08/27/21 12:08*	*09/16/21 12:20*	*1*

Lab Sample ID: LCS 160-524342/1-A
Matrix: Water
Analysis Batch: 527396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524342

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.33	9.679		1.22	1.00	0.510	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.7*		*40 - 110*
Y Carrier	*79.3*		*40 - 110*

Lab Sample ID: MB 160-524669/23-A
Matrix: Water
Analysis Batch: 528321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524669

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.05024	U	0.282	0.282	1.00	0.507	pCi/L	08/30/21 13:46	09/22/21 14:12	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*
Y Carrier	*87.9*		*40 - 110*	*08/30/21 13:46*	*09/22/21 14:12*	*1*

Lab Sample ID: LCS 160-524669/1-A
Matrix: Water
Analysis Batch: 528313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524669

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.31	9.135		1.13	1.00	0.530	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*83.1*		*40 - 110*
Y Carrier	*83.0*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCSD 160-524669/2-A
Matrix: Water
Analysis Batch: 528313

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524669

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.31	9.261		1.13	1.00	0.499	pCi/L	99	75 - 125	0.06	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*82.1*		*40 - 110*
Y Carrier	*84.9*		*40 - 110*

Lab Sample ID: MB 160-525041/23-A
Matrix: Water
Analysis Batch: 528517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525041

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.06242	U	0.282	0.282	1.00	0.508	pCi/L	09/01/21 10:24	09/23/21 13:56	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.1*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:56*	*1*
Y Carrier	*85.2*		*40 - 110*	*09/01/21 10:24*	*09/23/21 13:56*	*1*

Lab Sample ID: LCS 160-525041/1-A
Matrix: Water
Analysis Batch: 528515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525041

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.31	10.24		1.29	1.00	0.621	pCi/L	110	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*69.8*		*40 - 110*
Y Carrier	*83.0*		*40 - 110*

Lab Sample ID: MB 160-525276/25-A
Matrix: Water
Analysis Batch: 528515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 525276

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1022	U	0.285	0.285	1.00	0.523	pCi/L	09/02/21 15:19	09/23/21 13:46	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.9*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:46*	*1*
Y Carrier	*83.0*		*40 - 110*	*09/02/21 15:19*	*09/23/21 13:46*	*1*

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125939-2

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-525276/1-A
Matrix: Water
Analysis Batch: 528688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 525276

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.31	10.16		1.25	1.00	0.557	pCi/L	109	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*72.4*		*40 - 110*
Y Carrier	*84.1*		*40 - 110*

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Prep Batch: 524072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	PrecSep-21	
180-125939-2	EB-1	Total/NA	Water	PrecSep-21	
180-125939-3	AP1PZ-7	Total/NA	Water	PrecSep-21	
180-125939-4	AP1PZ-8	Total/NA	Water	PrecSep-21	
MB 160-524072/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524072/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 524081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125939-1	FB-1	Total/NA	Water	PrecSep_0	
180-125939-2	EB-1	Total/NA	Water	PrecSep_0	
180-125939-3	AP1PZ-7	Total/NA	Water	PrecSep_0	
180-125939-4	AP1PZ-8	Total/NA	Water	PrecSep_0	
MB 160-524081/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524081/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 524328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125949-1	APIGWA-1	Total/NA	Water	PrecSep-21	
180-125949-2	APIGWA-2	Total/NA	Water	PrecSep-21	
180-125949-3	DUP-1	Total/NA	Water	PrecSep-21	
MB 160-524328/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524328/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 524342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125949-1	APIGWA-1	Total/NA	Water	PrecSep_0	
180-125949-2	APIGWA-2	Total/NA	Water	PrecSep_0	
180-125949-3	DUP-1	Total/NA	Water	PrecSep_0	
MB 160-524342/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524342/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 524659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	PrecSep-21	
180-126094-2	AP1PZ-9	Total/NA	Water	PrecSep-21	
180-126094-3	FB-2	Total/NA	Water	PrecSep-21	
180-126094-4	AP1PZ-10	Total/NA	Water	PrecSep-21	
180-126097-1	AP1PZ-4	Total/NA	Water	PrecSep-21	
180-126097-2	AP1PZ-5	Total/NA	Water	PrecSep-21	
180-126097-3	AP1PZ-11	Total/NA	Water	PrecSep-21	
180-126098-1	AP1PZ-1	Total/NA	Water	PrecSep-21	
180-126098-2	AP1PZ-2	Total/NA	Water	PrecSep-21	
180-126098-3	DUP-2	Total/NA	Water	PrecSep-21	
MB 160-524659/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-524659/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-524659/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 524669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-1	EB-2	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 524669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126094-2	AP1PZ-9	Total/NA	Water	PrecSep_0	
180-126094-3	FB-2	Total/NA	Water	PrecSep_0	
180-126094-4	AP1PZ-10	Total/NA	Water	PrecSep_0	
180-126097-1	AP1PZ-4	Total/NA	Water	PrecSep_0	
180-126097-2	AP1PZ-5	Total/NA	Water	PrecSep_0	
180-126097-3	AP1PZ-11	Total/NA	Water	PrecSep_0	
180-126098-1	AP1PZ-1	Total/NA	Water	PrecSep_0	
180-126098-2	AP1PZ-2	Total/NA	Water	PrecSep_0	
180-126098-3	DUP-2	Total/NA	Water	PrecSep_0	
MB 160-524669/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-524669/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-524669/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 525034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-4	AP1PZ-3	Total/NA	Water	PrecSep-21	
MB 160-525034/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-525034/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 525041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126098-4	AP1PZ-3	Total/NA	Water	PrecSep_0	
MB 160-525041/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-525041/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 525267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	PrecSep-21	
MB 160-525267/25-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-525267/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 525276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126161-1	AP1PZ-6	Total/NA	Water	PrecSep_0	
MB 160-525276/25-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-525276/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

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Chain of Custody Record

244- ATLANTA

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/Evan Guillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes:
City: Atlanta	TAT Requested (days): Standard			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
FB-1	8/18/21	0935	G	W			X		X	X	X		3	
EB-1		0945	G	W			X		X	X	X		3	
AP1PZ-7		1310	G	W			X		X	X	X		3	
AP1PZ-8		1638	G	W			X		X	X	X		3	

180-125939 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/18/21 1900		D Watson	8-19-21 9:15	EA Pitt
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244 - ATLANTA

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EvanGuilen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury							Total Number of containers	Special Instructions/Note:
Preservation Code:							D	D	N	N	N	N								
APIGWA-1	8/17/21	1510	G	W			X		X	X	X								3	
APIGWA-2	8/18/21	1155	G	W			X		X	X	X								3	
DUP-1	8/18/21	—	G	W			X		X	X	X								3	

180-125949 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	David Howard	8/18/21 / 1900		D Waters	8-19-21	Kettle
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:15	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing America

ATLANTA-224

Client Information	Sampler: DHoward/EGullen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	D									
EB-2	8/19/21	0950	G	W			X		X	X	X									3	
AP1PZ-9	8/19/21	1650	G	W			X		X	X	X									3	pH=5.77
FB-2	8/20/21	0910	G	W			X		X	X	X									3	
AP1PZ-10	8/20/21	1130	G	W			X		X	X	X									3	pH=6.53

180-126094 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Daniel L Howard	8/20/21/1830		Duratek	8-21-21 930	ETAPlt
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: DHoward/EGwilkey	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 16 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	XD	XD		
AP1PZ-4	8/20/21	1130	G	W			X		X	X	X		3	pH=6.56
AP1PZ-5	↓	1440	G	W			X		X	X	X		3	pH=6.60
AP1PZ-11	↓	1650	G	W			X		X	X	X		3	pH=6.71

180-126097 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
David L Howard	8/20/21 1830		D Watson	8-21-21	EGI
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244-ATLANTA

eurofins Environment Testing America

Client Information	Sampler: DHoward/EGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	D	D	N	N	MD	MD									
AP1PZ-1	8/18/21	1815	G	W			X		X	X	X									3	pH=5.59
AP1PZ-2	8/19/21	1345	G	W			X		X	X	X									3	pH=5.84
DUP-2		-	G	W			X		X	X	X									3	pH=5.84
AP1PZ-3	↓	1645	G	W			X		X	X	X									3	pH=5.60

180-126098 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than ... nth)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/20/21 1830		DWatson	8-21-21	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				9:30	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 24

Eurofins Environment Testing America

Client Information	Sampler: D Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	D	N	N	W	X	
AP1PZ-6	8/23/21	1412	G	W		X		X	X	X		3	pH=5.50

180-126161 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel R Howard	8/23/21 1545		D Water	8-24-21	EHHT
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

ORIGIN ID:MCNA (404) 273-0418
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.80 LB
CAD: 6994493/SSFE2220
DIMS: 24x13x14 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7068
INV:
PO:
REF:
DEPT:

RT 98
FZ
1
10:30 A
7077
08.19

FedEx Express

2 of 2
MPS# 0681 2827 2332 7077
Mstr# 8121 9394 4282 0215

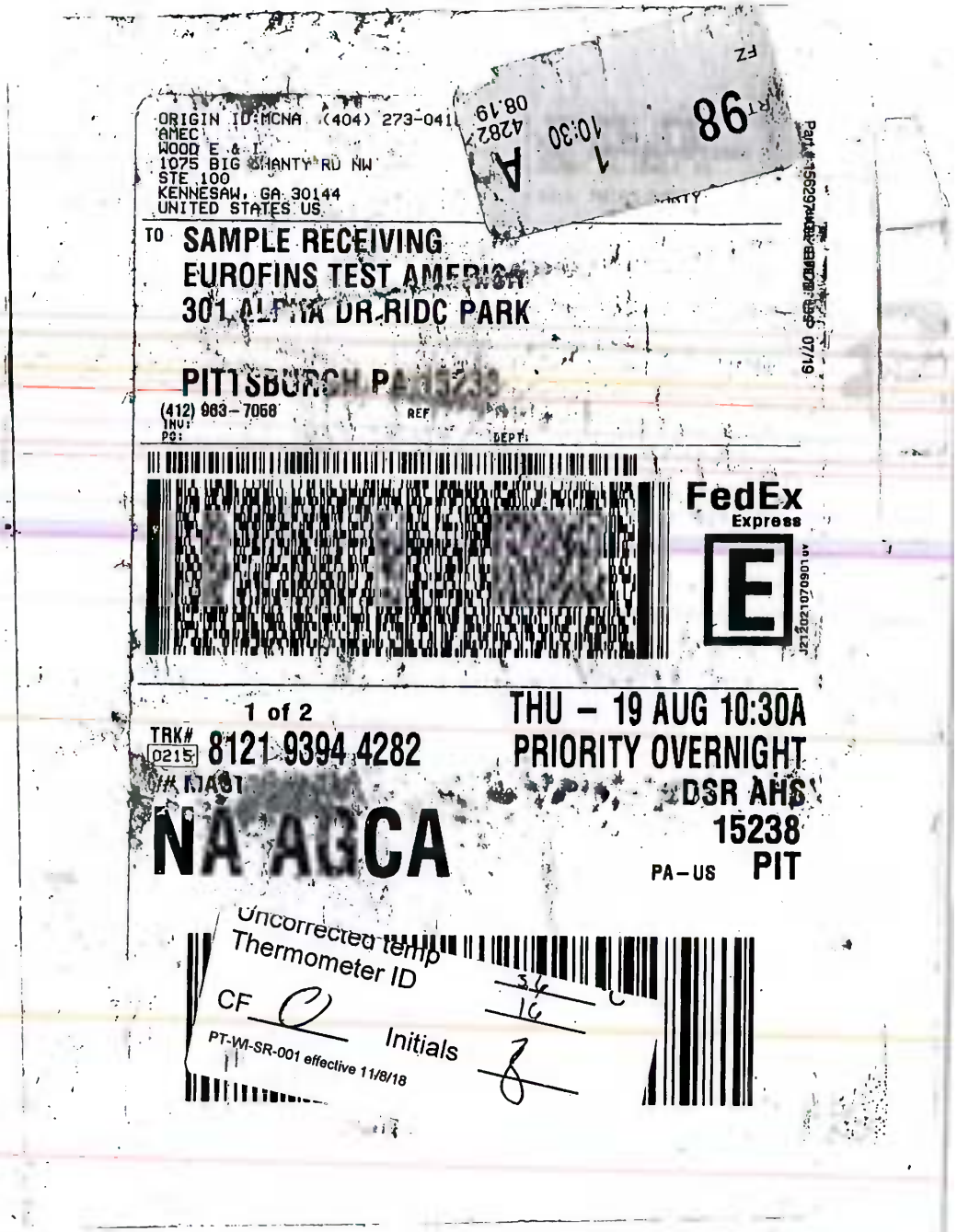
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

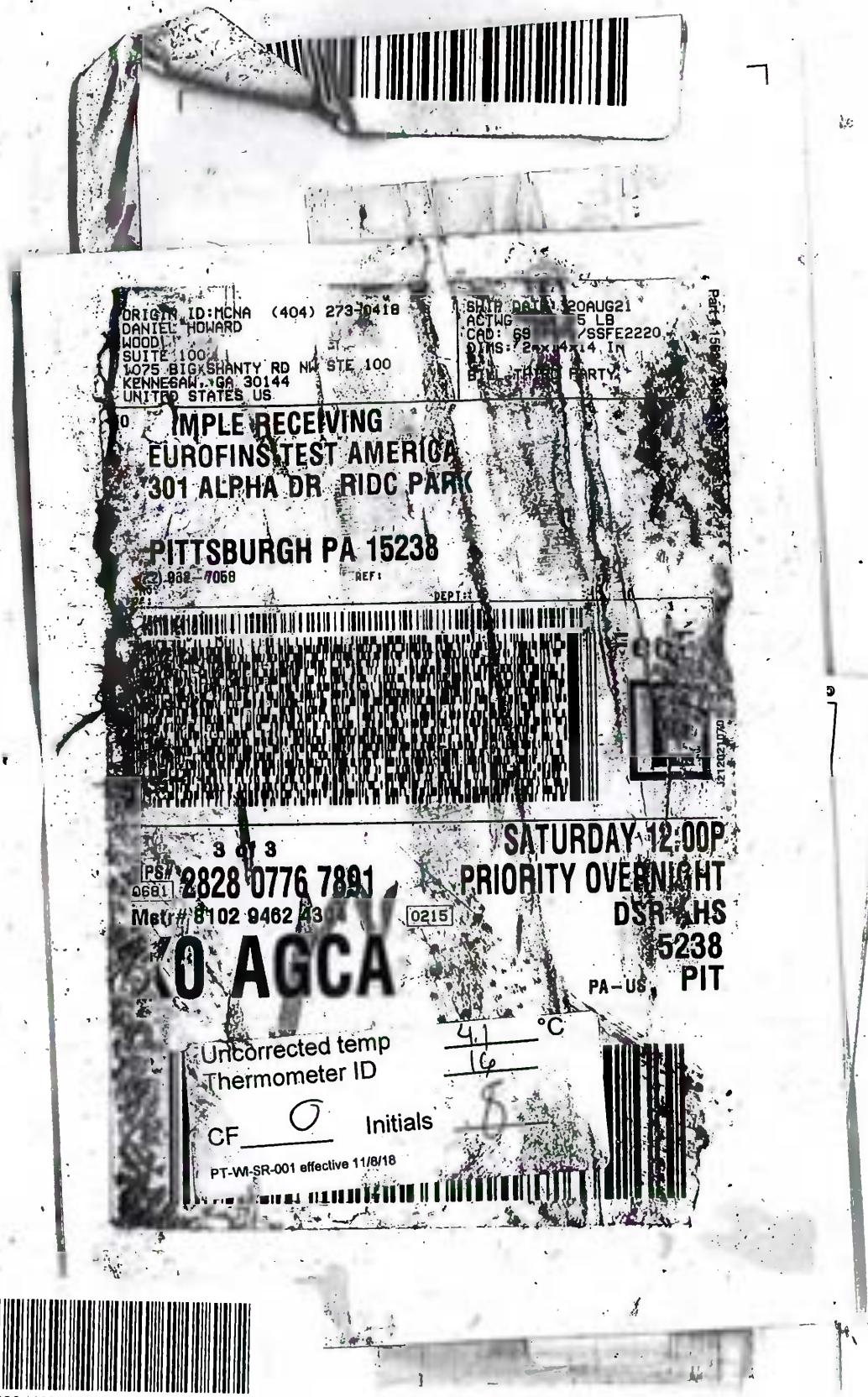
NA AGCA

Uncorrected temp 8.2 °C
Thermometer ID 16
CF 0 Initials 8
PT-WI-SR-001 effective 11/8/18

180-125939 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E &
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
NA AGCA
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill


ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF
INV:
PO:
DEPT:
FedEx
Express
1 of 2
TRK# 8121 9394 4282
0215
NA AGCA
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-12594 Waybill



180-126094 Waybill

FedEx®

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
WOOD
SUITE 100
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 20AUG21
ACTWGT: 57.95 LB
CAD: 6994493/SSFE2220
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7058

REF:
INV:
PO:
DEPT:

FedEx
Express

2 of 3
MPS# 2828 0776 7880
0681
Mstr# 8102 9462 4304
0215

SATURDAY 12:00
PRIORITY OVERNIGH
DSR AH
1523
PI
PA-US

XO AGCA

Uncorrected temp
Thermometer ID
CF 0
°C
Initials
PT-WI-SR-001 effective 11/20

9/29/2021

Page 2 of 2


ORIGIN D:MCNA (404) -0418
DANIEL HOWARD
SUITE 100
1900 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US
TE: 2 UG21
62.80 LB
94493/SSFE2220
24x14x14 IN
BILL THIRD PARTY
TO SAMPLE RECEIVING
EUROFINS TEST AMER
301 ALPHA DR RIDC P
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT
FedEx
Express
1 of 3
TRK# 0215 8102 9462 4304
MASTER
XO AGCA
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18


180-126098 Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx Express

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E&I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO

PITTSBURGH PA 15238

(412) 963-7068
REF:
DEPT:

180-126161 Waybill

FedEx Express

J212021070901an

TRK# 0215 8121 9394 4591

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

NA AGCA

Uncorrected temp 4.2 °C
Thermometer ID 14
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

Part # 156297-436 PRTR FXE 06/22

1 From
Date
Sender's Name DEEAN
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
City KENNESAW State GA ZIP 30144-3652
Dept/Floor/Suite/Room

2 Your Internal Billing Reference

3 To
Recipient's Name Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address
REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address
REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

fedex.com 1.800.GoFedEx 1.800.463.3339

7 Payment Bill to:
Sender
Acct No. in Section 1 will be billed
Recipient
Third Party
Credit Card
Cash/Check
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.

Does this shipment contain dangerous goods?
One box must be checked.
No
Yes
As per attached Shipper's Declaration
Yes
Shipper's Declaration not required
Dry Ice
Dry ice, 9, UN 1845 x kg
Cargo Aircraft Only
Restrictions apply for dangerous goods — see the current FedEx Service Guide.

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required
Package may be left without obtaining a signature for delivery.
Direct Signature
Someone at recipient's address may sign for delivery.
Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

5 Packaging *Declared value limit $500.
FedEx Envelope*
FedEx Pak*
FedEx Box
FedEx Tube
Other

Next Business Day
FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.
FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

FedEx Express Package Service
* To most locations.
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Recipient Copy

Part # 156297-435 RRDB EXP 06/22

FedEx Express

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN
BILL THIRD PARTY

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E& I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT:
INV:
PO:

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238 PIT
PA-US

TRK# 8121 9394 4591
0215

NA AGCA

Uncorrected temp 42 °C
Thermometer ID 16
CF 0 Initials
PT-WI-SR-001 effective 11/8/18

180-12616i Waybill

Align FedEx Pouch Here

fedex.com 1.800.GoFedEx 1.800.463.3339

00033
00200

FedEx Express

Tracking Number 8121 9394 4591

ID No.

1 From
Date
Sender's Name DEEA DPI 770 1-3
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
Dept./Floor/Suite/Room
City KENNESAW State GA ZIP 30144-3652

2 Your Internal Billing Reference

3 To
Recipient's Name Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept./Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.
Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service * To most locations.
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day
- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.
FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
No Signature Required — Package may be left without obtaining a signature for delivery.
Direct Signature — Someone at recipient's address may sign for delivery.
Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.
No Yes As per attached Shipper's Declaration. Yes Shipper's Declaration not required. Dry Ice Dry ice, 9, UN 1845 ____ x ____ kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide.
Cargo Aircraft Only

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.
Sender Acct. No. in Section 1 will be billed. Recipient Third Party Credit Card Cash/Check

fedex.com 1.800.GoFedEx 1.800.463.3339

9/29/2021

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442319.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-125939-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/1/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
FB-1 (180-125939-1)	8/18/21	09:35 Eastern		Water			X	X	X	2	
EB-1 (180-125939-2)	8/18/21	09:45 Eastern		Water			X	X	X	2	
AP1PZ-7 (180-125939-3)	8/18/21	13:10 Eastern		Water			X	X	X	2	
AP1PZ-8 (180-125939-4)	8/18/21	16:38 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 8/20/21 1700	Company	Received by: FED EX	Date/Time:	Company		
Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: 8/21/21 0842	Company ETA SJC		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442319.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-125949-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/1/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APIGWA-1 (180-125949-1)	8/17/21	15:10 Eastern		Water			X	X	X	2	
APIGWA-2 (180-125949-2)	8/18/21	11:55 Eastern		Water			X	X	X	2	
DUP-1 (180-125949-3)	8/18/21	Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: FED EX	Date/Time: 8/20/21 1700	Company	Received by: FED EX	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8/21/21 0842	Company STA SRR	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126094-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/6/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
EB-2 (180-126094-1)	8/19/21	09:50 Eastern		Water			X	X	X	2	
AP1PZ-9 (180-126094-2)	8/19/21	16:50 Eastern		Water			X	X	X	2	
FB-2- (180-126094-3)	8/20/21	09:10 Eastern		Water			X	X	X	2	
AP1PZ-10 (180-126094-4)	8/20/21	11:30 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	ME	8/23/21 1700	ETA STL	FE		
	FE			Micha Konrings	08/24/2021 09:35	ETA STL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126097-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/26/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
AP1PZ-4 (180-126097-1)	8/20/21	11:30 Eastern		Water			X	X	X	2	
AP1PZ-5 (180-126097-2)	8/20/21	14:40 Eastern		Water			X	X	X	2	
AP1PZ-11 (180-126097-3)	8/20/21	16:50 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: ERT	Received by: FE	Date/Time:	Company	
Relinquished by: FE	Date/Time:	Company	Received by: Micha Koinzhing	Date/Time: 8/24/21 09:35	Company: ETA SR	
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-442391.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-126098-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 9/26/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
AP1PZ-1 (180-126098-1)	8/18/21	18:15 Eastern		Water			X	X	X	2	
AP1PZ-2 (180-126098-2)	8/19/21	13:45 Eastern		Water			X	X	X	2	
DUP-2 (180-126098-3)	8/19/21	Eastern		Water			X	X	X	2	
AP1PZ-3 (180-126098-4)	8/19/21	16:45 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by: MO	Date/Time: 8/23/21 1700	Company: ERTH	Received by: FE	Date/Time:	Company	
Relinquished by: FE	Date/Time:	Company	Received by: Micha Kerrington	Date/Time: 8/24/21 09:35	Company: ETA SDG	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125939
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125939
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/21/21 12:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125949
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 125949
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/21/21 12:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126094
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126094
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126097
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126097
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126098
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126098
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/24/21 05:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126161
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125939-2

Login Number: 126161
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 08/27/21 09:55 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-125940-1
Client Project/Site: Plant Arkwright AP-1
Revision: 1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
8/27/2021 12:51:36 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Job ID: 180-125940-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125940-1

Comments
082721 Revised to include three samples from 180-195428-1. This report replaces the report previously issued on 082621.

Receipt
The samples were received on 8/19/2021 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.1º C and 3.6º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125940-1	FB-1	Water	08/18/21 09:35	08/19/21 09:15
180-125940-2	EB-1	Water	08/18/21 09:45	08/19/21 09:15
180-125940-3	AP1PZ-7	Water	08/18/21 13:10	08/19/21 09:15
180-125940-4	AP1PZ-8	Water	08/18/21 16:38	08/19/21 09:15
180-125948-1	AP1GWA-1	Water	08/17/21 15:10	08/19/21 09:15
180-125948-2	AP1GWA-2	Water	08/18/21 11:55	08/19/21 09:15
180-125948-3	DUP-1	Water	08/18/21 00:00	08/19/21 09:15

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: FB-1
Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:28	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:32	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: EB-1
Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:32	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:33	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-7
Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:35	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:34	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-8
Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:39	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:35	KEM	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1GWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:54	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:27	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1GWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 12:57	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:28	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368732	08/20/21 12:14	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			368942	08/21/21 13:01	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	368676	08/20/21 08:47	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			368918	08/23/21 15:31	KEM	TAL PIT
	Instrument ID: HGZ									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

TLP = Tara Peterson

Batch Type: Analysis

KEM = Kimberly Mahoney

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: FB-1

Date Collected: 08/18/21 09:35
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:28	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:28	1
Barium	<0.0016		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:28	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:28	1
Boron	**0.054**	**J**	0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:28	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:28	1
Calcium	<0.13		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:28	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:28	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:28	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:28	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:28	1
Thallium	**0.00027**	**J**	0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:28	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:32	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: EB-1

Date Collected: 08/18/21 09:45
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:32	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:32	1
Barium	<0.0016		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:32	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:32	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:32	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:32	1
Calcium	<0.13		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:32	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:32	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:32	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:32	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:32	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:32	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:32	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:33	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1PZ-7

Date Collected: 08/18/21 13:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00041**	**J**	0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:35	1
Arsenic	**0.0020**		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:35	1
Barium	**0.097**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:35	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:35	1
Boron	**2.1**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:35	1
Calcium	**330**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:35	1
Chromium	**0.0015**	**J**	0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:35	1
Cobalt	**0.0085**		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:35	1
Lead	**0.00013**	**J**	0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:35	1
Lithium	**0.0038**	**J**	0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:35	1
Molybdenum	**0.011**	**J**	0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:35	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:34	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1PZ-8

Date Collected: 08/18/21 16:38
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125940-4

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:39	1
Arsenic	**0.0016**		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:39	1
Barium	**0.085**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:39	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:39	1
Boron	**2.4**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:39	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:39	1
Calcium	**250**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:39	1
Cobalt	**0.00090**	**J**	0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:39	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:39	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:39	1
Molybdenum	**0.41**		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:39	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:39	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:39	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:35	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1GWA-1

Date Collected: 08/17/21 15:10
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:54	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:54	1
Barium	**0.059**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:54	1
Beryllium	**0.0019**	**J**	0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:54	1
Boron	**0.14**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:54	1
Cadmium	**0.00040**	**J**	0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:54	1
Calcium	**18**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:54	1
Chromium	**0.0038**		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:54	1
Cobalt	**0.0084**		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:54	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:54	1
Lithium	**0.011**		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:54	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:54	1
Selenium	**0.0030**	**J**	0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:54	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:54	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: AP1GWA-2

Date Collected: 08/18/21 11:55
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:57	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:57	1
Barium	**0.044**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:57	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:57	1
Boron	**0.066**	**J**	0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:57	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:57	1
Calcium	**6.4**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:57	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:57	1
Cobalt	**0.0082**		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:57	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:57	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:57	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:57	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:57	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:57	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:28	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Client Sample ID: DUP-1

Date Collected: 08/18/21 00:00
Date Received: 08/19/21 09:15

Lab Sample ID: 180-125948-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 13:01	1
Arsenic	**0.0017**		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 13:01	1
Barium	**0.084**		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 13:01	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 13:01	1
Boron	**2.3**		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 13:01	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 13:01	1
Calcium	**250**		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 13:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 13:01	1
Cobalt	**0.0010**	**J**	0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 13:01	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 13:01	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 13:01	1
Molybdenum	**0.41**		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 13:01	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 13:01	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 13:01	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:31	1

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-368732/1-A
Matrix: Water
Analysis Batch: 368942

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 368732

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/20/21 12:14	08/21/21 12:21	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/20/21 12:14	08/21/21 12:21	1
Barium	<0.0016		0.010	0.0016	mg/L		08/20/21 12:14	08/21/21 12:21	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/20/21 12:14	08/21/21 12:21	1
Boron	<0.039		0.080	0.039	mg/L		08/20/21 12:14	08/21/21 12:21	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/20/21 12:14	08/21/21 12:21	1
Calcium	<0.13		0.50	0.13	mg/L		08/20/21 12:14	08/21/21 12:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/20/21 12:14	08/21/21 12:21	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/20/21 12:14	08/21/21 12:21	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/20/21 12:14	08/21/21 12:21	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/20/21 12:14	08/21/21 12:21	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/20/21 12:14	08/21/21 12:21	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/20/21 12:14	08/21/21 12:21	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/20/21 12:14	08/21/21 12:21	1

Lab Sample ID: LCS 180-368732/2-A
Matrix: Water
Analysis Batch: 368942

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 368732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.239		mg/L		95	80 - 120
Arsenic	1.00	0.993		mg/L		99	80 - 120
Barium	1.00	1.00		mg/L		100	80 - 120
Beryllium	0.500	0.502		mg/L		100	80 - 120
Boron	1.25	1.24		mg/L		99	80 - 120
Cadmium	0.500	0.506		mg/L		101	80 - 120
Calcium	25.0	25.5		mg/L		102	80 - 120
Chromium	0.500	0.501		mg/L		100	80 - 120
Cobalt	0.500	0.496		mg/L		99	80 - 120
Lead	0.500	0.506		mg/L		101	80 - 120
Lithium	0.500	0.490		mg/L		98	80 - 120
Molybdenum	0.500	0.506		mg/L		101	80 - 120
Selenium	1.00	1.00		mg/L		100	80 - 120
Thallium	1.00	1.01		mg/L		101	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-368676/1-A
Matrix: Water
Analysis Batch: 368918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/20/21 08:47	08/23/21 15:16	1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-368676/2-A
Matrix: Water
Analysis Batch: 368918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00212		mg/L		85	80 - 120

QC Association Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-125940-1

Metals

Prep Batch: 368676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total/NA	Water	7470A	
180-125940-2	EB-1	Total/NA	Water	7470A	
180-125940-3	AP1PZ-7	Total/NA	Water	7470A	
180-125940-4	AP1PZ-8	Total/NA	Water	7470A	
180-125948-1	AP1GWA-1	Total/NA	Water	7470A	
180-125948-2	AP1GWA-2	Total/NA	Water	7470A	
180-125948-3	DUP-1	Total/NA	Water	7470A	
MB 180-368676/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-368676/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 368732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total Recoverable	Water	3005A	
180-125940-2	EB-1	Total Recoverable	Water	3005A	
180-125940-3	AP1PZ-7	Total Recoverable	Water	3005A	
180-125940-4	AP1PZ-8	Total Recoverable	Water	3005A	
180-125948-1	AP1GWA-1	Total Recoverable	Water	3005A	
180-125948-2	AP1GWA-2	Total Recoverable	Water	3005A	
180-125948-3	DUP-1	Total Recoverable	Water	3005A	
MB 180-368732/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-368732/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 368918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total/NA	Water	EPA 7470A	368676
180-125940-2	EB-1	Total/NA	Water	EPA 7470A	368676
180-125940-3	AP1PZ-7	Total/NA	Water	EPA 7470A	368676
180-125940-4	AP1PZ-8	Total/NA	Water	EPA 7470A	368676
180-125948-1	AP1GWA-1	Total/NA	Water	EPA 7470A	368676
180-125948-2	AP1GWA-2	Total/NA	Water	EPA 7470A	368676
180-125948-3	DUP-1	Total/NA	Water	EPA 7470A	368676
MB 180-368676/1-A	Method Blank	Total/NA	Water	EPA 7470A	368676
LCS 180-368676/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	368676

Analysis Batch: 368942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125940-1	FB-1	Total Recoverable	Water	EPA 6020B	368732
180-125940-2	EB-1	Total Recoverable	Water	EPA 6020B	368732
180-125940-3	AP1PZ-7	Total Recoverable	Water	EPA 6020B	368732
180-125940-4	AP1PZ-8	Total Recoverable	Water	EPA 6020B	368732
180-125948-1	AP1GWA-1	Total Recoverable	Water	EPA 6020B	368732
180-125948-2	AP1GWA-2	Total Recoverable	Water	EPA 6020B	368732
180-125948-3	DUP-1	Total Recoverable	Water	EPA 6020B	368732
MB 180-368732/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	368732
LCS 180-368732/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	368732

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 224

Eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EvanGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): 5 days			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
EB-1	8/18/21	0935	G	W				X				X	1	
EB-1		0945	G	W				X				X	1	
AP1PZ-7		1310	G	W				X				X	1	
AP1PZ-8		1638	G	W				X				X	1	

180-125940 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	8/18/21 1900		D Watts	8-19-21 9:15	Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA-224 — eurofins Environment Testing America

Client Information	Sampler: Daniel Howard/EverGreen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.3
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~3 of 3~~
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Atlanta	TAT Requested (days): 5 days			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver) + Li, Mo	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N		
APIGWA-1	8/17/21	1510	G	W				X				X	1	
APIGWA-2	8/18/21	1155	G	W				X					1	
DUP-1	8/18/21	—	G	W				X				X	1	

180-125948 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Daniel H Daniel Howard	8/18/21 1900		D Watson	8-19-21 9:15	ETAPIT
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

ORIGIN ID:MCNA (404) 273-0418
AMEC
WOOD E & I
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 18AUG21
ACTWGT: 60.80 LB
CAD: 6994493/SSFE2220
DIMS: 24x13x14 IN
BILL THIRD PARTY

Part # 156027

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7058
INV:
PO:
REF:
DEPT:

RT 98 FZ
1
10:30 A
7077
08.19

FedEx Express

2 of 2
MPS# 0681 2827 2332 7077
Mstr# 8121 9394 4282

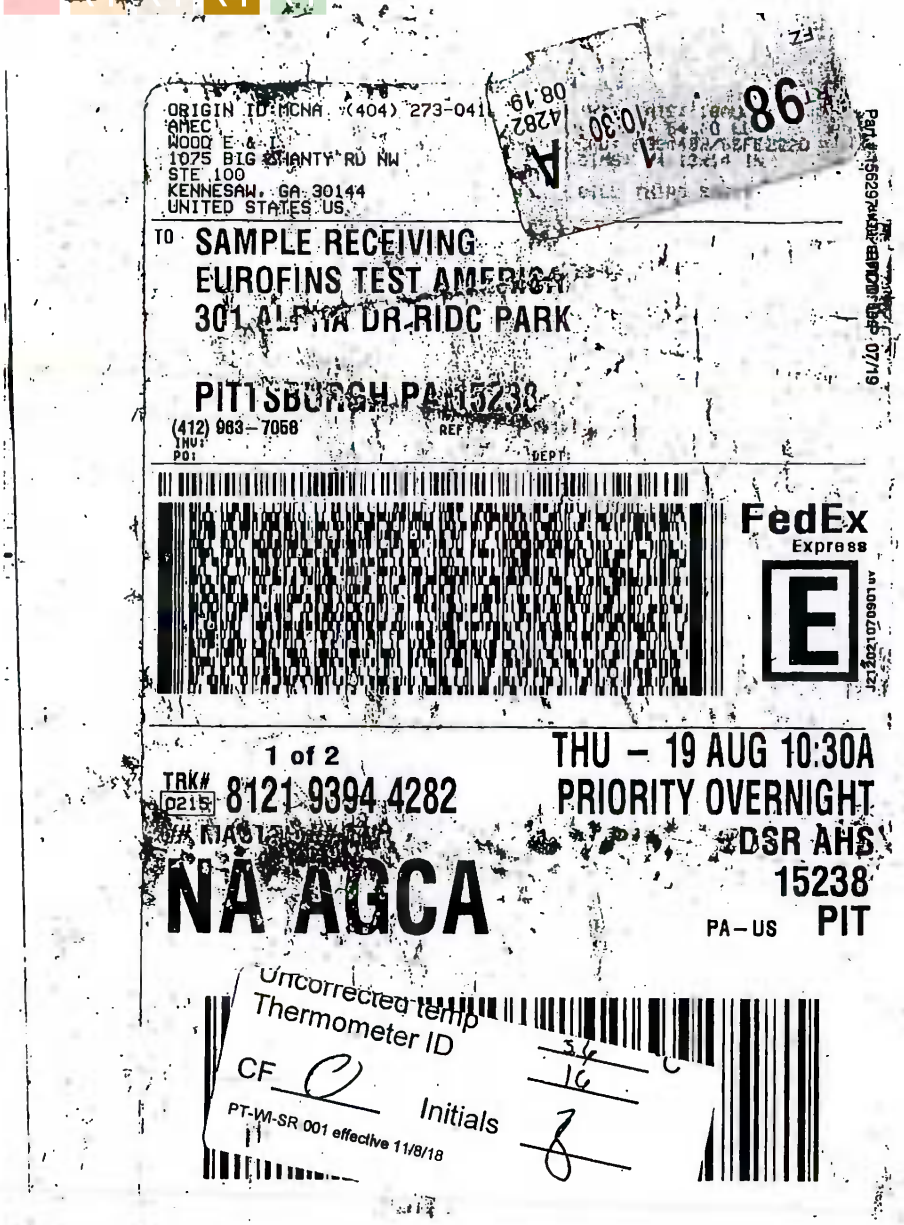
THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US
0215

NA AGCA

Uncorrected temp 20.2 °C
Thermometer ID 14
CF 0 Initials 8

PT-WI-SR-001 effective 11/8/18

180-125940 Waybill



180-125948 Waybill

ORIGIN ID:MCNA (404) 273-0411
AMEC
WOOD E &
1075 BIG SHANTY RD NW
STE 100
KENNESAW, GA 30144
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH P
(412) 963-7058
REF:
INV:
PO:
DEPT:

FedEx Express

1 of 2
TRK# 8121 9394 4282
NA AGCA

THU - 19 AUG 10:30A
PRIORITY OVERNIGHT
DSR AHS
15238
PA-US PIT

Uncorrected temp
Thermometer ID
CF
Initials
PT-WI SR-001 effective 11/8/18

180-125948 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125940-1

Login Number: 125940
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-125940-1

Login Number: 125948
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-126095-1
Client Project/Site: Plant Arkwright AP-1
Revision: 1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
9/1/2021 10:35:40 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Job ID: 180-126095-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-126095-1

Comments
090121 Revised report to include case narrative page. This report replaces the report previously issued on 083021.

Receipt
The samples were received on 8/21/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.4º C, 3.7º C and 4.1º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	08-31-21
Georgia	State	PA 02-00416	08-31-21
Illinois	NELAP	004375	08-31-21
Kansas	NELAP	E-10350	08-31-21
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	08-31-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	08-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	08-31-21
New York	NELAP	11182	08-31-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	08-31-21
Oregon	NELAP	PA-2151	08-31-21
Pennsylvania	NELAP	02-00416	08-31-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	08-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	08-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	08-31-21
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-126095-1	EB-2	Water	08/19/21 09:50	08/21/21 09:30
180-126095-2	AP1PZ-9	Water	08/19/21 16:50	08/21/21 09:30
180-126095-3	FB-2	Water	08/20/21 09:10	08/21/21 09:30
180-126095-4	AP1PZ-10	Water	08/20/21 11:30	08/21/21 09:30
180-126096-1	AP1PZ-4	Water	08/20/21 11:30	08/21/21 09:30
180-126096-2	AP1PZ-5	Water	08/20/21 14:40	08/21/21 09:30
180-126096-3	AP1PZ-11	Water	08/20/21 16:50	08/21/21 09:30
180-126099-1	AP1PZ-1	Water	08/18/21 18:15	08/21/21 09:30
180-126099-2	AP1PZ-2	Water	08/19/21 13:45	08/21/21 09:30
180-126099-3	DUP-2	Water	08/19/21 00:00	08/21/21 09:30
180-126099-4	AP1PZ-3	Water	08/19/21 16:45	08/21/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: EB-2
Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 11:06	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369512	08/27/21 09:35	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:40	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-9
Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Dissolved	Analysis	EPA 6020B		1			369225	08/25/21 12:13	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:09	RSK	TAL PIT
	Instrument ID: A									
Dissolved	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Dissolved	Analysis	EPA 7470A		1			369353	08/26/21 15:44	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:41	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: FB-2
Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:23	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:42	KEM	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-10
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:45	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:43	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-4
Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 12:49	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:30	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-5
Date Collected: 08/20/21 14:40
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:04	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:31	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-11
Date Collected: 08/20/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:18	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:32	KEM	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-1
Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:22	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:45	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:23	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-2
Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:25	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:45	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:27	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: DUP-2
Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:29	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:28	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: AP1PZ-3
Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	368990	08/24/21 10:44	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369225	08/25/21 13:33	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	369187	08/25/21 13:46	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369353	08/26/21 15:29	KEM	TAL PIT
	Instrument ID: HGZ									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

TLP = Tara Peterson

Batch Type: Analysis

KEM = Kimberly Mahoney

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: EB-2

Date Collected: 08/19/21 09:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 11:06	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 11:06	1
Barium	<0.0016		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 11:06	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 11:06	1
Boron	<0.039		0.080	0.039	mg/L		08/24/21 10:44	08/27/21 09:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 11:06	1
Calcium	<0.13		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 11:06	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 11:06	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 11:06	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 11:06	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 11:06	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 11:06	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 11:06	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 11:06	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:40	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-9

Date Collected: 08/19/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00070	J	0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:09	1
Arsenic	0.00041	J	0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:09	1
Barium	0.047		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:09	1
Beryllium	0.00028	J	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:09	1
Boron	0.80		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:09	1
Cadmium	0.00064	J	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:09	1
Calcium	76		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:09	1
Cobalt	0.057		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:09	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:09	1
Lithium	0.073		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:09	1
Molybdenum	0.0021	J	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:09	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:09	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:09	1

Method: EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:13	1
Arsenic	0.00036	J	0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:13	1
Barium	0.047		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:13	1
Beryllium	0.00023	J	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:13	1
Boron	0.80		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:13	1
Cadmium	0.00057	J	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:13	1
Calcium	75		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:13	1
Cobalt	0.055		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:13	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:13	1
Lithium	0.070		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:13	1
Molybdenum	0.0022	J	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:13	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:13	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:13	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:41	1

Method: EPA 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:44	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: FB-2

Date Collected: 08/20/21 09:10
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:23	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:23	1
Barium	<0.0016		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:23	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:23	1
Boron	**0.061**	**J**	0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:23	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:23	1
Calcium	<0.13		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:23	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:23	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:23	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:23	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:23	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:23	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:23	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:23	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:42	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-10

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126095-4

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:45	1
Arsenic	**0.0032**		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:45	1
Barium	**0.045**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:45	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:45	1
Boron	**0.40**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:45	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:45	1
Calcium	**99**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:45	1
Chromium	**0.0036**		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:45	1
Cobalt	**0.0023**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:45	1
Lithium	**0.012**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:45	1
Molybdenum	**0.0050**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:45	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:43	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-4

Date Collected: 08/20/21 11:30
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 12:49	1
Arsenic	**0.00055**	**J**	0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 12:49	1
Barium	**0.090**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 12:49	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 12:49	1
Boron	**3.5**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 12:49	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 12:49	1
Calcium	**380**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 12:49	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 12:49	1
Cobalt	**0.0016**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 12:49	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 12:49	1
Lithium	**0.0059**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 12:49	1
Molybdenum	**0.022**		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 12:49	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 12:49	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 12:49	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:30	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-5

Date Collected: 08/20/21 14:40
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00040**	**J**	0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:04	1
Arsenic	**0.0013**		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:04	1
Barium	**0.10**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:04	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:04	1
Boron	**4.7**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:04	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:04	1
Calcium	**450**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:04	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:04	1
Cobalt	**0.0098**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:04	1
Lead	**0.00023**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:04	1
Lithium	**0.067**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:04	1
Molybdenum	**0.044**		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:04	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:04	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:04	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:31	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-11

Date Collected: 08/20/21 16:50
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126096-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:18	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:18	1
Barium	**0.021**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:18	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:18	1
Boron	**0.20**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:18	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:18	1
Calcium	**28**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:18	1
Cobalt	**0.0013**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:18	1
Lead	**0.00023**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:18	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:18	1
Molybdenum	**0.0023**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:18	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:18	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:32	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-1

Date Collected: 08/18/21 18:15
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:22	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:22	1
Barium	**0.059**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:22	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:22	1
Boron	**0.40**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:22	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:22	1
Calcium	**35**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:22	1
Cobalt	**0.00065**	**J**	0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:22	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:22	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:22	1
Molybdenum	**0.0015**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:22	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:22	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:45	08/26/21 15:23	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-2

Date Collected: 08/19/21 13:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:25	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:25	1
Barium	**0.035**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:25	1
Beryllium	**0.00071**	**J**	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:25	1
Boron	**0.57**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:25	1
Cadmium	**0.0014**	**J**	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:25	1
Calcium	**240**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:25	1
Cobalt	**0.30**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:25	1
Lead	**0.00035**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:25	1
Lithium	**0.028**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:25	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:25	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:25	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:45	08/26/21 15:27	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: DUP-2

Date Collected: 08/19/21 00:00
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-3

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:29	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:29	1
Barium	**0.035**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:29	1
Beryllium	**0.00071**	**J**	0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:29	1
Boron	**0.56**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:29	1
Cadmium	**0.0015**	**J**	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:29	1
Calcium	**240**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:29	1
Cobalt	**0.30**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:29	1
Lead	**0.00033**	**J**	0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:29	1
Lithium	**0.028**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:29	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:29	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:29	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:28	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Client Sample ID: AP1PZ-3

Date Collected: 08/19/21 16:45
Date Received: 08/21/21 09:30

Lab Sample ID: 180-126099-4

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 13:33	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 13:33	1
Barium	**0.036**		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 13:33	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 13:33	1
Boron	**1.5**		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 13:33	1
Cadmium	**0.00050**	**J**	0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 13:33	1
Calcium	**400**		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 13:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 13:33	1
Cobalt	**0.052**		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 13:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 13:33	1
Lithium	**0.053**		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 13:33	1
Molybdenum	**0.0014**	**J**	0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 13:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 13:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 13:33	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:46	08/26/21 15:29	1

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-368990/1-A
Matrix: Water
Analysis Batch: 369225

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/24/21 10:44	08/25/21 10:37	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/24/21 10:44	08/25/21 10:37	1
Barium	<0.0016		0.010	0.0016	mg/L		08/24/21 10:44	08/25/21 10:37	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/24/21 10:44	08/25/21 10:37	1
Boron	<0.039		0.080	0.039	mg/L		08/24/21 10:44	08/25/21 10:37	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/24/21 10:44	08/25/21 10:37	1
Calcium	<0.13		0.50	0.13	mg/L		08/24/21 10:44	08/25/21 10:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/24/21 10:44	08/25/21 10:37	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/24/21 10:44	08/25/21 10:37	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/24/21 10:44	08/25/21 10:37	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/24/21 10:44	08/25/21 10:37	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/24/21 10:44	08/25/21 10:37	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/24/21 10:44	08/25/21 10:37	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/24/21 10:44	08/25/21 10:37	1

Lab Sample ID: LCS 180-368990/2-A
Matrix: Water
Analysis Batch: 369225

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.244		mg/L		97	80 - 120
Arsenic	1.00	1.05		mg/L		105	80 - 120
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.503		mg/L		101	80 - 120
Boron	1.25	1.25		mg/L		100	80 - 120
Cadmium	0.500	0.523		mg/L		105	80 - 120
Calcium	25.0	27.2		mg/L		109	80 - 120
Chromium	0.500	0.520		mg/L		104	80 - 120
Cobalt	0.500	0.513		mg/L		103	80 - 120
Lead	0.500	0.525		mg/L		105	80 - 120
Lithium	0.500	0.493		mg/L		99	80 - 120
Molybdenum	0.500	0.519		mg/L		104	80 - 120
Selenium	1.00	1.04		mg/L		104	80 - 120
Thallium	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: 180-126095-1 MS
Matrix: Water
Analysis Batch: 369225

Client Sample ID: EB-2
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00038		0.250	0.245		mg/L		98	75 - 125
Arsenic	<0.00031		1.00	1.02		mg/L		102	75 - 125
Barium	<0.0016		1.00	1.04		mg/L		104	75 - 125
Beryllium	<0.00018		0.500	0.488		mg/L		98	75 - 125
Cadmium	<0.00022		0.500	0.519		mg/L		104	75 - 125
Calcium	<0.13		25.0	26.9		mg/L		108	75 - 125
Chromium	<0.0015		0.500	0.517		mg/L		103	75 - 125
Cobalt	<0.00013		0.500	0.509		mg/L		102	75 - 125
Lead	<0.00013		0.500	0.523		mg/L		105	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-126095-1 MS
Matrix: Water
Analysis Batch: 369225

Client Sample ID: EB-2
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	<0.0034		0.500	0.499		mg/L		100	75 - 125
Molybdenum	<0.00061		0.500	0.518		mg/L		104	75 - 125
Selenium	<0.0015		1.00	1.03		mg/L		103	75 - 125
Thallium	<0.00015		1.00	1.03		mg/L		103	75 - 125

Lab Sample ID: 180-126095-1 MSD
Matrix: Water
Analysis Batch: 369225

Client Sample ID: EB-2
Prep Type: Total Recoverable
Prep Batch: 368990

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00038		0.250	0.243		mg/L		97	75 - 125	1	20
Arsenic	<0.00031		1.00	1.04		mg/L		104	75 - 125	1	20
Barium	<0.0016		1.00	1.03		mg/L		103	75 - 125	1	20
Beryllium	<0.00018		0.500	0.477		mg/L		95	75 - 125	2	20
Cadmium	<0.00022		0.500	0.511		mg/L		102	75 - 125	2	20
Calcium	<0.13		25.0	27.6		mg/L		110	75 - 125	2	20
Chromium	<0.0015		0.500	0.527		mg/L		105	75 - 125	2	20
Cobalt	<0.00013		0.500	0.510		mg/L		102	75 - 125	0	20
Lead	<0.00013		0.500	0.526		mg/L		105	75 - 125	0	20
Lithium	<0.0034		0.500	0.497		mg/L		99	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.521		mg/L		104	75 - 125	0	20
Selenium	<0.0015		1.00	1.03		mg/L		103	75 - 125	0	20
Thallium	<0.00015		1.00	1.05		mg/L		105	75 - 125	1	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-369187/1-A
Matrix: Water
Analysis Batch: 369353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/25/21 13:45	08/26/21 15:21	1

Lab Sample ID: LCS 180-369187/2-A
Matrix: Water
Analysis Batch: 369353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00259		mg/L		104	80 - 120

Lab Sample ID: 180-126099-1 MS
Matrix: Water
Analysis Batch: 369353

Client Sample ID: AP1PZ-1
Prep Type: Total/NA
Prep Batch: 369187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00013		0.00100	0.00113		mg/L		113	75 - 125

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126095-1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 180-126099-1 MSD
Matrix: Water
Analysis Batch: 369353

Client Sample ID: AP1PZ-1
Prep Type: Total/NA
Prep Batch: 369187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013		0.00100	0.00106		mg/L		106	75 - 125	6	20

Metals

Prep Batch: 368990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total Recoverable	Water	3005A	
180-126095-2	AP1PZ-9	Dissolved	Water	3005A	
180-126095-2	AP1PZ-9	Total Recoverable	Water	3005A	
180-126095-3	FB-2	Total Recoverable	Water	3005A	
180-126095-4	AP1PZ-10	Total Recoverable	Water	3005A	
180-126096-1	AP1PZ-4	Total Recoverable	Water	3005A	
180-126096-2	AP1PZ-5	Total Recoverable	Water	3005A	
180-126096-3	AP1PZ-11	Total Recoverable	Water	3005A	
180-126099-1	AP1PZ-1	Total Recoverable	Water	3005A	
180-126099-2	AP1PZ-2	Total Recoverable	Water	3005A	
180-126099-3	DUP-2	Total Recoverable	Water	3005A	
180-126099-4	AP1PZ-3	Total Recoverable	Water	3005A	
MB 180-368990/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-368990/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-126095-1 MS	EB-2	Total Recoverable	Water	3005A	
180-126095-1 MSD	EB-2	Total Recoverable	Water	3005A	

Prep Batch: 369187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total/NA	Water	7470A	
180-126095-2	AP1PZ-9	Dissolved	Water	7470A	
180-126095-2	AP1PZ-9	Total/NA	Water	7470A	
180-126095-3	FB-2	Total/NA	Water	7470A	
180-126095-4	AP1PZ-10	Total/NA	Water	7470A	
180-126096-1	AP1PZ-4	Total/NA	Water	7470A	
180-126096-2	AP1PZ-5	Total/NA	Water	7470A	
180-126096-3	AP1PZ-11	Total/NA	Water	7470A	
180-126099-1	AP1PZ-1	Total/NA	Water	7470A	
180-126099-2	AP1PZ-2	Total/NA	Water	7470A	
180-126099-3	DUP-2	Total/NA	Water	7470A	
180-126099-4	AP1PZ-3	Total/NA	Water	7470A	
MB 180-369187/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369187/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-126099-1 MS	AP1PZ-1	Total/NA	Water	7470A	
180-126099-1 MSD	AP1PZ-1	Total/NA	Water	7470A	

Analysis Batch: 369225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total Recoverable	Water	EPA 6020B	368990
180-126095-2	AP1PZ-9	Dissolved	Water	EPA 6020B	368990
180-126095-2	AP1PZ-9	Total Recoverable	Water	EPA 6020B	368990
180-126095-3	FB-2	Total Recoverable	Water	EPA 6020B	368990
180-126095-4	AP1PZ-10	Total Recoverable	Water	EPA 6020B	368990
180-126096-1	AP1PZ-4	Total Recoverable	Water	EPA 6020B	368990
180-126096-2	AP1PZ-5	Total Recoverable	Water	EPA 6020B	368990
180-126096-3	AP1PZ-11	Total Recoverable	Water	EPA 6020B	368990
180-126099-1	AP1PZ-1	Total Recoverable	Water	EPA 6020B	368990
180-126099-2	AP1PZ-2	Total Recoverable	Water	EPA 6020B	368990
180-126099-3	DUP-2	Total Recoverable	Water	EPA 6020B	368990
180-126099-4	AP1PZ-3	Total Recoverable	Water	EPA 6020B	368990
MB 180-368990/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	368990

Metals (Continued)

Analysis Batch: 369225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-368990/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	368990
180-126095-1 MS	EB-2	Total Recoverable	Water	EPA 6020B	368990
180-126095-1 MSD	EB-2	Total Recoverable	Water	EPA 6020B	368990

Analysis Batch: 369353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total/NA	Water	EPA 7470A	369187
180-126095-2	AP1PZ-9	Dissolved	Water	EPA 7470A	369187
180-126095-2	AP1PZ-9	Total/NA	Water	EPA 7470A	369187
180-126095-3	FB-2	Total/NA	Water	EPA 7470A	369187
180-126095-4	AP1PZ-10	Total/NA	Water	EPA 7470A	369187
180-126096-1	AP1PZ-4	Total/NA	Water	EPA 7470A	369187
180-126096-2	AP1PZ-5	Total/NA	Water	EPA 7470A	369187
180-126096-3	AP1PZ-11	Total/NA	Water	EPA 7470A	369187
180-126099-1	AP1PZ-1	Total/NA	Water	EPA 7470A	369187
180-126099-2	AP1PZ-2	Total/NA	Water	EPA 7470A	369187
180-126099-3	DUP-2	Total/NA	Water	EPA 7470A	369187
180-126099-4	AP1PZ-3	Total/NA	Water	EPA 7470A	369187
MB 180-369187/1-A	Method Blank	Total/NA	Water	EPA 7470A	369187
LCS 180-369187/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369187
180-126099-1 MS	AP1PZ-1	Total/NA	Water	EPA 7470A	369187
180-126099-1 MSD	AP1PZ-1	Total/NA	Water	EPA 7470A	369187

Analysis Batch: 369512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126095-1	EB-2	Total Recoverable	Water	EPA 6020B	368990

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

Client Information	Sampler: D Howard/E Gullen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Diss 6020B - Custom 15 App III/AppIV+Silver	Diss 7470A - Mercury						Total Number of containers	Special Instructions/Note:
Preservation Code:							D	D	N	N	ND	ND	D	D							
EB-2	8/19/21	0950	G	W				X				X								1	
AP1PZ-9	8/19/21	1650	G	W	Y			X				X	X	X						2	pH=5.77
FB-2	8/20/21	0910	G	W				X				X								1	
AP1PZ-10	8/20/21	1130	G	W				X				X								1	pH=6.53

180-126095 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Daniel L Howard	Date/Time: 8/20/21 1830	Company	Received by: Division	Date/Time: 8-21-21 9:30	Company: APPLIED
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244- ATLANTA

eurofins Environment Testing America

Client Information	Sampler: D Howard/EGwillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	~~D~~	~~D~~		
AP1PZ-4	8/20/21	1130	G	W				X				X	1	pH=6.56
AP1PZ-5	↓	1440	G	W				X				X	1	pH=6.60
AP1PZ-11	↓	1650	G	W				X				X	1	pH=6.71

180-126096 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: David R Howard	8/20/21 / 1830			8-21-21	EA PH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 930	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

244-ATLANTA

eurofins | Environment Testing America

Client Information	Sampler: DHoward/EGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.1
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 1 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	XD	XD		
AP1PZ-1	8/18/21	1815	G	W				X				X	1	pH = 6.59
AP1PZ-2	8/19/21	1345	G	W				X				X	1	pH = 5.84
DUP-2	↓	—	G	W				X				X	1	pH = 5.84
AP1PZ-3	↓	1645	G	W				X				X	1	pH = 5.60

180-126099 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

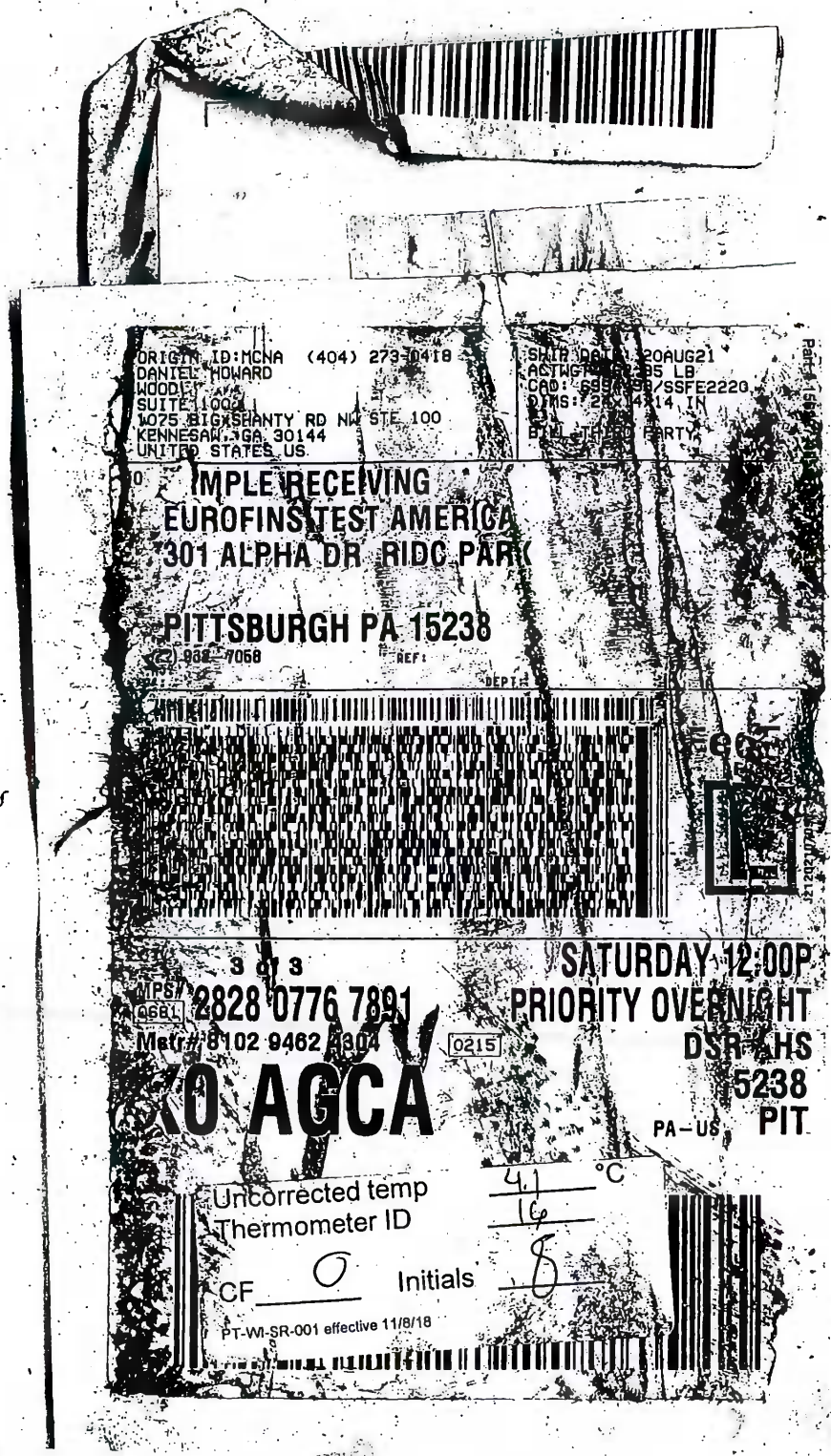
Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	David L Howard	8/20/21 1830		pWatson	8-21-21	ETA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:



180-126095 Waybill

FedEx®

180-126096 Waybill

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
WOOD
SUITE 100
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 20AUG21
ACTWGT: 57.95 LB
CAD: 6994493/SSFE2220
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK

PITTSBURGH PA 15238
(412) 963-7058

REF:
INV:
PO:
DEPT:

FedEx Express

2 of 3
MPS# 0691 2828 0776 7880
Mstr# 8102 9462 4304

SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR AHS
15238
PIT
PA-US

0215

XO AGCA

Uncorrected
Thermometer
CF 0
°C
PT-WI-SR-001 effective 1
als

Part # 156297-491-ACSC1 REV 06/22


ORIGIN ID:MCNA (404) 423-0418
DANIEL HOWARD
SHE-TOO
2600 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US
TE: 20AUG21
62.80 LB
94493/SSFE2220
24x14x14 IN
THIRD PARTY
TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
FedEx
Express
1 of 3
TRK# 8102 9462 4304
SATURDAY 12:00P
PRIORITY OVERNIGHT
DSR-AHS
15238-
PIT
PA-US
MASTER
XO AGCA
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18


180-126099 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126095-1

Login Number: 126095
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126095-1

Login Number: 126096
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126095-1

Login Number: 126099
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-126160-1
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
8/31/2021 2:42:35 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Job ID: 180-126160-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-126160-1

Comments
No additional comments.

Receipt
The sample was received on 8/24/2021 9:30 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2º C.

Metals
Method 7470A: The laboratory control sample (LCS) for 369283 recovered outside control limits for the following analytes: mercury. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 7470A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-369283 and analytical batch 180-369660 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Qualifiers

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-126160-1	AP1PZ-6	Water	08/23/21 14:12	08/24/21 09:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Client Sample ID: AP1PZ-6
Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126160-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369320	08/26/21 12:26	TLP	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369512	08/27/21 09:38	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			50 mL	50 mL	369283	08/26/21 09:40	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			369660	08/30/21 14:05	KEM	TAL PIT
	Instrument ID: HGY									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

TLP = Tara Peterson

Batch Type: Analysis

KEM = Kimberly Mahoney

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Client Sample ID: AP1PZ-6

Date Collected: 08/23/21 14:12
Date Received: 08/24/21 09:30

Lab Sample ID: 180-126160-1

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:26	08/27/21 09:38	1
Arsenic	**0.0015**		0.0010	0.00031	mg/L		08/26/21 12:26	08/27/21 09:38	1
Barium	**0.035**		0.010	0.0016	mg/L		08/26/21 12:26	08/27/21 09:38	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:26	08/27/21 09:38	1
Boron	**6.9**		0.080	0.039	mg/L		08/26/21 12:26	08/27/21 09:38	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:26	08/27/21 09:38	1
Calcium	**470**		0.50	0.13	mg/L		08/26/21 12:26	08/27/21 09:38	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:26	08/27/21 09:38	1
Cobalt	**0.35**		0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 09:38	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:26	08/27/21 09:38	1
Lithium	**0.0064**		0.0050	0.0034	mg/L		08/26/21 12:26	08/27/21 09:38	1
Molybdenum	**0.0013**	**J**	0.015	0.00061	mg/L		08/26/21 12:26	08/27/21 09:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:26	08/27/21 09:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:26	08/27/21 09:38	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	F2 F1 *+	0.00020	0.00013	mg/L		08/26/21 09:40	08/30/21 14:05	1

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-369320/1-A
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/26/21 12:26	08/27/21 09:21	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/26/21 12:26	08/27/21 09:21	1
Barium	<0.0016		0.010	0.0016	mg/L		08/26/21 12:26	08/27/21 09:21	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/26/21 12:26	08/27/21 09:21	1
Boron	<0.039		0.080	0.039	mg/L		08/26/21 12:26	08/27/21 09:21	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		08/26/21 12:26	08/27/21 09:21	1
Calcium	<0.13		0.50	0.13	mg/L		08/26/21 12:26	08/27/21 09:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/26/21 12:26	08/27/21 09:21	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/26/21 12:26	08/27/21 09:21	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/26/21 12:26	08/27/21 09:21	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/26/21 12:26	08/27/21 09:21	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/26/21 12:26	08/27/21 09:21	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/26/21 12:26	08/27/21 09:21	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/26/21 12:26	08/27/21 09:21	1

Lab Sample ID: LCS 180-369320/2-A
Matrix: Water
Analysis Batch: 369512

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 369320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.242		mg/L		97	80 - 120
Arsenic	1.00	1.03		mg/L		103	80 - 120
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.511		mg/L		102	80 - 120
Boron	1.25	1.20		mg/L		96	80 - 120
Cadmium	0.500	0.512		mg/L		102	80 - 120
Calcium	25.0	28.6		mg/L		114	80 - 120
Chromium	0.500	0.508		mg/L		102	80 - 120
Cobalt	0.500	0.508		mg/L		102	80 - 120
Lead	0.500	0.505		mg/L		101	80 - 120
Lithium	0.500	0.501		mg/L		100	80 - 120
Molybdenum	0.500	0.519		mg/L		104	80 - 120
Selenium	1.00	1.03		mg/L		103	80 - 120
Thallium	1.00	1.09		mg/L		109	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-369283/1-A
Matrix: Water
Analysis Batch: 369660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 369283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		08/26/21 09:40	08/30/21 14:03	1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-369283/2-A
Matrix: Water
Analysis Batch: 369660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 369283

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00125	0.00237	*+	mg/L		189	80 - 120		

Lab Sample ID: 180-126160-1 MS
Matrix: Water
Analysis Batch: 369660

Client Sample ID: AP1PZ-6
Prep Type: Total/NA
Prep Batch: 369283

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	<0.00013	F2 F1 *+	0.000500	0.000647	F1	mg/L		129	75 - 125		

Lab Sample ID: 180-126160-1 MSD
Matrix: Water
Analysis Batch: 369660

Client Sample ID: AP1PZ-6
Prep Type: Total/NA
Prep Batch: 369283

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00013	F2 F1 *+	0.000500	0.000484	F2	mg/L		97	75 - 125	29	20

QC Association Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-126160-1

Metals

Prep Batch: 369283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total/NA	Water	7470A	
MB 180-369283/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-369283/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-126160-1 MS	AP1PZ-6	Total/NA	Water	7470A	
180-126160-1 MSD	AP1PZ-6	Total/NA	Water	7470A	

Prep Batch: 369320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total Recoverable	Water	3005A	
MB 180-369320/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369320/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 369512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total Recoverable	Water	EPA 6020B	369320
MB 180-369320/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369320
LCS 180-369320/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369320

Analysis Batch: 369660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126160-1	AP1PZ-6	Total/NA	Water	EPA 7470A	369283
MB 180-369283/1-A	Method Blank	Total/NA	Water	EPA 7470A	369283
LCS 180-369283/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	369283
180-126160-1 MS	AP1PZ-6	Total/NA	Water	EPA 7470A	369283
180-126160-1 MSD	AP1PZ-6	Total/NA	Water	EPA 7470A	369283

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

ATLANTA 244

Eurofins Environment Testing America

Client Information	Sampler: D Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-73421-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested:			
City: Atlanta	TAT Requested (days): 5 day TAT			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 15 (App III/AppIV + Silver)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury								Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	D	N	N	XD	XD								X	
AP1PZ-6	8/23/21	1412	G	W				X				X								1	pH=5.50

180-126160 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel L Howard	8/23/21 1545		D Watts	8-24-21	ESTA
2	Relinquished by:	Date/Time:	Company	Received by	Date/Time: 1:30	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

fedex.com 1800.GoFedEx 1800.463.3339

ORIGIN ID:MCNA (404) 273-0418
DANIEL HOWARD
AMEC WOOD E&I
1075 BIG SHANTY RD NW STE 100
KENNESAW, GA 30144
UNITED STATES US

SHIP DATE: 23AUG21
ACTWGT: 32.00 LB
CAD: 6994493/SSFE2220
DIMS: 17x16x13 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
EUROFINS TEST AMERICA
301 ALPHA DR RIDC PARK PO

PITTSBURGH PA 15238

(412) 963-7058

REF:

DEPT:

FedEx Express

J212021070901US

TRK# 0215 8121 9394 4591

TUE - 24 AUG 10:30A
PRIORITY OVERNIGHT

DSR AHS
15238
PIT

PA-US

NA AGCA

Uncorrected temp 4.2 °C
Thermometer ID 16
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-126160 Waybill

Part # 156297-496 PRPP FXE 06/22

1 From
Date
Sender's Name DEEA
Company AMEC
Address 1075 BIG SHANTY RD NW STE 100
City KENNESAW State GA ZIP 30144-3652

2 Your Internal Billing Reference

3 To
Recipient's Name
Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

fedex.com 1800.GoFedEx 1800.463.3339

5 Packaging *Declared value limit $500.
FedEx Envelope* FedEx Pak* FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
Saturday Delivery
No Signature Required
Direct Signature
Indirect Signature
Does this shipment contain dangerous goods?
No Yes Dry Ice 9, UN 1845 kg
Cargo Aircraft Only

7 Payment Bill to:
Sender
Recipient
Third Party
Credit Card
Cash/Check
Obtain recip. Acct. No.

Express Package Service* *To most locations
Next Business Day
2 or 3 Business Days
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

FedEx First Overnight
FedEx Priority Overnight
FedEx Standard Overnight
FedEx 2Day A.M.
Second Business morning. Saturday Delivery NOT available.
FedEx 2Day
FedEx Express Saver
Third business day. Saturday Delivery NOT available.

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-126160-1

Login Number: 126160
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-129189-1
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
11/24/2021 7:14:29 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-129189-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-129189-1

Comments
No additional comments.

Receipt
The samples were received on 10/28/2021 4:00 PM and 10/30/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 3.7º C, 4.1º C, 4.2º C and 4.7º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC was not relinquished to TAPITT.

GC Semi VOA
Method 300.0: The matrix spike duplicate (MSD) recoveries for the following sample associated with analytical batch 180-376935 was low outside control limits for sulfate: (180-129189-C-1 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Methods 6020A, 6020B: The following samples were diluted due to the nature of the sample matrix: APIPZ-4 (180-129306-1) and APIPZ-5 (180-129306-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	11-11-21
Georgia	State	PA 02-00416	11-11-21
Illinois	NELAP	004375	11-11-21
Kansas	NELAP	E-10350	11-11-21
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	11-11-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	11-11-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	11-11-21
New York	NELAP	11182	11-11-21
North Carolina (WW/SW)	State	434	11-11-21
North Dakota	State	R-227	11-11-21
Oregon	NELAP	PA-2151	11-11-21
Pennsylvania	NELAP	02-00416	11-11-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	11-11-21
Texas	NELAP	T104704528	11-11-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	11-11-21
Virginia	NELAP	10043	11-11-21
West Virginia DEP	State	142	11-11-21
Wisconsin	State	998027800	11-11-21

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-129189-1	AP1GWA-1	Water	10/26/21 12:35	10/28/21 16:00
180-129189-2	AP1GWA-2	Water	10/26/21 14:30	10/28/21 16:00
180-129189-3	FB-1	Water	10/27/21 10:10	10/28/21 16:00
180-129189-4	AP1PZ-8	Water	10/27/21 11:54	10/28/21 16:00
180-129191-1	EB-1	Water	10/26/21 10:50	10/28/21 16:00
180-129191-2	APIPZ-6	Water	10/26/21 13:05	10/28/21 16:00
180-129191-3	DUP-1	Water	10/26/21 00:01	10/28/21 16:00
180-129191-4	APIPZ-7	Water	10/26/21 16:18	10/28/21 16:00
180-129304-1	APIPZ-10	Water	10/27/21 16:38	10/30/21 10:30
180-129304-2	EB-2	Water	10/28/21 11:00	10/30/21 10:30
180-129304-3	APIPZ-9	Water	10/28/21 14:40	10/30/21 10:30
180-129304-4	APIPZ-11	Water	10/28/21 18:36	10/30/21 10:30
180-129304-5	APIPZ-3	Water	10/29/21 11:34	10/30/21 10:30
180-129306-1	APIPZ-4	Water	10/27/21 15:10	10/30/21 10:30
180-129306-2	APIPZ-1	Water	10/28/21 13:10	10/30/21 10:30
180-129306-3	APIPZ-2	Water	10/28/21 17:50	10/30/21 10:30
180-129306-4	APIPZ-5	Water	10/29/21 11:05	10/30/21 10:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: AP1GWA-1

Lab Sample ID: 180-129189-1

Date Collected: 10/26/21 12:35

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			376935	10/29/21 08:24	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377832	11/05/21 12:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377936	11/06/21 12:14	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	377670	11/04/21 13:40	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377857	11/05/21 12:51	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			377481	10/26/21 12:35	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: AP1GWA-2

Lab Sample ID: 180-129189-2

Date Collected: 10/26/21 14:30

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			376935	10/29/21 09:13	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377832	11/05/21 12:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377936	11/06/21 12:17	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	377670	11/04/21 13:40	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377857	11/05/21 12:53	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			377481	10/26/21 14:30	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1

Lab Sample ID: 180-129189-3

Date Collected: 10/27/21 10:10

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			376935	10/29/21 09:29	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377832	11/05/21 12:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377936	11/06/21 12:20	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	377215	11/01/21 12:10	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377253	11/01/21 14:58	RJR	TAL PIT
	Instrument ID: HGY									

Client Sample ID: FB-1

Lab Sample ID: 180-129189-3

Date Collected: 10/27/21 10:10

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT

Client Sample ID: AP1PZ-8

Lab Sample ID: 180-129189-4

Date Collected: 10/27/21 11:54

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			376935	10/29/21 10:02	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		5			376935	10/29/21 10:18	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377832	11/05/21 12:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377936	11/06/21 12:23	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	377215	11/01/21 12:10	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377253	11/01/21 14:59	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			377481	10/27/21 11:54	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-1

Lab Sample ID: 180-129191-1

Date Collected: 10/26/21 10:50

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			376935	10/29/21 09:46	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377248	11/02/21 08:30	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377542	11/03/21 18:08	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	377215	11/01/21 12:10	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377253	11/01/21 15:03	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-6

Lab Sample ID: 180-129191-2

Date Collected: 10/26/21 13:05

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			376935	10/29/21 11:07	J1T	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-6

Date Collected: 10/26/21 13:05
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		25			376935	10/29/21 11:24	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	377248	11/02/21 08:30	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377542	11/03/21 18:13	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	377215	11/01/21 12:10	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377253	11/01/21 15:05	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			377481	10/26/21 13:05	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1

Date Collected: 10/26/21 00:01
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			376935	10/29/21 11:40	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		25			376935	10/29/21 11:56	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377248	11/02/21 08:30	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377542	11/03/21 18:29	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	377215	11/01/21 12:10	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377253	11/01/21 15:06	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			377481	10/26/21 00:01	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-7

Date Collected: 10/26/21 16:18
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			376935	10/29/21 12:13	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		10			376935	10/29/21 12:29	J1T	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377248	11/02/21 08:30	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			377542	11/03/21 18:45	RSK	TAL PIT
	Instrument ID: A									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-7

Lab Sample ID: 180-129191-4

Date Collected: 10/26/21 16:18
Matrix: Water
Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	377215	11/01/21 12:10	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			377253	11/01/21 15:07	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377220	11/01/21 12:50	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			377481	10/26/21 16:18	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-10

Lab Sample ID: 180-129304-1

Date Collected: 10/27/21 16:38
Matrix: Water
Date Received: 10/30/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 17:19	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		5			377100	10/31/21 17:35	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378151	11/06/21 15:33	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378673	11/11/21 10:27	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 10:59	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377385	11/02/21 14:07	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			378382	10/27/21 16:38	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2

Lab Sample ID: 180-129304-2

Date Collected: 10/28/21 11:00
Matrix: Water
Date Received: 10/30/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 17:52	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378151	11/06/21 15:37	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378673	11/11/21 10:38	RSK	TAL PIT
	Instrument ID: DORY									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: EB-2
Date Collected: 10/28/21 11:00
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:00	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377385	11/02/21 14:07	KMM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-9
Date Collected: 10/28/21 14:40
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 18:08	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		5			377100	10/31/21 18:24	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378151	11/06/21 15:40	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378673	11/11/21 10:41	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:01	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377503	11/03/21 11:52	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			378382	10/28/21 14:40	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-11
Date Collected: 10/28/21 18:36
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 18:41	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378151	11/06/21 15:44	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378673	11/11/21 10:51	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:04	RJR	TAL PIT
	Instrument ID: HGY									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-11

Date Collected: 10/28/21 18:36
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377503	11/03/21 11:52	KMM	TAL PIT
Total/NA	Analysis	Field Sampling		1			378382	10/28/21 18:36	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-3

Date Collected: 10/29/21 11:34
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 18:57	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		10			377100	10/31/21 19:13	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378151	11/06/21 15:47	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377767	11/05/21 11:00	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378673	11/11/21 10:55	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:05	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377503	11/03/21 11:52	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			378382	10/29/21 11:34	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-4

Date Collected: 10/27/21 15:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 14:50	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		10			377100	10/31/21 15:07	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Dissolved	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Dissolved	Analysis	EPA 6020B		1			378338	11/09/21 12:57	RSK	TAL PIT
	Instrument ID: DORY									
Dissolved	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Dissolved	Analysis	EPA 6020B		2			378673	11/11/21 10:07	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378338	11/09/21 11:44	RSK	TAL PIT
	Instrument ID: DORY									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-4
Date Collected: 10/27/21 15:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		2			378673	11/11/21 09:28	RSK	TAL PIT
	Instrument ID: DORY									
Dissolved	Prep	7470A			25 mL	25 mL	378156	11/09/21 06:14	RJR	TAL PIT
Dissolved	Analysis	EPA 7470A		1			378605	11/11/21 11:14	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:06	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	377385	11/02/21 14:07	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			378414	10/27/21 15:10	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-1
Date Collected: 10/28/21 13:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 15:24	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378338	11/09/21 12:22	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378673	11/11/21 09:32	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:07	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377503	11/03/21 11:52	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			378414	10/28/21 13:10	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-2
Date Collected: 10/28/21 17:50
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 15:41	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		5			377100	10/31/21 15:57	M1D	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-2

Date Collected: 10/28/21 17:50
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378338	11/09/21 12:26	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378673	11/11/21 09:35	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:08	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	377503	11/03/21 11:52	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			378414	10/28/21 17:50	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-5

Date Collected: 10/29/21 11:05
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			377100	10/31/21 16:46	M1D	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		20			377297	11/02/21 13:32	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			378338	11/09/21 12:29	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			50 mL	50 mL	377808	11/08/21 11:30	RGM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		5			378673	11/11/21 09:39	RSK	TAL PIT
	Instrument ID: DORY									
Total/NA	Prep	7470A			25 mL	25 mL	378157	11/09/21 06:16	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			378424	11/10/21 11:09	RJR	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	377503	11/03/21 11:52	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			378414	10/29/21 11:05	KAR	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KFS = Kelly Shannon
RGM = Rebecca Manns
RJR = Ron Rosenbaum

Batch Type: Analysis

FDS = Sampler Field
J1T = Jianwu Tang
JRB = James Burzio
KAR = Kacy Reitnauer
KMM = Kendric Moore
M1D = Maureen Donlin
RJR = Ron Rosenbaum
RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: AP1GWA-1

Date Collected: 10/26/21 12:35
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.6**		1.0	0.71	mg/L			10/29/21 08:24	1
Fluoride	**0.29**		0.10	0.026	mg/L			10/29/21 08:24	1
Sulfate	**69**	**F1**	1.0	0.76	mg/L			10/29/21 08:24	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 12:00	11/06/21 12:14	1
Arsenic	**0.00074**	**J**	0.0010	0.00031	mg/L		11/05/21 12:00	11/06/21 12:14	1
Barium	**0.082**		0.010	0.0016	mg/L		11/05/21 12:00	11/06/21 12:14	1
Beryllium	**0.0041**		0.0025	0.00018	mg/L		11/05/21 12:00	11/06/21 12:14	1
Boron	**0.12**		0.080	0.039	mg/L		11/05/21 12:00	11/06/21 12:14	1
Cadmium	**0.00065**	**J**	0.0025	0.00022	mg/L		11/05/21 12:00	11/06/21 12:14	1
Calcium	**22**		0.50	0.13	mg/L		11/05/21 12:00	11/06/21 12:14	1
Chromium	**0.0036**		0.0020	0.0015	mg/L		11/05/21 12:00	11/06/21 12:14	1
Cobalt	**0.015**		0.0025	0.00013	mg/L		11/05/21 12:00	11/06/21 12:14	1
Lead	**0.00013**	**J**	0.0010	0.00013	mg/L		11/05/21 12:00	11/06/21 12:14	1
Lithium	**0.019**		0.0050	0.0034	mg/L		11/05/21 12:00	11/06/21 12:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/05/21 12:00	11/06/21 12:14	1
Selenium	**0.0023**	**J**	0.0050	0.0015	mg/L		11/05/21 12:00	11/06/21 12:14	1
Thallium	**0.00017**	**J**	0.0010	0.00015	mg/L		11/05/21 12:00	11/06/21 12:14	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/04/21 13:40	11/05/21 12:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**160**		10	10	mg/L			11/01/21 12:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**4.76**				SU			10/26/21 12:35	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: AP1GWA-2

Date Collected: 10/26/21 14:30
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.1**		1.0	0.71	mg/L			10/29/21 09:13	1
Fluoride	**0.074**	**J**	0.10	0.026	mg/L			10/29/21 09:13	1
Sulfate	**1.5**		1.0	0.76	mg/L			10/29/21 09:13	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 12:00	11/06/21 12:17	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 12:00	11/06/21 12:17	1
Barium	**0.027**		0.010	0.0016	mg/L		11/05/21 12:00	11/06/21 12:17	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 12:00	11/06/21 12:17	1
Boron	<0.039		0.080	0.039	mg/L		11/05/21 12:00	11/06/21 12:17	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 12:00	11/06/21 12:17	1
Calcium	**4.5**		0.50	0.13	mg/L		11/05/21 12:00	11/06/21 12:17	1
Chromium	**0.0072**		0.0020	0.0015	mg/L		11/05/21 12:00	11/06/21 12:17	1
Cobalt	**0.00029**	**J**	0.0025	0.00013	mg/L		11/05/21 12:00	11/06/21 12:17	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 12:00	11/06/21 12:17	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/05/21 12:00	11/06/21 12:17	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/05/21 12:00	11/06/21 12:17	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 12:00	11/06/21 12:17	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 12:00	11/06/21 12:17	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/04/21 13:40	11/05/21 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**65**		10	10	mg/L			11/01/21 12:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.98**				SU			10/26/21 14:30	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: FB-1

Date Collected: 10/27/21 10:10
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			10/29/21 09:29	1
Fluoride	<0.026		0.10	0.026	mg/L			10/29/21 09:29	1
Sulfate	<0.76		1.0	0.76	mg/L			10/29/21 09:29	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 12:00	11/06/21 12:20	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 12:00	11/06/21 12:20	1
Barium	<0.0016		0.010	0.0016	mg/L		11/05/21 12:00	11/06/21 12:20	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 12:00	11/06/21 12:20	1
Boron	<0.039		0.080	0.039	mg/L		11/05/21 12:00	11/06/21 12:20	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 12:00	11/06/21 12:20	1
Calcium	<0.13		0.50	0.13	mg/L		11/05/21 12:00	11/06/21 12:20	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 12:00	11/06/21 12:20	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		11/05/21 12:00	11/06/21 12:20	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 12:00	11/06/21 12:20	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/05/21 12:00	11/06/21 12:20	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/05/21 12:00	11/06/21 12:20	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 12:00	11/06/21 12:20	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 12:00	11/06/21 12:20	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/01/21 12:10	11/01/21 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/01/21 12:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: AP1PZ-8

Date Collected: 10/27/21 11:54
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.9**		1.0	0.71	mg/L			10/29/21 10:02	1
Fluoride	**0.25**		0.10	0.026	mg/L			10/29/21 10:02	1
Sulfate	**660**		5.0	3.8	mg/L			10/29/21 10:18	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 12:00	11/06/21 12:23	1
Arsenic	**0.00066**	**J**	0.0010	0.00031	mg/L		11/05/21 12:00	11/06/21 12:23	1
Barium	**0.076**		0.010	0.0016	mg/L		11/05/21 12:00	11/06/21 12:23	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 12:00	11/06/21 12:23	1
Boron	**2.5**		0.080	0.039	mg/L		11/05/21 12:00	11/06/21 12:23	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 12:00	11/06/21 12:23	1
Calcium	**300**		0.50	0.13	mg/L		11/05/21 12:00	11/06/21 12:23	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 12:00	11/06/21 12:23	1
Cobalt	**0.00068**	**J**	0.0025	0.00013	mg/L		11/05/21 12:00	11/06/21 12:23	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 12:00	11/06/21 12:23	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/05/21 12:00	11/06/21 12:23	1
Molybdenum	**0.47**		0.015	0.00061	mg/L		11/05/21 12:00	11/06/21 12:23	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 12:00	11/06/21 12:23	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 12:00	11/06/21 12:23	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/01/21 12:10	11/01/21 14:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1300**		10	10	mg/L			11/01/21 12:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.67**				SU			10/27/21 11:54	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: EB-1
Date Collected: 10/26/21 10:50
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-1
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			10/29/21 09:46	1
Fluoride	<0.026		0.10	0.026	mg/L			10/29/21 09:46	1
Sulfate	<0.76		1.0	0.76	mg/L			10/29/21 09:46	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/02/21 08:30	11/03/21 18:08	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/02/21 08:30	11/03/21 18:08	1
Barium	<0.0016		0.010	0.0016	mg/L		11/02/21 08:30	11/03/21 18:08	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/02/21 08:30	11/03/21 18:08	1
Boron	<0.039		0.080	0.039	mg/L		11/02/21 08:30	11/03/21 18:08	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/02/21 08:30	11/03/21 18:08	1
Calcium	<0.13		0.50	0.13	mg/L		11/02/21 08:30	11/03/21 18:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/02/21 08:30	11/03/21 18:08	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		11/02/21 08:30	11/03/21 18:08	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/02/21 08:30	11/03/21 18:08	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/02/21 08:30	11/03/21 18:08	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/02/21 08:30	11/03/21 18:08	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/02/21 08:30	11/03/21 18:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/02/21 08:30	11/03/21 18:08	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/01/21 12:10	11/01/21 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/01/21 12:50	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-6

Date Collected: 10/26/21 13:05
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10**		2.5	1.8	mg/L			10/29/21 11:07	2.5
Fluoride	**0.13**	**J**	0.25	0.065	mg/L			10/29/21 11:07	2.5
Sulfate	**2200**		25	19	mg/L			10/29/21 11:24	25

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/02/21 08:30	11/03/21 18:13	1
Arsenic	**0.0014**		0.0010	0.00031	mg/L		11/02/21 08:30	11/03/21 18:13	1
Barium	**0.031**		0.010	0.0016	mg/L		11/02/21 08:30	11/03/21 18:13	1
Beryllium	**0.00021**	**J**	0.0025	0.00018	mg/L		11/02/21 08:30	11/03/21 18:13	1
Boron	**6.5**	**B**	0.080	0.039	mg/L		11/02/21 08:30	11/03/21 18:13	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/02/21 08:30	11/03/21 18:13	1
Calcium	**420**		0.50	0.13	mg/L		11/02/21 08:30	11/03/21 18:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/02/21 08:30	11/03/21 18:13	1
Cobalt	**0.40**		0.0025	0.00013	mg/L		11/02/21 08:30	11/03/21 18:13	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/02/21 08:30	11/03/21 18:13	1
Lithium	**0.0057**		0.0050	0.0034	mg/L		11/02/21 08:30	11/03/21 18:13	1
Molybdenum	**0.00076**	**J**	0.015	0.00061	mg/L		11/02/21 08:30	11/03/21 18:13	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/02/21 08:30	11/03/21 18:13	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/02/21 08:30	11/03/21 18:13	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/01/21 12:10	11/01/21 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**3100**		20	20	mg/L			11/01/21 12:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.66**				SU			10/26/21 13:05	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: DUP-1
Date Collected: 10/26/21 00:01
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-3
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10		2.5	1.8	mg/L			10/29/21 11:40	2.5
Fluoride	0.11	J	0.25	0.065	mg/L			10/29/21 11:40	2.5
Sulfate	2400		25	19	mg/L			10/29/21 11:56	25

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/02/21 08:30	11/03/21 18:29	1
Arsenic	0.0016		0.0010	0.00031	mg/L		11/02/21 08:30	11/03/21 18:29	1
Barium	0.030		0.010	0.0016	mg/L		11/02/21 08:30	11/03/21 18:29	1
Beryllium	0.00023	J	0.0025	0.00018	mg/L		11/02/21 08:30	11/03/21 18:29	1
Boron	6.9	B	0.080	0.039	mg/L		11/02/21 08:30	11/03/21 18:29	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/02/21 08:30	11/03/21 18:29	1
Calcium	420		0.50	0.13	mg/L		11/02/21 08:30	11/03/21 18:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/02/21 08:30	11/03/21 18:29	1
Cobalt	0.40		0.0025	0.00013	mg/L		11/02/21 08:30	11/03/21 18:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/02/21 08:30	11/03/21 18:29	1
Lithium	0.0057		0.0050	0.0034	mg/L		11/02/21 08:30	11/03/21 18:29	1
Molybdenum	0.00081	J	0.015	0.00061	mg/L		11/02/21 08:30	11/03/21 18:29	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/02/21 08:30	11/03/21 18:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/02/21 08:30	11/03/21 18:29	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/01/21 12:10	11/01/21 15:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	3100		20	20	mg/L			11/01/21 12:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.66				SU			10/26/21 00:01	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-7

Date Collected: 10/26/21 16:18
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		1.0	0.71	mg/L			10/29/21 12:13	1
Fluoride	**0.15**		0.10	0.026	mg/L			10/29/21 12:13	1
Sulfate	**1300**		10	7.6	mg/L			10/29/21 12:29	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/02/21 08:30	11/03/21 18:45	1
Arsenic	**0.0017**		0.0010	0.00031	mg/L		11/02/21 08:30	11/03/21 18:45	1
Barium	**0.077**		0.010	0.0016	mg/L		11/02/21 08:30	11/03/21 18:45	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/02/21 08:30	11/03/21 18:45	1
Boron	**2.0**	**B**	0.080	0.039	mg/L		11/02/21 08:30	11/03/21 18:45	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/02/21 08:30	11/03/21 18:45	1
Calcium	**310**		0.50	0.13	mg/L		11/02/21 08:30	11/03/21 18:45	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/02/21 08:30	11/03/21 18:45	1
Cobalt	**0.0036**		0.0025	0.00013	mg/L		11/02/21 08:30	11/03/21 18:45	1
Lead	**0.00051**	**J**	0.0010	0.00013	mg/L		11/02/21 08:30	11/03/21 18:45	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/02/21 08:30	11/03/21 18:45	1
Molybdenum	**0.0030**	**J**	0.015	0.00061	mg/L		11/02/21 08:30	11/03/21 18:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/02/21 08:30	11/03/21 18:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/02/21 08:30	11/03/21 18:45	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/01/21 12:10	11/01/21 15:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2000**		10	10	mg/L			11/01/21 12:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.45**				SU			10/26/21 16:18	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-10

Date Collected: 10/27/21 16:38
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.5**		1.0	0.71	mg/L			10/31/21 17:19	1
Fluoride	**0.40**		0.10	0.026	mg/L			10/31/21 17:19	1
Sulfate	**300**		5.0	3.8	mg/L			10/31/21 17:35	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00038**	**J**	0.0020	0.00038	mg/L		11/05/21 11:00	11/06/21 15:33	1
Arsenic	**0.0030**		0.0010	0.00031	mg/L		11/05/21 11:00	11/06/21 15:33	1
Barium	**0.039**		0.010	0.0016	mg/L		11/05/21 11:00	11/06/21 15:33	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 11:00	11/06/21 15:33	1
Boron	**0.36**		0.080	0.039	mg/L		11/05/21 11:00	11/11/21 10:27	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 11:00	11/06/21 15:33	1
Calcium	**94**		0.50	0.13	mg/L		11/05/21 11:00	11/06/21 15:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 11:00	11/06/21 15:33	1
Cobalt	**0.0018**	**J**	0.0025	0.00013	mg/L		11/05/21 11:00	11/06/21 15:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 11:00	11/06/21 15:33	1
Lithium	**0.013**		0.0050	0.0034	mg/L		11/05/21 11:00	11/06/21 15:33	1
Molybdenum	**0.0045**	**J**	0.015	0.00061	mg/L		11/05/21 11:00	11/06/21 15:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 11:00	11/06/21 15:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 11:00	11/06/21 15:33	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**520**		10	10	mg/L			11/02/21 14:07	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.58**				SU			10/27/21 16:38	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: EB-2
Date Collected: 10/28/21 11:00
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-2
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			10/31/21 17:52	1
Fluoride	<0.026		0.10	0.026	mg/L			10/31/21 17:52	1
Sulfate	<0.76		1.0	0.76	mg/L			10/31/21 17:52	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 11:00	11/06/21 15:37	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 11:00	11/06/21 15:37	1
Barium	<0.0016		0.010	0.0016	mg/L		11/05/21 11:00	11/06/21 15:37	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 11:00	11/06/21 15:37	1
Boron	<0.039		0.080	0.039	mg/L		11/05/21 11:00	11/11/21 10:38	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 11:00	11/06/21 15:37	1
Calcium	<0.13		0.50	0.13	mg/L		11/05/21 11:00	11/06/21 15:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 11:00	11/06/21 15:37	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		11/05/21 11:00	11/06/21 15:37	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 11:00	11/06/21 15:37	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/05/21 11:00	11/06/21 15:37	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/05/21 11:00	11/06/21 15:37	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 11:00	11/06/21 15:37	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 11:00	11/06/21 15:37	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/02/21 14:07	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-9

Date Collected: 10/28/21 14:40
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.2**		1.0	0.71	mg/L			10/31/21 18:08	1
Fluoride	**0.45**		0.10	0.026	mg/L			10/31/21 18:08	1
Sulfate	**300**		5.0	3.8	mg/L			10/31/21 18:24	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00057**	**J**	0.0020	0.00038	mg/L		11/05/21 11:00	11/06/21 15:40	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 11:00	11/06/21 15:40	1
Barium	**0.035**		0.010	0.0016	mg/L		11/05/21 11:00	11/06/21 15:40	1
Beryllium	**0.00029**	**J**	0.0025	0.00018	mg/L		11/05/21 11:00	11/06/21 15:40	1
Boron	**0.75**		0.080	0.039	mg/L		11/05/21 11:00	11/11/21 10:41	1
Cadmium	**0.00055**	**J**	0.0025	0.00022	mg/L		11/05/21 11:00	11/06/21 15:40	1
Calcium	**69**		0.50	0.13	mg/L		11/05/21 11:00	11/06/21 15:40	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 11:00	11/06/21 15:40	1
Cobalt	**0.079**		0.0025	0.00013	mg/L		11/05/21 11:00	11/06/21 15:40	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 11:00	11/06/21 15:40	1
Lithium	**0.099**		0.0050	0.0034	mg/L		11/05/21 11:00	11/06/21 15:40	1
Molybdenum	**0.00068**	**J**	0.015	0.00061	mg/L		11/05/21 11:00	11/06/21 15:40	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 11:00	11/06/21 15:40	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 11:00	11/06/21 15:40	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**510**		10	10	mg/L			11/03/21 11:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.49**				SU			10/28/21 14:40	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-11

Date Collected: 10/28/21 18:36
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.0**		1.0	0.71	mg/L			10/31/21 18:41	1
Fluoride	**0.15**		0.10	0.026	mg/L			10/31/21 18:41	1
Sulfate	**60**		1.0	0.76	mg/L			10/31/21 18:41	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00058**	**J**	0.0020	0.00038	mg/L		11/05/21 11:00	11/06/21 15:44	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 11:00	11/06/21 15:44	1
Barium	**0.020**		0.010	0.0016	mg/L		11/05/21 11:00	11/06/21 15:44	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 11:00	11/06/21 15:44	1
Boron	**0.16**		0.080	0.039	mg/L		11/05/21 11:00	11/11/21 10:51	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 11:00	11/06/21 15:44	1
Calcium	**25**		0.50	0.13	mg/L		11/05/21 11:00	11/06/21 15:44	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 11:00	11/06/21 15:44	1
Cobalt	**0.00044**	**J**	0.0025	0.00013	mg/L		11/05/21 11:00	11/06/21 15:44	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 11:00	11/06/21 15:44	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/05/21 11:00	11/06/21 15:44	1
Molybdenum	**0.0022**	**J**	0.015	0.00061	mg/L		11/05/21 11:00	11/06/21 15:44	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 11:00	11/06/21 15:44	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 11:00	11/06/21 15:44	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**190**		10	10	mg/L			11/03/21 11:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.78**				SU			10/28/21 18:36	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-3

Date Collected: 10/29/21 11:34
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.7**		1.0	0.71	mg/L			10/31/21 18:57	1
Fluoride	**0.088**	**J**	0.10	0.026	mg/L			10/31/21 18:57	1
Sulfate	**1300**		10	7.6	mg/L			10/31/21 19:13	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 11:00	11/06/21 15:47	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 11:00	11/06/21 15:47	1
Barium	**0.028**		0.010	0.0016	mg/L		11/05/21 11:00	11/06/21 15:47	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 11:00	11/06/21 15:47	1
Boron	**1.6**		0.080	0.039	mg/L		11/05/21 11:00	11/11/21 10:55	1
Cadmium	**0.00077**	**J**	0.0025	0.00022	mg/L		11/05/21 11:00	11/06/21 15:47	1
Calcium	**370**		0.50	0.13	mg/L		11/05/21 11:00	11/06/21 15:47	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 11:00	11/06/21 15:47	1
Cobalt	**0.056**		0.0025	0.00013	mg/L		11/05/21 11:00	11/06/21 15:47	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 11:00	11/06/21 15:47	1
Lithium	**0.058**		0.0050	0.0034	mg/L		11/05/21 11:00	11/06/21 15:47	1
Molybdenum	**0.00086**	**J**	0.015	0.00061	mg/L		11/05/21 11:00	11/06/21 15:47	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 11:00	11/06/21 15:47	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 11:00	11/06/21 15:47	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1900**		10	10	mg/L			11/03/21 11:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.60**				SU			10/29/21 11:34	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-4

Date Collected: 10/27/21 15:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.9**		1.0	0.71	mg/L			10/31/21 14:50	1
Fluoride	**0.20**		0.10	0.026	mg/L			10/31/21 14:50	1
Sulfate	**1300**		10	7.6	mg/L			10/31/21 15:07	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/08/21 11:30	11/09/21 11:44	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/08/21 11:30	11/09/21 11:44	1
Barium	**0.070**		0.010	0.0016	mg/L		11/08/21 11:30	11/09/21 11:44	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/08/21 11:30	11/09/21 11:44	1
Boron	**3.7**		0.16	0.077	mg/L		11/08/21 11:30	11/11/21 09:28	2
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/08/21 11:30	11/09/21 11:44	1
Calcium	**400**		0.50	0.13	mg/L		11/08/21 11:30	11/09/21 11:44	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/08/21 11:30	11/09/21 11:44	1
Cobalt	**0.0013**	**J**	0.0025	0.00013	mg/L		11/08/21 11:30	11/09/21 11:44	1
Lead	**0.00026**	**J B**	0.0010	0.00013	mg/L		11/08/21 11:30	11/09/21 11:44	1
Lithium	**0.0073**		0.0050	0.0034	mg/L		11/08/21 11:30	11/09/21 11:44	1
Molybdenum	**0.0085**	**J**	0.015	0.00061	mg/L		11/08/21 11:30	11/09/21 11:44	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/08/21 11:30	11/09/21 11:44	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/08/21 11:30	11/09/21 11:44	1

Method: EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/08/21 11:30	11/09/21 12:57	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/08/21 11:30	11/09/21 12:57	1
Barium	**0.062**		0.010	0.0016	mg/L		11/08/21 11:30	11/09/21 12:57	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/08/21 11:30	11/09/21 12:57	1
Boron	**3.7**		0.16	0.077	mg/L		11/08/21 11:30	11/11/21 10:07	2
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/08/21 11:30	11/09/21 12:57	1
Calcium	**360**		0.50	0.13	mg/L		11/08/21 11:30	11/09/21 12:57	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/08/21 11:30	11/09/21 12:57	1
Cobalt	**0.0013**	**J**	0.0025	0.00013	mg/L		11/08/21 11:30	11/09/21 12:57	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/08/21 11:30	11/09/21 12:57	1
Lithium	**0.0066**		0.0050	0.0034	mg/L		11/08/21 11:30	11/09/21 12:57	1
Molybdenum	**0.0073**	**J**	0.015	0.00061	mg/L		11/08/21 11:30	11/09/21 12:57	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/08/21 11:30	11/09/21 12:57	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/08/21 11:30	11/09/21 12:57	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:06	1

Method: EPA 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:14	11/11/21 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2000**		20	20	mg/L			11/02/21 14:07	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-4
Date Collected: 10/27/21 15:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-1
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.47				SU			10/27/21 15:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-1

Date Collected: 10/28/21 13:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.9**		1.0	0.71	mg/L			10/31/21 15:24	1
Fluoride	**0.076**	**J**	0.10	0.026	mg/L			10/31/21 15:24	1
Sulfate	**100**		1.0	0.76	mg/L			10/31/21 15:24	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/08/21 11:30	11/09/21 12:22	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/08/21 11:30	11/09/21 12:22	1
Barium	**0.058**		0.010	0.0016	mg/L		11/08/21 11:30	11/09/21 12:22	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/08/21 11:30	11/09/21 12:22	1
Boron	**0.41**		0.080	0.039	mg/L		11/08/21 11:30	11/11/21 09:32	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/08/21 11:30	11/09/21 12:22	1
Calcium	**33**		0.50	0.13	mg/L		11/08/21 11:30	11/09/21 12:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/08/21 11:30	11/09/21 12:22	1
Cobalt	**0.00073**	**J**	0.0025	0.00013	mg/L		11/08/21 11:30	11/09/21 12:22	1
Lead	**0.00013**	**J B**	0.0010	0.00013	mg/L		11/08/21 11:30	11/09/21 12:22	1
Lithium	**0.0038**	**J**	0.0050	0.0034	mg/L		11/08/21 11:30	11/09/21 12:22	1
Molybdenum	**0.00096**	**J**	0.015	0.00061	mg/L		11/08/21 11:30	11/09/21 12:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/08/21 11:30	11/09/21 12:22	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/08/21 11:30	11/09/21 12:22	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**250**		10	10	mg/L			11/03/21 11:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.44**				SU			10/28/21 13:10	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-2

Date Collected: 10/28/21 17:50
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.0**		1.0	0.71	mg/L			10/31/21 15:41	1
Fluoride	**0.13**		0.10	0.026	mg/L			10/31/21 15:41	1
Sulfate	**820**		5.0	3.8	mg/L			10/31/21 15:57	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/08/21 11:30	11/09/21 12:26	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/08/21 11:30	11/09/21 12:26	1
Barium	**0.024**		0.010	0.0016	mg/L		11/08/21 11:30	11/09/21 12:26	1
Beryllium	**0.00047**	**J**	0.0025	0.00018	mg/L		11/08/21 11:30	11/09/21 12:26	1
Boron	**0.48**		0.080	0.039	mg/L		11/08/21 11:30	11/11/21 09:35	1
Cadmium	**0.00084**	**J**	0.0025	0.00022	mg/L		11/08/21 11:30	11/09/21 12:26	1
Calcium	**190**		0.50	0.13	mg/L		11/08/21 11:30	11/09/21 12:26	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/08/21 11:30	11/09/21 12:26	1
Cobalt	**0.19**		0.0025	0.00013	mg/L		11/08/21 11:30	11/09/21 12:26	1
Lead	**0.00043**	**J B**	0.0010	0.00013	mg/L		11/08/21 11:30	11/09/21 12:26	1
Lithium	**0.021**		0.0050	0.0034	mg/L		11/08/21 11:30	11/09/21 12:26	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/08/21 11:30	11/09/21 12:26	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/08/21 11:30	11/09/21 12:26	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/08/21 11:30	11/09/21 12:26	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1200**		10	10	mg/L			11/03/21 11:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.86**				SU			10/28/21 17:50	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-1

Client Sample ID: APIPZ-5

Date Collected: 10/29/21 11:05
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.9**		1.0	0.71	mg/L			10/31/21 16:46	1
Fluoride	**0.32**		0.10	0.026	mg/L			10/31/21 16:46	1
Sulfate	**1900**		20	15	mg/L			11/02/21 13:32	20

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/08/21 11:30	11/09/21 12:29	1
Arsenic	**0.0011**		0.0010	0.00031	mg/L		11/08/21 11:30	11/09/21 12:29	1
Barium	**0.080**		0.010	0.0016	mg/L		11/08/21 11:30	11/09/21 12:29	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/08/21 11:30	11/09/21 12:29	1
Boron	**6.5**		0.40	0.19	mg/L		11/08/21 11:30	11/11/21 09:39	5
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/08/21 11:30	11/09/21 12:29	1
Calcium	**590**		0.50	0.13	mg/L		11/08/21 11:30	11/09/21 12:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/08/21 11:30	11/09/21 12:29	1
Cobalt	**0.018**		0.0025	0.00013	mg/L		11/08/21 11:30	11/09/21 12:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/08/21 11:30	11/09/21 12:29	1
Lithium	**0.13**		0.0050	0.0034	mg/L		11/08/21 11:30	11/09/21 12:29	1
Molybdenum	**0.031**		0.015	0.00061	mg/L		11/08/21 11:30	11/09/21 12:29	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/08/21 11:30	11/09/21 12:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/08/21 11:30	11/09/21 12:29	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 11:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2800**		20	20	mg/L			11/03/21 11:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.36**				SU			10/29/21 11:05	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-376935/6
Matrix: Water
Analysis Batch: 376935

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			10/29/21 08:08	1
Fluoride	<0.026		0.10	0.026	mg/L			10/29/21 08:08	1
Sulfate	<0.76		1.0	0.76	mg/L			10/29/21 08:08	1

Lab Sample ID: LCS 180-376935/5
Matrix: Water
Analysis Batch: 376935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.2		mg/L		100	90 - 110
Fluoride	2.50	2.55		mg/L		102	90 - 110
Sulfate	50.0	49.4		mg/L		99	90 - 110

Lab Sample ID: 180-129189-1 MS
Matrix: Water
Analysis Batch: 376935

Client Sample ID: AP1GWA-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.6		50.0	52.4		mg/L		102	90 - 110
Fluoride	0.29		2.50	2.82		mg/L		101	90 - 110
Sulfate	69	F1	50.0	118		mg/L		99	90 - 110

Lab Sample ID: 180-129189-1 MSD
Matrix: Water
Analysis Batch: 376935

Client Sample ID: AP1GWA-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.6		50.0	50.2		mg/L		97	90 - 110	4	20
Fluoride	0.29		2.50	2.66		mg/L		95	90 - 110	6	20
Sulfate	69	F1	50.0	113	F1	mg/L		89	90 - 110	4	20

Lab Sample ID: MB 180-377100/7
Matrix: Water
Analysis Batch: 377100

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			10/31/21 13:42	1
Fluoride	<0.026		0.10	0.026	mg/L			10/31/21 13:42	1
Sulfate	<0.76		1.0	0.76	mg/L			10/31/21 13:42	1

Lab Sample ID: LCS 180-377100/6
Matrix: Water
Analysis Batch: 377100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Fluoride	2.50	2.51		mg/L		101	90 - 110
Sulfate	50.0	48.3		mg/L		97	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-377297/7
Matrix: Water
Analysis Batch: 377297

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			11/02/21 10:15	1
Fluoride	<0.026		0.10	0.026	mg/L			11/02/21 10:15	1
Sulfate	<0.76		1.0	0.76	mg/L			11/02/21 10:15	1

Lab Sample ID: LCS 180-377297/6
Matrix: Water
Analysis Batch: 377297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Fluoride	2.50	2.40		mg/L		96	90 - 110
Sulfate	50.0	47.9		mg/L		96	90 - 110

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-377248/1-A
Matrix: Water
Analysis Batch: 377542

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 377248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/02/21 08:30	11/03/21 16:22	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/02/21 08:30	11/03/21 16:22	1
Barium	<0.0016		0.010	0.0016	mg/L		11/02/21 08:30	11/03/21 16:22	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/02/21 08:30	11/03/21 16:22	1
Boron	0.0594	J	0.080	0.039	mg/L		11/02/21 08:30	11/03/21 16:22	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/02/21 08:30	11/03/21 16:22	1
Calcium	<0.13		0.50	0.13	mg/L		11/02/21 08:30	11/03/21 16:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/02/21 08:30	11/03/21 16:22	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		11/02/21 08:30	11/03/21 16:22	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/02/21 08:30	11/03/21 16:22	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/02/21 08:30	11/03/21 16:22	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/02/21 08:30	11/03/21 16:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/02/21 08:30	11/03/21 16:22	1
Thallium	0.000280	J	0.0010	0.00015	mg/L		11/02/21 08:30	11/03/21 16:22	1

Lab Sample ID: LCS 180-377248/2-A
Matrix: Water
Analysis Batch: 377542

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 377248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.251		mg/L		100	80 - 120
Arsenic	1.00	1.04		mg/L		104	80 - 120
Barium	1.00	1.04		mg/L		104	80 - 120
Beryllium	0.500	0.502		mg/L		100	80 - 120
Boron	1.25	1.24		mg/L		99	80 - 120
Cadmium	0.500	0.523		mg/L		105	80 - 120
Calcium	25.0	26.0		mg/L		104	80 - 120
Chromium	0.500	0.507		mg/L		101	80 - 120
Cobalt	0.500	0.527		mg/L		105	80 - 120

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-377248/2-A
Matrix: Water
Analysis Batch: 377542

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 377248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.500	0.510		mg/L		102	80 - 120
Lithium	0.500	0.493		mg/L		99	80 - 120
Molybdenum	0.500	0.528		mg/L		106	80 - 120
Selenium	1.00	1.01		mg/L		101	80 - 120
Thallium	1.00	1.03		mg/L		103	80 - 120

Lab Sample ID: MB 180-377767/1-A
Matrix: Water
Analysis Batch: 378151

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 377767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 11:00	11/06/21 13:12	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 11:00	11/06/21 13:12	1
Barium	<0.0016		0.010	0.0016	mg/L		11/05/21 11:00	11/06/21 13:12	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 11:00	11/06/21 13:12	1
Boron	<0.039		0.080	0.039	mg/L		11/05/21 11:00	11/06/21 13:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 11:00	11/06/21 13:12	1
Calcium	<0.13		0.50	0.13	mg/L		11/05/21 11:00	11/06/21 13:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 11:00	11/06/21 13:12	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		11/05/21 11:00	11/06/21 13:12	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 11:00	11/06/21 13:12	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/05/21 11:00	11/06/21 13:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/05/21 11:00	11/06/21 13:12	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 11:00	11/06/21 13:12	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 11:00	11/06/21 13:12	1

Lab Sample ID: LCS 180-377767/2-A
Matrix: Water
Analysis Batch: 378151

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 377767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.250		mg/L		100	80 - 120
Arsenic	1.00	1.05		mg/L		105	80 - 120
Barium	1.00	1.04		mg/L		104	80 - 120
Beryllium	0.500	0.527		mg/L		105	80 - 120
Boron	1.25	1.15		mg/L		92	80 - 120
Cadmium	0.500	0.521		mg/L		104	80 - 120
Calcium	25.0	27.4		mg/L		110	80 - 120
Chromium	0.500	0.510		mg/L		102	80 - 120
Cobalt	0.500	0.519		mg/L		104	80 - 120
Lead	0.500	0.523		mg/L		105	80 - 120
Lithium	0.500	0.502		mg/L		100	80 - 120
Molybdenum	0.500	0.532		mg/L		106	80 - 120
Selenium	1.00	1.05		mg/L		105	80 - 120
Thallium	1.00	1.11		mg/L		111	80 - 120

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-377808/1-A
Matrix: Water
Analysis Batch: 378338

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 377808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/08/21 11:30	11/09/21 11:27	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/08/21 11:30	11/09/21 11:27	1
Barium	<0.0016		0.010	0.0016	mg/L		11/08/21 11:30	11/09/21 11:27	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/08/21 11:30	11/09/21 11:27	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/08/21 11:30	11/09/21 11:27	1
Calcium	<0.13		0.50	0.13	mg/L		11/08/21 11:30	11/09/21 11:27	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/08/21 11:30	11/09/21 11:27	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		11/08/21 11:30	11/09/21 11:27	1
Lead	0.000188	J	0.0010	0.00013	mg/L		11/08/21 11:30	11/09/21 11:27	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/08/21 11:30	11/09/21 11:27	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/08/21 11:30	11/09/21 11:27	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/08/21 11:30	11/09/21 11:27	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/08/21 11:30	11/09/21 11:27	1

Lab Sample ID: MB 180-377808/1-A
Matrix: Water
Analysis Batch: 378673

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 377808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		11/08/21 11:30	11/11/21 09:22	1

Lab Sample ID: LCS 180-377808/2-A
Matrix: Water
Analysis Batch: 378338

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 377808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.245		mg/L		98	80 - 120
Arsenic	1.00	0.988		mg/L		99	80 - 120
Barium	1.00	0.997		mg/L		100	80 - 120
Beryllium	0.500	0.489		mg/L		98	80 - 120
Cadmium	0.500	0.499		mg/L		100	80 - 120
Calcium	25.0	27.8		mg/L		111	80 - 120
Chromium	0.500	0.488		mg/L		98	80 - 120
Cobalt	0.500	0.503		mg/L		101	80 - 120
Lead	0.500	0.494		mg/L		99	80 - 120
Lithium	0.500	0.473		mg/L		95	80 - 120
Molybdenum	0.500	0.514		mg/L		103	80 - 120
Selenium	1.00	0.987		mg/L		99	80 - 120
Thallium	1.00	1.04		mg/L		104	80 - 120

Lab Sample ID: LCS 180-377808/2-A
Matrix: Water
Analysis Batch: 378673

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 377808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.18		mg/L		95	80 - 120

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-129306-1 MS
Matrix: Water
Analysis Batch: 378338

Client Sample ID: APIPZ-4
Prep Type: Total Recoverable
Prep Batch: 377808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.00038		0.250	0.244		mg/L		97	75 - 125
Arsenic	<0.00031		1.00	1.03		mg/L		103	75 - 125
Barium	0.070		1.00	1.07		mg/L		100	75 - 125
Beryllium	<0.00018		0.500	0.490		mg/L		98	75 - 125
Cadmium	<0.00022		0.500	0.491		mg/L		98	75 - 125
Calcium	400		25.0	413	4	mg/L		71	75 - 125
Chromium	<0.0015		0.500	0.483		mg/L		97	75 - 125
Cobalt	0.0013	J	0.500	0.510		mg/L		102	75 - 125
Lead	0.00026	J B	0.500	0.494		mg/L		99	75 - 125
Lithium	0.0073		0.500	0.481		mg/L		95	75 - 125
Molybdenum	0.0085	J	0.500	0.540		mg/L		106	75 - 125
Selenium	<0.0015		1.00	0.988		mg/L		99	75 - 125
Thallium	<0.00015		1.00	1.04		mg/L		104	75 - 125

Lab Sample ID: 180-129306-1 MSD
Matrix: Water
Analysis Batch: 378338

Client Sample ID: APIPZ-4
Prep Type: Total Recoverable
Prep Batch: 377808

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00038		0.250	0.243		mg/L		97	75 - 125	0	20
Arsenic	<0.00031		1.00	1.02		mg/L		102	75 - 125	1	20
Barium	0.070		1.00	1.07		mg/L		100	75 - 125	1	20
Beryllium	<0.00018		0.500	0.495		mg/L		99	75 - 125	1	20
Cadmium	<0.00022		0.500	0.493		mg/L		99	75 - 125	0	20
Calcium	400		25.0	412	4	mg/L		66	75 - 125	0	20
Chromium	<0.0015		0.500	0.485		mg/L		97	75 - 125	0	20
Cobalt	0.0013	J	0.500	0.509		mg/L		102	75 - 125	0	20
Lead	0.00026	J B	0.500	0.490		mg/L		98	75 - 125	1	20
Lithium	0.0073		0.500	0.481		mg/L		95	75 - 125	0	20
Molybdenum	0.0085	J	0.500	0.537		mg/L		106	75 - 125	0	20
Selenium	<0.0015		1.00	0.976		mg/L		98	75 - 125	1	20
Thallium	<0.00015		1.00	1.03		mg/L		103	75 - 125	0	20

Lab Sample ID: MB 180-377832/1-A
Matrix: Water
Analysis Batch: 377936

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 377832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		11/05/21 12:00	11/06/21 12:09	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		11/05/21 12:00	11/06/21 12:09	1
Barium	<0.0016		0.010	0.0016	mg/L		11/05/21 12:00	11/06/21 12:09	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		11/05/21 12:00	11/06/21 12:09	1
Boron	<0.039		0.080	0.039	mg/L		11/05/21 12:00	11/06/21 12:09	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		11/05/21 12:00	11/06/21 12:09	1
Calcium	<0.13		0.50	0.13	mg/L		11/05/21 12:00	11/06/21 12:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		11/05/21 12:00	11/06/21 12:09	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		11/05/21 12:00	11/06/21 12:09	1
Lead	<0.00013		0.0010	0.00013	mg/L		11/05/21 12:00	11/06/21 12:09	1
Lithium	<0.0034		0.0050	0.0034	mg/L		11/05/21 12:00	11/06/21 12:09	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-377832/1-A
Matrix: Water
Analysis Batch: 377936

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 377832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	<0.00061		0.015	0.00061	mg/L		11/05/21 12:00	11/06/21 12:09	1
Selenium	<0.0015		0.0050	0.0015	mg/L		11/05/21 12:00	11/06/21 12:09	1
Thallium	<0.00015		0.0010	0.00015	mg/L		11/05/21 12:00	11/06/21 12:09	1

Lab Sample ID: LCS 180-377832/2-A
Matrix: Water
Analysis Batch: 377936

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 377832

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.234		mg/L		93	80 - 120
Arsenic	1.00	0.969		mg/L		97	80 - 120
Barium	1.00	0.988		mg/L		99	80 - 120
Beryllium	0.500	0.548		mg/L		110	80 - 120
Boron	1.25	1.15		mg/L		92	80 - 120
Cadmium	0.500	0.504		mg/L		101	80 - 120
Calcium	25.0	28.9		mg/L		115	80 - 120
Chromium	0.500	0.504		mg/L		101	80 - 120
Cobalt	0.500	0.487		mg/L		97	80 - 120
Lead	0.500	0.511		mg/L		102	80 - 120
Lithium	0.500	0.489		mg/L		98	80 - 120
Molybdenum	0.500	0.515		mg/L		103	80 - 120
Selenium	1.00	1.12		mg/L		112	80 - 120
Thallium	1.00	0.988		mg/L		99	80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-377215/1-A
Matrix: Water
Analysis Batch: 377253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377215

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/01/21 12:10	11/01/21 14:50	1

Lab Sample ID: LCS 180-377215/2-A
Matrix: Water
Analysis Batch: 377253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00275		mg/L		110	80 - 120

Lab Sample ID: MB 180-377670/1-A
Matrix: Water
Analysis Batch: 377857

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/04/21 13:40	11/05/21 12:42	1

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-377670/2-A
Matrix: Water
Analysis Batch: 377857

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00234		mg/L		94	80 - 120

Lab Sample ID: MB 180-378156/1-A
Matrix: Water
Analysis Batch: 378605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378156

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:14	11/11/21 10:55	1

Lab Sample ID: LCS 180-378156/2-A
Matrix: Water
Analysis Batch: 378605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378156

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00259		mg/L		104	80 - 120

Lab Sample ID: MB 180-378157/1-A
Matrix: Water
Analysis Batch: 378424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 378157

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		11/09/21 06:16	11/10/21 10:43	1

Lab Sample ID: LCS 180-378157/2-A
Matrix: Water
Analysis Batch: 378424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 378157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00246		mg/L		98	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-377220/2
Matrix: Water
Analysis Batch: 377220

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/01/21 12:50	1

Lab Sample ID: LCS 180-377220/1
Matrix: Water
Analysis Batch: 377220

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	422	502		mg/L		119	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 180-129191-4 DU
Matrix: Water
Analysis Batch: 377220

Client Sample ID: APIPZ-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	2000			1940		mg/L				2	10

Lab Sample ID: MB 180-377385/2
Matrix: Water
Analysis Batch: 377385

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/02/21 14:07	1

Lab Sample ID: LCS 180-377385/1
Matrix: Water
Analysis Batch: 377385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			422	402		mg/L		95	80 - 120		

Lab Sample ID: MB 180-377503/2
Matrix: Water
Analysis Batch: 377503

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/03/21 11:52	1

Lab Sample ID: LCS 180-377503/1
Matrix: Water
Analysis Batch: 377503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			422	400		mg/L		95	80 - 120		

Lab Sample ID: 180-129304-3 DU
Matrix: Water
Analysis Batch: 377503

Client Sample ID: APIPZ-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	510			554		mg/L				8	10

HPLC/IC

Analysis Batch: 376935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-129189-2	AP1GWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-129189-3	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-129189-4	AP1PZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-129189-4	AP1PZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-129191-1	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-129191-2	APIPZ-6	Total/NA	Water	EPA 300.0 R2.1	
180-129191-2	APIPZ-6	Total/NA	Water	EPA 300.0 R2.1	
180-129191-3	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-129191-3	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-129191-4	APIPZ-7	Total/NA	Water	EPA 300.0 R2.1	
180-129191-4	APIPZ-7	Total/NA	Water	EPA 300.0 R2.1	
MB 180-376935/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-376935/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-129189-1 MS	AP1GWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-129189-1 MSD	AP1GWA-1	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 377100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total/NA	Water	EPA 300.0 R2.1	
180-129304-1	APIPZ-10	Total/NA	Water	EPA 300.0 R2.1	
180-129304-2	EB-2	Total/NA	Water	EPA 300.0 R2.1	
180-129304-3	APIPZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-129304-3	APIPZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-129304-4	APIPZ-11	Total/NA	Water	EPA 300.0 R2.1	
180-129304-5	APIPZ-3	Total/NA	Water	EPA 300.0 R2.1	
180-129304-5	APIPZ-3	Total/NA	Water	EPA 300.0 R2.1	
180-129306-1	APIPZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-129306-1	APIPZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-129306-2	APIPZ-1	Total/NA	Water	EPA 300.0 R2.1	
180-129306-3	APIPZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-129306-3	APIPZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-129306-4	APIPZ-5	Total/NA	Water	EPA 300.0 R2.1	
MB 180-377100/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-377100/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 377297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-4	APIPZ-5	Total/NA	Water	EPA 300.0 R2.1	
MB 180-377297/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-377297/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 377215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-3	FB-1	Total/NA	Water	7470A	
180-129189-4	AP1PZ-8	Total/NA	Water	7470A	
180-129191-1	EB-1	Total/NA	Water	7470A	
180-129191-2	APIPZ-6	Total/NA	Water	7470A	
180-129191-3	DUP-1	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 377215 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129191-4	APIPZ-7	Total/NA	Water	7470A	
MB 180-377215/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-377215/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 377248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129191-1	EB-1	Total Recoverable	Water	3005A	
180-129191-2	APIPZ-6	Total Recoverable	Water	3005A	
180-129191-3	DUP-1	Total Recoverable	Water	3005A	
180-129191-4	APIPZ-7	Total Recoverable	Water	3005A	
MB 180-377248/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-377248/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 377253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-3	FB-1	Total/NA	Water	EPA 7470A	377215
180-129189-4	AP1PZ-8	Total/NA	Water	EPA 7470A	377215
180-129191-1	EB-1	Total/NA	Water	EPA 7470A	377215
180-129191-2	APIPZ-6	Total/NA	Water	EPA 7470A	377215
180-129191-3	DUP-1	Total/NA	Water	EPA 7470A	377215
180-129191-4	APIPZ-7	Total/NA	Water	EPA 7470A	377215
MB 180-377215/1-A	Method Blank	Total/NA	Water	EPA 7470A	377215
LCS 180-377215/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	377215

Analysis Batch: 377542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129191-1	EB-1	Total Recoverable	Water	EPA 6020B	377248
180-129191-2	APIPZ-6	Total Recoverable	Water	EPA 6020B	377248
180-129191-3	DUP-1	Total Recoverable	Water	EPA 6020B	377248
180-129191-4	APIPZ-7	Total Recoverable	Water	EPA 6020B	377248
MB 180-377248/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	377248
LCS 180-377248/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	377248

Prep Batch: 377670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total/NA	Water	7470A	
180-129189-2	AP1GWA-2	Total/NA	Water	7470A	
MB 180-377670/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-377670/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 377767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total Recoverable	Water	3005A	
180-129304-2	EB-2	Total Recoverable	Water	3005A	
180-129304-3	APIPZ-9	Total Recoverable	Water	3005A	
180-129304-4	APIPZ-11	Total Recoverable	Water	3005A	
180-129304-5	APIPZ-3	Total Recoverable	Water	3005A	
MB 180-377767/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-377767/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Prep Batch: 377808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	APIPZ-4	Dissolved	Water	3005A	
180-129306-1	APIPZ-4	Total Recoverable	Water	3005A	
180-129306-2	APIPZ-1	Total Recoverable	Water	3005A	
180-129306-3	APIPZ-2	Total Recoverable	Water	3005A	
180-129306-4	APIPZ-5	Total Recoverable	Water	3005A	
MB 180-377808/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-377808/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-129306-1 MS	APIPZ-4	Total Recoverable	Water	3005A	
180-129306-1 MSD	APIPZ-4	Total Recoverable	Water	3005A	

Prep Batch: 377832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total Recoverable	Water	3005A	
180-129189-2	AP1GWA-2	Total Recoverable	Water	3005A	
180-129189-3	FB-1	Total Recoverable	Water	3005A	
180-129189-4	AP1PZ-8	Total Recoverable	Water	3005A	
MB 180-377832/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-377832/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 377857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total/NA	Water	EPA 7470A	377670
180-129189-2	AP1GWA-2	Total/NA	Water	EPA 7470A	377670
MB 180-377670/1-A	Method Blank	Total/NA	Water	EPA 7470A	377670
LCS 180-377670/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	377670

Analysis Batch: 377936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total Recoverable	Water	EPA 6020B	377832
180-129189-2	AP1GWA-2	Total Recoverable	Water	EPA 6020B	377832
180-129189-3	FB-1	Total Recoverable	Water	EPA 6020B	377832
180-129189-4	AP1PZ-8	Total Recoverable	Water	EPA 6020B	377832
MB 180-377832/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	377832
LCS 180-377832/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	377832

Analysis Batch: 378151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total Recoverable	Water	EPA 6020B	377767
180-129304-2	EB-2	Total Recoverable	Water	EPA 6020B	377767
180-129304-3	APIPZ-9	Total Recoverable	Water	EPA 6020B	377767
180-129304-4	APIPZ-11	Total Recoverable	Water	EPA 6020B	377767
180-129304-5	APIPZ-3	Total Recoverable	Water	EPA 6020B	377767
MB 180-377767/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	377767
LCS 180-377767/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	377767

Prep Batch: 378156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	APIPZ-4	Dissolved	Water	7470A	
MB 180-378156/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-378156/2-A	Lab Control Sample	Total/NA	Water	7470A	

Metals

Prep Batch: 378157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total/NA	Water	7470A	
180-129304-2	EB-2	Total/NA	Water	7470A	
180-129304-3	APIPZ-9	Total/NA	Water	7470A	
180-129304-4	APIPZ-11	Total/NA	Water	7470A	
180-129304-5	APIPZ-3	Total/NA	Water	7470A	
180-129306-1	APIPZ-4	Total/NA	Water	7470A	
180-129306-2	APIPZ-1	Total/NA	Water	7470A	
180-129306-3	APIPZ-2	Total/NA	Water	7470A	
180-129306-4	APIPZ-5	Total/NA	Water	7470A	
MB 180-378157/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-378157/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 378338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	APIPZ-4	Dissolved	Water	EPA 6020B	377808
180-129306-1	APIPZ-4	Total Recoverable	Water	EPA 6020B	377808
180-129306-2	APIPZ-1	Total Recoverable	Water	EPA 6020B	377808
180-129306-3	APIPZ-2	Total Recoverable	Water	EPA 6020B	377808
180-129306-4	APIPZ-5	Total Recoverable	Water	EPA 6020B	377808
MB 180-377808/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	377808
LCS 180-377808/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	377808
180-129306-1 MS	APIPZ-4	Total Recoverable	Water	EPA 6020B	377808
180-129306-1 MSD	APIPZ-4	Total Recoverable	Water	EPA 6020B	377808

Analysis Batch: 378424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total/NA	Water	EPA 7470A	378157
180-129304-2	EB-2	Total/NA	Water	EPA 7470A	378157
180-129304-3	APIPZ-9	Total/NA	Water	EPA 7470A	378157
180-129304-4	APIPZ-11	Total/NA	Water	EPA 7470A	378157
180-129304-5	APIPZ-3	Total/NA	Water	EPA 7470A	378157
180-129306-1	APIPZ-4	Total/NA	Water	EPA 7470A	378157
180-129306-2	APIPZ-1	Total/NA	Water	EPA 7470A	378157
180-129306-3	APIPZ-2	Total/NA	Water	EPA 7470A	378157
180-129306-4	APIPZ-5	Total/NA	Water	EPA 7470A	378157
MB 180-378157/1-A	Method Blank	Total/NA	Water	EPA 7470A	378157
LCS 180-378157/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	378157

Analysis Batch: 378605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	APIPZ-4	Dissolved	Water	EPA 7470A	378156
MB 180-378156/1-A	Method Blank	Total/NA	Water	EPA 7470A	378156
LCS 180-378156/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	378156

Analysis Batch: 378673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total Recoverable	Water	EPA 6020B	377767
180-129304-2	EB-2	Total Recoverable	Water	EPA 6020B	377767
180-129304-3	APIPZ-9	Total Recoverable	Water	EPA 6020B	377767
180-129304-4	APIPZ-11	Total Recoverable	Water	EPA 6020B	377767
180-129304-5	APIPZ-3	Total Recoverable	Water	EPA 6020B	377767

Metals (Continued)

Analysis Batch: 378673 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	APIPZ-4	Dissolved	Water	EPA 6020B	377808
180-129306-1	APIPZ-4	Total Recoverable	Water	EPA 6020B	377808
180-129306-2	APIPZ-1	Total Recoverable	Water	EPA 6020B	377808
180-129306-3	APIPZ-2	Total Recoverable	Water	EPA 6020B	377808
180-129306-4	APIPZ-5	Total Recoverable	Water	EPA 6020B	377808
MB 180-377808/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	377808
LCS 180-377808/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	377808

General Chemistry

Analysis Batch: 377220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total/NA	Water	SM 2540C	
180-129189-2	AP1GWA-2	Total/NA	Water	SM 2540C	
180-129189-3	FB-1	Total/NA	Water	SM 2540C	
180-129189-4	AP1PZ-8	Total/NA	Water	SM 2540C	
180-129191-1	EB-1	Total/NA	Water	SM 2540C	
180-129191-2	APIPZ-6	Total/NA	Water	SM 2540C	
180-129191-3	DUP-1	Total/NA	Water	SM 2540C	
180-129191-4	APIPZ-7	Total/NA	Water	SM 2540C	
MB 180-377220/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-377220/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-129191-4 DU	APIPZ-7	Total/NA	Water	SM 2540C	

Analysis Batch: 377385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total/NA	Water	SM 2540C	
180-129304-2	EB-2	Total/NA	Water	SM 2540C	
180-129306-1	APIPZ-4	Total/NA	Water	SM 2540C	
MB 180-377385/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-377385/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 377503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-3	APIPZ-9	Total/NA	Water	SM 2540C	
180-129304-4	APIPZ-11	Total/NA	Water	SM 2540C	
180-129304-5	APIPZ-3	Total/NA	Water	SM 2540C	
180-129306-2	APIPZ-1	Total/NA	Water	SM 2540C	
180-129306-3	APIPZ-2	Total/NA	Water	SM 2540C	
180-129306-4	APIPZ-5	Total/NA	Water	SM 2540C	
MB 180-377503/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-377503/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-129304-3 DU	APIPZ-9	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 377481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total/NA	Water	Field Sampling	
180-129189-2	AP1GWA-2	Total/NA	Water	Field Sampling	
180-129189-4	AP1PZ-8	Total/NA	Water	Field Sampling	
180-129191-2	APIPZ-6	Total/NA	Water	Field Sampling	

Field Service / Mobile Lab (Continued)

Analysis Batch: 377481 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129191-3	DUP-1	Total/NA	Water	Field Sampling	
180-129191-4	APIPZ-7	Total/NA	Water	Field Sampling	

Analysis Batch: 378382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	APIPZ-10	Total/NA	Water	Field Sampling	
180-129304-3	APIPZ-9	Total/NA	Water	Field Sampling	
180-129304-4	APIPZ-11	Total/NA	Water	Field Sampling	
180-129304-5	APIPZ-3	Total/NA	Water	Field Sampling	

Analysis Batch: 378414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	APIPZ-4	Total/NA	Water	Field Sampling	
180-129306-2	APIPZ-1	Total/NA	Water	Field Sampling	
180-129306-3	APIPZ-2	Total/NA	Water	Field Sampling	
180-129306-4	APIPZ-5	Total/NA	Water	Field Sampling	

Cooler 2

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins 244- ATLANTA

Client Information	Sampler: Daniel Howard/Eve Gulley	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/AppIV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N	D		
APIGWA-1	10/26/21	1235	G	W	N		X	X	X	X	X	X		4	pH = 4.76
APIGWA-2	10/26/21	1430	G	W	N		X	X	X	X	X	X		4	pH = 5.98
FB-1	10/27/21	1010	G	W	N		X	X	X	X	X	X		4	
APIPZ-8	10/27/21	1154	G	W	N		X	X	X	X	X	X		4	pH = 6.67

180-129189 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Daniel Howard	10/27/21 1401	Wood		10/27/21	
2		10/27/21 16:20	FTA		10/27/21 16:10	FTA
3		Date/Time:	Company	Received by:	10/28/21	FTA-PM

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

cooler 1

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins 244- ATLANTA

Client Information	Sampler: Daniel Howard/Evan Guillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~2 of 3~~ 1
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: Standard			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify); Other:
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/AppIV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N	D		
EB-1	10/26/21	1050	G	W	N		X	X	X	X	X	X		4	
APIPZ-6		1305	G	W	N		X	X	X	X	X	X		4	pH=5.66
DUP-1		—	G	W	N		X	X	X	X	X	X		4	pH=5.66
APIPZ-7	↓	1618	G	W	N		X	X	X	X	X	X		4	pH=6.45

180-129191 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	David L Howard	10/27/21 1401			10/27/21 16:10	ETA
2		10/27/21 16:00	ETA		10/27/21 16:00	ETA
3		Date/Time:	Company	Received by:	Date/Time: Invishi 16:00	Company: ETA PLA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Cooler 1

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins 244- ATLANTA

Client Information	Sampler: Daniel Howard/EverGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~2 of 3~~ 1
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: standard			Preservation Codes:
City: Atlanta	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/AppIV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	~~N~~ D	D		
APIPZ-10	10/27/21	1638	G	W	N		X	X	X	X	X	X		4	pH=6.58
EB-2	10/28/21	1100	G	W	N		X	X	X	X	X	X		4	
APIPZ-9	↓	1440	G	W	N		X	X	X	X	X	X		4	pH=5.49
APIPZ-11	↓	1836	G	W	N		X	X	X	X	X	X		4	pH=6.78
APIPZ-3	10/29/21	1134	G	W	N		X	X	X	X	X	X		4	pH=5.60

180-129304 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by: Daniel K Howard	Date/Time: 10/29/21 1347	Company: Wood	Received by: M Washington	Date/Time: 10-29-21 13:47	Company	
Relinquished by:	Date/Time: 10/29/21 1700	Company	Received by:	Date/Time: 10/29/21 1700	Company	
Relinquished by:	Date/Time:	Company	Received by: DN ~~Nolan~~	Date/Time: 10-30-21	Company: ~~ESTAT~~ EAT	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 10:30

cooler 2

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins 244- ATLANTA

Client Information	Sampler: Daniel Howard/Ever Gillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~2 of 3~~ 1
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/ApplV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered								Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	~~N~~ D	D									
APIPZ-4	10/27/21	1510	G	W	Y		X	X	X	X	X	X	X								4	pH=6.47
APIPZ-1	10/28/21	1310	G	W	N		X	X	X	X	X	X										pH=6.44
APIPZ-2	10/28/21	1750	G	W	N		X	X	X	X	X	X										pH=5.86
APIPZ-5	10/29/21	1105	G	W	N		X	X	X	X	X	X										pH=6.36

180-129306 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel L Howard	10/29/21 1347	Wood	M L Washington	10-29-21 13:47	
2		10/29/21 1700			10/29/21 1800	
3				D Watson	10-30-21	FEDEX

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.30

Ver: 06/08/2021

11/24/2021


9298
0.28
Do not lift using
Part # 166469-434 Rtr2 EXP 09/21
eurofins
Environment Testing
TestAmerica
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE: 27OCT21
ACTWGT: 62.90 LB
CAD: 859116/CAFE3507
BILL RECIPIENT
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLANT ARTWRIGHT
1600
FedEx
Express
1 of 2
TRK# 0201 5220 7113 9298
MASTER
THU - 28 OCT 10:30A
PRIORITY OVERNIGHT
15238
PIT
PA-US
NA AGCA
180-129189 Waybill
Uncorrected temp
Thermometer ID
CF 0
Initials
4.1 °C
PT-WI-SR-001 effective 11/8/18
11/24/2021

Svcs: PRIORITY OVERNIGHT Mast F
TRC
10.28
Do not

Part # 159469-494 RIT2 EXP 09/21

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 27OCT21
ACTWGT: 62.90 LB
CAD: 859116/CAFE3507

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLANT ARTWRIGHT

FedEx Express

2 of 2
MPS# 0263 5220 7113 9302
Mstr# 5220 7113 9298

THU - 28 OCT 10:30A
PRIORITY OVERNIGHT

0201

NA AGCA

15238
PIT

Uncorrected temp 5.7 °C
Thermometer ID 8
CF 0 Initials
PT-WI-SR-001 effective 11/8/18

11/24/2021

Part # 159469-434 RIT2 EXP 09/21

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 29OCT21
ACTWGT: 60.40 LB
CAD: 859116/CAFE3507

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLT- ARTWRIGHT

FedEx Express

1 of 2

TRK# 0201 5220 7114 0258

SATURDAY 12:00P
PRIORITY OVERNIGHT

MASTER
XO AGCA

15238
PA-US PIT

Uncorrected temp 4.7 °C
Thermometer ID 8
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

PLT- Artwright
Dep:
Date: 29Oct21
Wgt: 60.40 LBS
DV:
SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
Svcs: PRIORITY OVERNIGHT Master 5220 7114 0258
TRCK: 5220 7114 0269

Part # 159469-434 RIT2 EXP 09/21

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 300
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 29OCT21
ACTWGT: 60.40 LB
CAD: 859116/CAFE3507

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLT - ARTWRIGHT

FedEx Express

J2110201211101uv

2 of 2
MPS# 5220 7114 0269
Mstr# 5220 7114 0258

SATURDAY 12:00P
PRIORITY OVERNIGHT

0263 0201

XO AGCA

15238
PIT

4.2 °C
6
-US

Uncorrected temp
Thermometer ID
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-129306 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-1

Login Number: 129189
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-1

Login Number: 129191
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-1

Login Number: 129304
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-1

Login Number: 129306
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-129189-2
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
12/21/2021 1:26:11 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-129189-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-129189-2

Comments
No additional comments.

Receipt
The samples were received on 10/28/2021 4:00 PM and 10/30/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 3.7º C, 4.1º C, 4.2º C and 4.7º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC was not relinquished to TAPITT.

RAD
Methods 903.0, 9315: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
AP1GWA-1 (180-129189-1), AP1GWA-2 (180-129189-2), FB-1 (180-129189-3) and AP1PZ-8 (180-129189-4)

Methods 903.0, 9315: Radium 226 batch 535027
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-1 (180-129191-1), AP1PZ-6 (180-129191-2), DUP-1 (180-129191-3), AP1PZ-7 (180-129191-4), (LCS 160-535027/1-A), (LCSD 160-535027/2-A) and (MB 160-535027/23-A)

Methods 903.0, 9315: Radium 226 batch 535638
The method blank (MB) has activity above the MDC and RL. The following associated samples are below the reporting limit for the contaminant, therefore, re-analysis is not required. The data have been reported. (MB 160-535638/23-A)

Methods 903.0, 9315: Radium 226 batch 535638
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-4 (180-129306-1), AP1PZ-1 (180-129306-2), AP1PZ-2 (180-129306-3), AP1PZ-5 (180-129306-4), (LCS 160-535638/1-A), (LCSD 160-535638/2-A) and (MB 160-535638/23-A)

Methods 903.0, 9315: Radium 226 batch 538437
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-10 (180-129304-1), EB-2 (180-129304-2), AP1PZ-9 (180-129304-3), AP1PZ-11 (180-129304-4), AP1PZ-3 (180-129304-5), (LCS 160-538437/1-A) and (MB 160-538437/23-A)

Methods 904.0, 9320: Radium 228 batch 535160
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1GWA-1 (180-129189-1), AP1GWA-2 (180-129189-2), FB-1 (180-129189-3), AP1PZ-8 (180-129189-4), (LCS 160-535160/1-A), (LCSD 160-535160/2-A) and (MB 160-535160/23-A)

Methods 904.0, 9320: Radium 228 batch 535028
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-1 (180-129191-1), AP1PZ-6 (180-129191-2), DUP-1 (180-129191-3), AP1PZ-7 (180-129191-4), (LCS 160-535028/1-A), (LCSD 160-535028/2-A) and (MB 160-535028/23-A)

Job ID: 180-129189-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

Methods 904.0, 9320: Radium 228 batch 535642
The LCS/LCSD recovered at (72% & 69%). The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (61-138) per method requirements. The LCS passes, no further action is required (LCS 160-535642/1-A) and (LCSD 160-535642/2-A)

Methods 904.0, 9320: Radium 228 batch 535642
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-4 (180-129306-1), AP1PZ-1 (180-129306-2), AP1PZ-2 (180-129306-3), AP1PZ-5 (180-129306-4), (LCS 160-535642/1-A), (LCSD 160-535642/2-A) and (MB 160-535642/23-A)

Methods 904.0, 9320: Radium 228 batch 538441
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. AP1PZ-10 (180-129304-1), EB-2 (180-129304-2), AP1PZ-9 (180-129304-3), AP1PZ-11 (180-129304-4), AP1PZ-3 (180-129304-5), (LCS 160-538441/1-A) and (MB 160-538441/23-A)

Method PrecSep_0: Radium-228 Prep Batch 160-535028
Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-1 (180-129191-1), AP1PZ-6 (180-129191-2), DUP-1 (180-129191-3) and AP1PZ-7 (180-129191-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-535160
Insufficient sample volume was available to perform a sample duplicate for the following samples: AP1GWA-1 (180-129189-1), AP1GWA-2 (180-129189-2), FB-1 (180-129189-3) and AP1PZ-8 (180-129189-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium-228 Prep Batch 160-535642
The following samples were prepared at a reduced aliquot due to Matrix: AP1PZ-4 (180-129306-1) and AP1PZ-1 (180-129306-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-535027
Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-1 (180-129191-1), AP1PZ-6 (180-129191-2), DUP-1 (180-129191-3) and AP1PZ-7 (180-129191-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-535029
Insufficient sample volume was available to perform a sample duplicate for the following samples: AP1GWA-1 (180-129189-1), AP1GWA-2 (180-129189-2), FB-1 (180-129189-3) and AP1PZ-8 (180-129189-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-535638
The following samples were prepared at a reduced aliquot due to Matrix: AP1PZ-4 (180-129306-1) and AP1PZ-1 (180-129306-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-129189-1	AP1GWA-1	Water	10/26/21 12:35	10/28/21 16:00
180-129189-2	AP1GWA-2	Water	10/26/21 14:30	10/28/21 16:00
180-129189-3	FB-1	Water	10/27/21 10:10	10/28/21 16:00
180-129189-4	AP1PZ-8	Water	10/27/21 11:54	10/28/21 16:00
180-129191-1	EB-1	Water	10/26/21 10:50	10/28/21 16:00
180-129191-2	AP1PZ-6	Water	10/26/21 13:05	10/28/21 16:00
180-129191-3	DUP-1	Water	10/26/21 00:01	10/28/21 16:00
180-129191-4	AP1PZ-7	Water	10/26/21 16:18	10/28/21 16:00
180-129304-1	AP1PZ-10	Water	10/27/21 16:38	10/30/21 10:30
180-129304-2	EB-2	Water	10/28/21 11:00	10/30/21 10:30
180-129304-3	AP1PZ-9	Water	10/28/21 14:40	10/30/21 10:30
180-129304-4	AP1PZ-11	Water	10/28/21 18:36	10/30/21 10:30
180-129304-5	AP1PZ-3	Water	10/29/21 11:34	10/30/21 10:30
180-129306-1	AP1PZ-4	Water	10/27/21 15:10	10/30/21 10:30
180-129306-2	AP1PZ-1	Water	10/28/21 13:10	10/30/21 10:30
180-129306-3	AP1PZ-2	Water	10/28/21 17:50	10/30/21 10:30
180-129306-4	AP1PZ-5	Water	10/29/21 11:05	10/30/21 10:30

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1GWA-1

Lab Sample ID: 180-129189-1

Date Collected: 10/26/21 12:35

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.83 mL	1.0 g	535029	11/04/21 09:25	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 11:22	MLK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.83 mL	1.0 g	535160	11/04/21 10:07	BMP	TAL SL
Total/NA	Analysis	9320		1			537997	11/22/21 13:26	EMH	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			542892	12/20/21 13:04	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1GWA-2

Lab Sample ID: 180-129189-2

Date Collected: 10/26/21 14:30

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.83 mL	1.0 g	535029	11/04/21 09:25	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 11:23	MLK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.83 mL	1.0 g	535160	11/04/21 10:07	BMP	TAL SL
Total/NA	Analysis	9320		1			537997	11/22/21 13:27	EMH	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			542892	12/20/21 13:04	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1

Lab Sample ID: 180-129189-3

Date Collected: 10/27/21 10:10

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.13 mL	1.0 g	535029	11/04/21 09:25	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 11:23	MLK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.13 mL	1.0 g	535160	11/04/21 10:07	BMP	TAL SL
Total/NA	Analysis	9320		1			537997	11/22/21 13:28	EMH	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			542892	12/20/21 13:04	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-8

Lab Sample ID: 180-129189-4

Date Collected: 10/27/21 11:54

Matrix: Water

Date Received: 10/28/21 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.99 mL	1.0 g	535029	11/04/21 09:25	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 11:23	MLK	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-8

Date Collected: 10/27/21 11:54
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.99 mL	1.0 g	535160	11/04/21 10:07	BMP	TAL SL
Total/NA	Analysis	9320		1			537997	11/22/21 13:28	EMH	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			542892	12/20/21 13:04	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-1

Date Collected: 10/26/21 10:50
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.64 mL	1.0 g	535027	11/04/21 08:46	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 13:34	MLK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.64 mL	1.0 g	535028	11/04/21 09:20	BMP	TAL SL
Total/NA	Analysis	9320		1			538217	11/23/21 12:57	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			539552	11/30/21 15:36	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-6

Date Collected: 10/26/21 13:05
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.81 mL	1.0 g	535027	11/04/21 08:46	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 13:35	MLK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.81 mL	1.0 g	535028	11/04/21 09:20	BMP	TAL SL
Total/NA	Analysis	9320		1			538217	11/23/21 12:58	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			539552	11/30/21 15:36	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1

Date Collected: 10/26/21 00:01
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.34 mL	1.0 g	535027	11/04/21 08:46	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 13:35	MLK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.34 mL	1.0 g	535028	11/04/21 09:20	BMP	TAL SL
Total/NA	Analysis	9320		1			538217	11/23/21 12:58	SCB	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: DUP-1
Date Collected: 10/26/21 00:01
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			539552	11/30/21 15:36	EMH	TAL SL

Client Sample ID: AP1PZ-7
Date Collected: 10/26/21 16:18
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.28 mL	1.0 g	535027	11/04/21 08:46	BMP	TAL SL
Total/NA	Analysis	9315		1			539048	11/29/21 13:36	MLK	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.28 mL	1.0 g	535028	11/04/21 09:20	BMP	TAL SL
Total/NA	Analysis	9320		1			538217	11/23/21 12:58	SCB	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			539552	11/30/21 15:36	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-10
Date Collected: 10/27/21 16:38
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.40 mL	1.0 g	538437	11/24/21 09:32	LPS	TAL SL
Total/NA	Analysis	9315		1			542558	12/17/21 12:09	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.40 mL	1.0 g	538441	11/24/21 10:09	LPS	TAL SL
Total/NA	Analysis	9320		1			539995	12/02/21 12:53	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			543071	12/21/21 08:29	CAH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2
Date Collected: 10/28/21 11:00
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.11 mL	1.0 g	538437	11/24/21 09:32	LPS	TAL SL
Total/NA	Analysis	9315		1			542558	12/17/21 12:10	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			999.11 mL	1.0 g	538441	11/24/21 10:09	LPS	TAL SL
Total/NA	Analysis	9320		1			539995	12/02/21 12:53	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			543071	12/21/21 08:29	CAH	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-9
Date Collected: 10/28/21 14:40
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.09 mL	1.0 g	538437	11/24/21 09:32	LPS	TAL SL
Total/NA	Analysis	9315		1			542558	12/17/21 12:10	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.09 mL	1.0 g	538441	11/24/21 10:09	LPS	TAL SL
Total/NA	Analysis	9320		1			539995	12/02/21 12:53	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			543071	12/21/21 08:29	CAH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-11
Date Collected: 10/28/21 18:36
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.70 mL	1.0 g	538437	11/24/21 09:32	LPS	TAL SL
Total/NA	Analysis	9315		1			542558	12/17/21 12:10	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.70 mL	1.0 g	538441	11/24/21 10:09	LPS	TAL SL
Total/NA	Analysis	9320		1			539995	12/02/21 12:53	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			543071	12/21/21 08:29	CAH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-3
Date Collected: 10/29/21 11:34
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.45 mL	1.0 g	538437	11/24/21 09:32	LPS	TAL SL
Total/NA	Analysis	9315		1			542558	12/17/21 12:10	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.45 mL	1.0 g	538441	11/24/21 10:09	LPS	TAL SL
Total/NA	Analysis	9320		1			539995	12/02/21 12:54	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			543071	12/21/21 08:29	CAH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-4
Date Collected: 10/27/21 15:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.80 mL	1.0 g	535638	11/09/21 10:24	LPS	TAL SL
Total/NA	Analysis	9315		1			539990	12/02/21 19:57	FLC	TAL SL
	Instrument ID: GFPCRED									

Client Sample ID: AP1PZ-4

Lab Sample ID: 180-129306-1

Date Collected: 10/27/21 15:10

Matrix: Water

Date Received: 10/30/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.80 mL	1.0 g	535642	11/09/21 11:17	LPS	TAL SL
Total/NA	Analysis	9320		1			538450	11/24/21 13:18	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			542893	12/20/21 13:07	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-1

Lab Sample ID: 180-129306-2

Date Collected: 10/28/21 13:10

Matrix: Water

Date Received: 10/30/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.23 mL	1.0 g	535638	11/09/21 10:24	LPS	TAL SL
Total/NA	Analysis	9315		1			539990	12/02/21 19:54	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.23 mL	1.0 g	535642	11/09/21 11:17	LPS	TAL SL
Total/NA	Analysis	9320		1			538451	11/24/21 13:24	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Analysis	Ra226_Ra228		1			542893	12/20/21 13:07	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-2

Lab Sample ID: 180-129306-3

Date Collected: 10/28/21 17:50

Matrix: Water

Date Received: 10/30/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.27 mL	1.0 g	535638	11/09/21 10:24	LPS	TAL SL
Total/NA	Analysis	9315		1			539990	12/02/21 19:54	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.27 mL	1.0 g	535642	11/09/21 11:17	LPS	TAL SL
Total/NA	Analysis	9320		1			538450	11/24/21 13:18	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			542893	12/20/21 13:07	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-5

Lab Sample ID: 180-129306-4

Date Collected: 10/29/21 11:05

Matrix: Water

Date Received: 10/30/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.70 mL	1.0 g	535638	11/09/21 10:24	LPS	TAL SL
Total/NA	Analysis	9315		1			539990	12/02/21 19:53	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			749.70 mL	1.0 g	535642	11/09/21 11:17	LPS	TAL SL
Total/NA	Analysis	9320		1			538451	11/24/21 13:23	FLC	TAL SL
	Instrument ID: GFPCRED									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-5
Date Collected: 10/29/21 11:05
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			542893	12/20/21 13:07	EMH	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: TAL SL

Batch Type: Prep

BMP = Bailey Pinette

LPS = Lauren Szostak

Batch Type: Analysis

CAH = Chris Hough

EMH = Elizabeth Hoerchler

FLC = Fernando Cruz

MLK = Micha Korrinhizer

SCB = Sarah Bernsen

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1GWA-1

Date Collected: 10/26/21 12:35
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.208		0.107	0.109	1.00	0.143	pCi/L	11/04/21 09:25	11/29/21 11:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*11/04/21 09:25*	*11/29/21 11:22*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.874		0.306	0.316	1.00	0.415	pCi/L	11/04/21 10:07	11/22/21 13:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:26*	*1*
Y Carrier	*80.0*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:26*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.08		0.324	0.334	5.00	0.415	pCi/L		12/20/21 13:04	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1GWA-2

Date Collected: 10/26/21 14:30
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.168		0.0999	0.101	1.00	0.139	pCi/L	11/04/21 09:25	11/29/21 11:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*11/04/21 09:25*	*11/29/21 11:23*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.767		0.271	0.280	1.00	0.363	pCi/L	11/04/21 10:07	11/22/21 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:27*	*1*
Y Carrier	*87.1*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.935		0.289	0.298	5.00	0.363	pCi/L		12/20/21 13:04	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: FB-1
Date Collected: 10/27/21 10:10
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.145**		0.0966	0.0975	1.00	0.139	pCi/L	11/04/21 09:25	11/29/21 11:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.5*		*40 - 110*	*11/04/21 09:25*	*11/29/21 11:23*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.478	U	0.368	0.371	1.00	0.581	pCi/L	11/04/21 10:07	11/22/21 13:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.5*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:28*	*1*
Y Carrier	*58.3*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:28*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.623**		0.380	0.384	5.00	0.581	pCi/L		12/20/21 13:04	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-8

Date Collected: 10/27/21 11:54
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129189-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.460		0.132	0.138	1.00	0.132	pCi/L	11/04/21 09:25	11/29/21 11:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.5*		*40 - 110*	*11/04/21 09:25*	*11/29/21 11:23*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.09		0.312	0.327	1.00	0.384	pCi/L	11/04/21 10:07	11/22/21 13:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.5*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:28*	*1*
Y Carrier	*79.6*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:28*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.55		0.339	0.355	5.00	0.384	pCi/L		12/20/21 13:04	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: EB-1

Date Collected: 10/26/21 10:50
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0194	U	0.0783	0.0783	1.00	0.160	pCi/L	11/04/21 08:46	11/29/21 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.0*		*40 - 110*	*11/04/21 08:46*	*11/29/21 13:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.242	U	0.245	0.246	1.00	0.398	pCi/L	11/04/21 09:20	11/23/21 12:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.0*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:57*	*1*
Y Carrier	*82.2*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:57*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.222	U	0.257	0.258	5.00	0.398	pCi/L		11/30/21 15:36	1

Client Sample ID: AP1PZ-6

Date Collected: 10/26/21 13:05
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.246**		0.110	0.112	1.00	0.137	pCi/L	11/04/21 08:46	11/29/21 13:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*109*		*40 - 110*	*11/04/21 08:46*	*11/29/21 13:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.288	U	0.249	0.250	1.00	0.399	pCi/L	11/04/21 09:20	11/23/21 12:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*109*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:58*	*1*
Y Carrier	*81.5*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.534**		0.272	0.274	5.00	0.399	pCi/L		11/30/21 15:36	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: DUP-1
Date Collected: 10/26/21 00:01
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.112	U	0.0898	0.0903	1.00	0.135	pCi/L	11/04/21 08:46	11/29/21 13:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*108*		*40 - 110*	*11/04/21 08:46*	*11/29/21 13:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.428**		0.239	0.242	1.00	0.357	pCi/L	11/04/21 09:20	11/23/21 12:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*108*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:58*	*1*
Y Carrier	*81.9*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.540**		0.255	0.258	5.00	0.357	pCi/L		11/30/21 15:36	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-7

Date Collected: 10/26/21 16:18
Date Received: 10/28/21 16:00

Lab Sample ID: 180-129191-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.426**		0.134	0.139	1.00	0.142	pCi/L	11/04/21 08:46	11/29/21 13:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*11/04/21 08:46*	*11/29/21 13:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0182	U	0.181	0.181	1.00	0.328	pCi/L	11/04/21 09:20	11/23/21 12:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:58*	*1*
Y Carrier	*83.0*		*40 - 110*	*11/04/21 09:20*	*11/23/21 12:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.444**		0.225	0.228	5.00	0.328	pCi/L		11/30/21 15:36	1

Client Sample ID: AP1PZ-10

Date Collected: 10/27/21 16:38
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.340		0.143	0.146	1.00	0.174	pCi/L	11/24/21 09:32	12/17/21 12:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*11/24/21 09:32*	*12/17/21 12:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.709		0.350	0.356	1.00	0.503	pCi/L	11/24/21 10:09	12/02/21 12:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*
Y Carrier	*84.9*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.05		0.378	0.385	5.00	0.503	pCi/L		12/21/21 08:29	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: EB-2
Date Collected: 10/28/21 11:00
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0212	U	0.0551	0.0552	1.00	0.102	pCi/L	11/24/21 09:32	12/17/21 12:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*40 - 110*	*11/24/21 09:32*	*12/17/21 12:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0355	U	0.230	0.230	1.00	0.420	pCi/L	11/24/21 10:09	12/02/21 12:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*
Y Carrier	*86.7*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0143	U	0.237	0.237	5.00	0.420	pCi/L		12/21/21 08:29	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-9

Date Collected: 10/28/21 14:40
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.209		0.0930	0.0949	1.00	0.111	pCi/L	11/24/21 09:32	12/17/21 12:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*11/24/21 09:32*	*12/17/21 12:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.519		0.268	0.272	1.00	0.395	pCi/L	11/24/21 10:09	12/02/21 12:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*
Y Carrier	*86.7*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.728		0.284	0.288	5.00	0.395	pCi/L		12/21/21 08:29	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-11
Date Collected: 10/28/21 18:36
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.136		0.0935	0.0943	1.00	0.129	pCi/L	11/24/21 09:32	12/17/21 12:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*11/24/21 09:32*	*12/17/21 12:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.131	U	0.329	0.329	1.00	0.612	pCi/L	11/24/21 10:09	12/02/21 12:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*
Y Carrier	*83.0*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.00478	U	0.342	0.342	5.00	0.612	pCi/L		12/21/21 08:29	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-3

Date Collected: 10/29/21 11:34
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129304-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.156		0.0777	0.0789	1.00	0.0912	pCi/L	11/24/21 09:32	12/17/21 12:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*11/24/21 09:32*	*12/17/21 12:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.970		0.327	0.339	1.00	0.446	pCi/L	11/24/21 10:09	12/02/21 12:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:54*	*1*
Y Carrier	*84.9*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:54*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.13		0.336	0.348	5.00	0.446	pCi/L		12/21/21 08:29	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-4

Date Collected: 10/27/21 15:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.319		0.106	0.109	1.00	0.0996	pCi/L	11/09/21 10:24	12/02/21 19:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*11/09/21 10:24*	*12/02/21 19:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.789		0.287	0.296	1.00	0.399	pCi/L	11/09/21 11:17	11/24/21 13:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:18*	*1*
Y Carrier	*86.0*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:18*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.11		0.306	0.315	5.00	0.399	pCi/L		12/20/21 13:07	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-1
Date Collected: 10/28/21 13:10
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-2
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.147		0.0992	0.100	1.00	0.136	pCi/L	11/09/21 10:24	12/02/21 19:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*11/09/21 10:24*	*12/02/21 19:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.259	U	0.287	0.288	1.00	0.470	pCi/L	11/09/21 11:17	11/24/21 13:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:24*	*1*
Y Carrier	*83.0*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:24*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.405	U	0.304	0.305	5.00	0.470	pCi/L		12/20/21 13:07	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-2

Date Collected: 10/28/21 17:50
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.259		0.0985	0.101	1.00	0.101	pCi/L	11/09/21 10:24	12/02/21 19:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*11/09/21 10:24*	*12/02/21 19:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.759		0.306	0.314	1.00	0.441	pCi/L	11/09/21 11:17	11/24/21 13:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:18*	*1*
Y Carrier	*86.4*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:18*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.321	0.330	5.00	0.441	pCi/L		12/20/21 13:07	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-129189-2

Client Sample ID: AP1PZ-5

Date Collected: 10/29/21 11:05
Date Received: 10/30/21 10:30

Lab Sample ID: 180-129306-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.183		0.103	0.104	1.00	0.126	pCi/L	11/09/21 10:24	12/02/21 19:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.5*		*40 - 110*	*11/09/21 10:24*	*12/02/21 19:53*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.643		0.348	0.353	1.00	0.518	pCi/L	11/09/21 11:17	11/24/21 13:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.5*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:23*	*1*
Y Carrier	*84.9*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:23*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.826		0.363	0.368	5.00	0.518	pCi/L		12/20/21 13:07	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-535027/23-A
Matrix: Water
Analysis Batch: 539049

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535027

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02492	U	0.0710	0.0710	1.00	0.131	pCi/L	11/04/21 08:46	11/29/21 13:39	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*11/04/21 08:46*	*11/29/21 13:39*	*1*

Lab Sample ID: LCS 160-535027/1-A
Matrix: Water
Analysis Batch: 539046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535027

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.20		1.09	1.00	0.146	pCi/L	90	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*95.0*		*40 - 110*

Lab Sample ID: LCSD 160-535027/2-A
Matrix: Water
Analysis Batch: 539046

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 535027

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	9.657		1.04	1.00	0.160	pCi/L	85	75 - 125	0.25	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*92.0*		*40 - 110*

Lab Sample ID: MB 160-535029/23-A
Matrix: Water
Analysis Batch: 539049

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535029

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1101	U	0.0834	0.0840	1.00	0.120	pCi/L	11/04/21 09:25	11/29/21 11:24	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*11/04/21 09:25*	*11/29/21 11:24*	*1*

Lab Sample ID: LCS 160-535029/1-A
Matrix: Water
Analysis Batch: 539046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535029

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	9.997		1.06	1.00	0.134	pCi/L	88	75 - 125		

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-535029/1-A
Matrix: Water
Analysis Batch: 539046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535029

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	100		40 - 110

Lab Sample ID: LCSD 160-535029/2-A
Matrix: Water
Analysis Batch: 539046

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 535029

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	9.750		1.03	1.00	0.139	pCi/L	86	75 - 125	0.12	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	104		40 - 110

Lab Sample ID: MB 160-535638/23-A
Matrix: Water
Analysis Batch: 539993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535638

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.309		0.244	0.271	1.00	0.182	pCi/L	11/09/21 10:24	12/02/21 20:41	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110	11/09/21 10:24	12/02/21 20:41	1

Lab Sample ID: LCS 160-535638/1-A
Matrix: Water
Analysis Batch: 539784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535638

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	12.59		1.33	1.00	0.173	pCi/L	83	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	107		40 - 110

Lab Sample ID: LCSD 160-535638/2-A
Matrix: Water
Analysis Batch: 539784

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 535638

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			15.1	12.51		1.33	1.00	0.194	pCi/L	83	75 - 125	0.03	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	99.7		40 - 110

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-538437/23-A
Matrix: Water
Analysis Batch: 542558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538437

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06878	U	0.0566	0.0570	1.00	0.0801	pCi/L	11/24/21 09:32	12/17/21 12:11	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*11/24/21 09:32*	*12/17/21 12:11*	*1*

Lab Sample ID: LCS 160-538437/1-A
Matrix: Water
Analysis Batch: 542557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538437

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.61		1.10	1.00	0.102	pCi/L	94	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.6*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-535028/23-A
Matrix: Water
Analysis Batch: 538233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535028

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.09522	U	0.195	0.195	1.00	0.336	pCi/L	11/04/21 09:20	11/23/21 13:02	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*11/04/21 09:20*	*11/23/21 13:02*	*1*
Y Carrier	*84.5*		*40 - 110*	*11/04/21 09:20*	*11/23/21 13:02*	*1*

Lab Sample ID: LCS 160-535028/1-A
Matrix: Water
Analysis Batch: 538216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535028

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.12	9.646		1.14	1.00	0.428	pCi/L	106	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*95.0*		*40 - 110*
Y Carrier	*79.3*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCSD 160-535028/2-A
Matrix: Water
Analysis Batch: 538216

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 535028

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.12	7.977		0.997	1.00	0.440	pCi/L	87	75 - 125	0.78	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*92.0*		*40 - 110*
Y Carrier	*79.6*		*40 - 110*

Lab Sample ID: MB 160-535160/23-A
Matrix: Water
Analysis Batch: 537997

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535160

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4991		0.280	0.284	1.00	0.414	pCi/L	11/04/21 10:07	11/22/21 13:28	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.3*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:28*	*1*
Y Carrier	*76.6*		*40 - 110*	*11/04/21 10:07*	*11/22/21 13:28*	*1*

Lab Sample ID: LCS 160-535160/1-A
Matrix: Water
Analysis Batch: 538184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535160

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.12	8.410		1.03	1.00	0.454	pCi/L	92	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*100*		*40 - 110*
Y Carrier	*78.1*		*40 - 110*

Lab Sample ID: LCSD 160-535160/2-A
Matrix: Water
Analysis Batch: 538184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 535160

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.12	7.866		0.945	1.00	0.362	pCi/L	86	75 - 125	0.28	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*104*		*40 - 110*
Y Carrier	*84.5*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-535642/23-A
Matrix: Water
Analysis Batch: 538450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 535642

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6999		0.347	0.353	1.00	0.509	pCi/L	11/09/21 11:17	11/24/21 13:18	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:18*	*1*
Y Carrier	*87.5*		*40 - 110*	*11/09/21 11:17*	*11/24/21 13:18*	*1*

Lab Sample ID: LCS 160-535642/1-A
Matrix: Water
Analysis Batch: 538449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 535642

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			12.2	8.813		1.13	1.00	0.561	pCi/L	72	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*107*		*40 - 110*
Y Carrier	*78.9*		*40 - 110*

Lab Sample ID: LCSD 160-535642/2-A
Matrix: Water
Analysis Batch: 538449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 535642

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			12.2	8.414		1.10	1.00	0.512	pCi/L	69	75 - 125	0.18	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*99.7*		*40 - 110*
Y Carrier	*82.2*		*40 - 110*

Lab Sample ID: MB 160-538441/23-A
Matrix: Water
Analysis Batch: 539995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538441

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.004977	U	0.244	0.244	1.00	0.439	pCi/L	11/24/21 10:09	12/02/21 12:54	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:54*	*1*
Y Carrier	*84.1*		*40 - 110*	*11/24/21 10:09*	*12/02/21 12:54*	*1*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-538441/1-A
Matrix: Water
Analysis Batch: 539994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538441

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.09	7.682		0.971	1.00	0.453	pCi/L	84	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.6*		*40 - 110*
Y Carrier	*81.1*		*40 - 110*

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Prep Batch: 535027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129191-1	EB-1	Total/NA	Water	PrecSep-21	
180-129191-2	AP1PZ-6	Total/NA	Water	PrecSep-21	
180-129191-3	DUP-1	Total/NA	Water	PrecSep-21	
180-129191-4	AP1PZ-7	Total/NA	Water	PrecSep-21	
MB 160-535027/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-535027/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-535027/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 535028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129191-1	EB-1	Total/NA	Water	PrecSep_0	
180-129191-2	AP1PZ-6	Total/NA	Water	PrecSep_0	
180-129191-3	DUP-1	Total/NA	Water	PrecSep_0	
180-129191-4	AP1PZ-7	Total/NA	Water	PrecSep_0	
MB 160-535028/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-535028/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-535028/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 535029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total/NA	Water	PrecSep-21	
180-129189-2	AP1GWA-2	Total/NA	Water	PrecSep-21	
180-129189-3	FB-1	Total/NA	Water	PrecSep-21	
180-129189-4	AP1PZ-8	Total/NA	Water	PrecSep-21	
MB 160-535029/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-535029/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-535029/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 535160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129189-1	AP1GWA-1	Total/NA	Water	PrecSep_0	
180-129189-2	AP1GWA-2	Total/NA	Water	PrecSep_0	
180-129189-3	FB-1	Total/NA	Water	PrecSep_0	
180-129189-4	AP1PZ-8	Total/NA	Water	PrecSep_0	
MB 160-535160/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-535160/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-535160/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 535638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	AP1PZ-4	Total/NA	Water	PrecSep-21	
180-129306-2	AP1PZ-1	Total/NA	Water	PrecSep-21	
180-129306-3	AP1PZ-2	Total/NA	Water	PrecSep-21	
180-129306-4	AP1PZ-5	Total/NA	Water	PrecSep-21	
MB 160-535638/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-535638/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-535638/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 535642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-1	AP1PZ-4	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 535642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129306-2	AP1PZ-1	Total/NA	Water	PrecSep_0	
180-129306-3	AP1PZ-2	Total/NA	Water	PrecSep_0	
180-129306-4	AP1PZ-5	Total/NA	Water	PrecSep_0	
MB 160-535642/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-535642/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-535642/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 538437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	AP1PZ-10	Total/NA	Water	PrecSep-21	
180-129304-2	EB-2	Total/NA	Water	PrecSep-21	
180-129304-3	AP1PZ-9	Total/NA	Water	PrecSep-21	
180-129304-4	AP1PZ-11	Total/NA	Water	PrecSep-21	
180-129304-5	AP1PZ-3	Total/NA	Water	PrecSep-21	
MB 160-538437/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-538437/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 538441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-129304-1	AP1PZ-10	Total/NA	Water	PrecSep_0	
180-129304-2	EB-2	Total/NA	Water	PrecSep_0	
180-129304-3	AP1PZ-9	Total/NA	Water	PrecSep_0	
180-129304-4	AP1PZ-11	Total/NA	Water	PrecSep_0	
180-129304-5	AP1PZ-3	Total/NA	Water	PrecSep_0	
MB 160-538441/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-538441/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Cooler 2

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins 244- ATLANTA

Client Information	Sampler: Daniel Howard/Eve Gulley	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page 2 of 3
Company: Southern Company	PWSID:			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/AppIV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N	D		
APIGWA-1	10/26/21	1235	G	W	N		X	X	X	X	X	X		4	pH = 4.76
APIGWA-2	10/26/21	1430	G	W	N		X	X	X	X	X	X		4	pH = 5.98
FB-1	10/27/21	1010	G	W	N		X	X	X	X	X	X		4	
APIPZ-8	10/27/21	1154	G	W	N		X	X	X	X	X	X		4	pH = 6.67

180-129189 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Daniel Howard	10/27/21 1401	Wood		10/27/21	
2		10/27/21 16:20	FHA		10/27/21 16:10	
3		Date/Time:	Company	Received by:	10/28/21 1100	FHA-PM

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

cooler 1

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins
244- ATLANTA

Client Information	Sampler: Daniel Howard/Evan Guillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~2 of 3~~ 1
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: Standard			Preservation Codes:
City: Atlanta	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/AppIV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	N	D		
EB-1	10/26/21	1050	G	W	N		X	X	X	X	X	X		4	
APIPZ-6	↓	1305	G	W	N		X	X	X	X	X	X		4	pH=5.66
DUP-1		—	G	W	N		X	X	X	X	X	X		4	pH=5.66
APIPZ-7	↓	1618	G	W	N		X	X	X	X	X	X		4	pH=6.45

180-129191 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	David L Howard	10/27/21 1401			10/27/21 16:10	ETA
2		10/27/21 16:00	ETA		10/27/21 16:00	ETA
3		Date/Time:	Company	Received by:	Date/Time: Invishi 16:00	Company: EDA P.A

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Cooler 1

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins 244- ATLANTA

Client Information	Sampler: Daniel Howard/EverGuillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~2 of 3~~ 1
Company: Southern Company	PWSID:	Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: standard			Preservation Codes:
City: Atlanta	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			Other:
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/AppIV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	~~N~~ D	D		
APIPZ-10	10/27/21	1638	G	W	N		X	X	X	X	X	X		4	pH=6.58
EB-2	10/28/21	1100	G	W	N		X	X	X	X	X	X		4	
APIPZ-9	↓	1440	G	W	N		X	X	X	X	X	X		4	pH=5.49
APIPZ-11	↓	1836	G	W	N		X	X	X	X	X	X		4	pH=6.78
APIPZ-3	10/29/21	1134	G	W	N		X	X	X	X	X	X		4	pH=5.60

180-129304 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by: Daniel K Howard	Date/Time: 10/29/21 1347	Company: Wood	Received by: M. Washington	Date/Time: 10-29-21 13:47	Company	
Relinquished by:	Date/Time: 10/29/21 1700	Company	Received by:	Date/Time: 10/29/21 1700	Company	
Relinquished by:	Date/Time:	Company	Received by: DN ~~Nolan~~	Date/Time: 10-30-21	Company ~~ETA~~ H+	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 10:30

cooler 2

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins 244- ATLANTA

Client Information	Sampler: Daniel Howard/Ever Gillen	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-75205-11995.2
Client Contact: Joju Abraham	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: GA	Page: Page ~~2 of 3~~ 1
Company: Southern Company	PWSID			Job #:
Address: 241 Ralph McGill Blvd SE B10185	Due Date Requested: standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308	Compliance Project: Δ Yes Δ No			
Phone:	PO #: GPC11064570			
Email: JAbraham@southernco.com	WO #:			
Project Name: Plant Arkwright CCR	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226 - Radium 226	6020B - Custom 14 (App III/ApplV)	300_ORGFM_28D - Chloride Fluoride Sulfate	2540C_Calcd - Total Dissolved Solids	9320_Ra228 - Radium 228	7470A - Mercury	6020B - Custom 14 (App III IV) field filtered							Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	N	N	N	~~N~~ D	D								
APIPZ-4	10/27/21	1510	G	W	Y		X	X	X	X	X	X	X							4	pH=6.47
APIPZ-1	10/28/21	1310	G	W	N		X	X	X	X	X	X									pH=6.44
APIPZ-2	10/28/21	1750	G	W	N		X	X	X	X	X	X									pH=5.86
APIPZ-5	10/29/21	1105	G	W	N		X	X	X	X	X	X									pH=6.36

180-129306 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Daniel L Howard	10/29/21 1347	Wood	M L Washington	10-29-21 13:47	
2		10/29/21 1700			10/29/21 1800	
3				D Watson	10-30-21	FEDEX

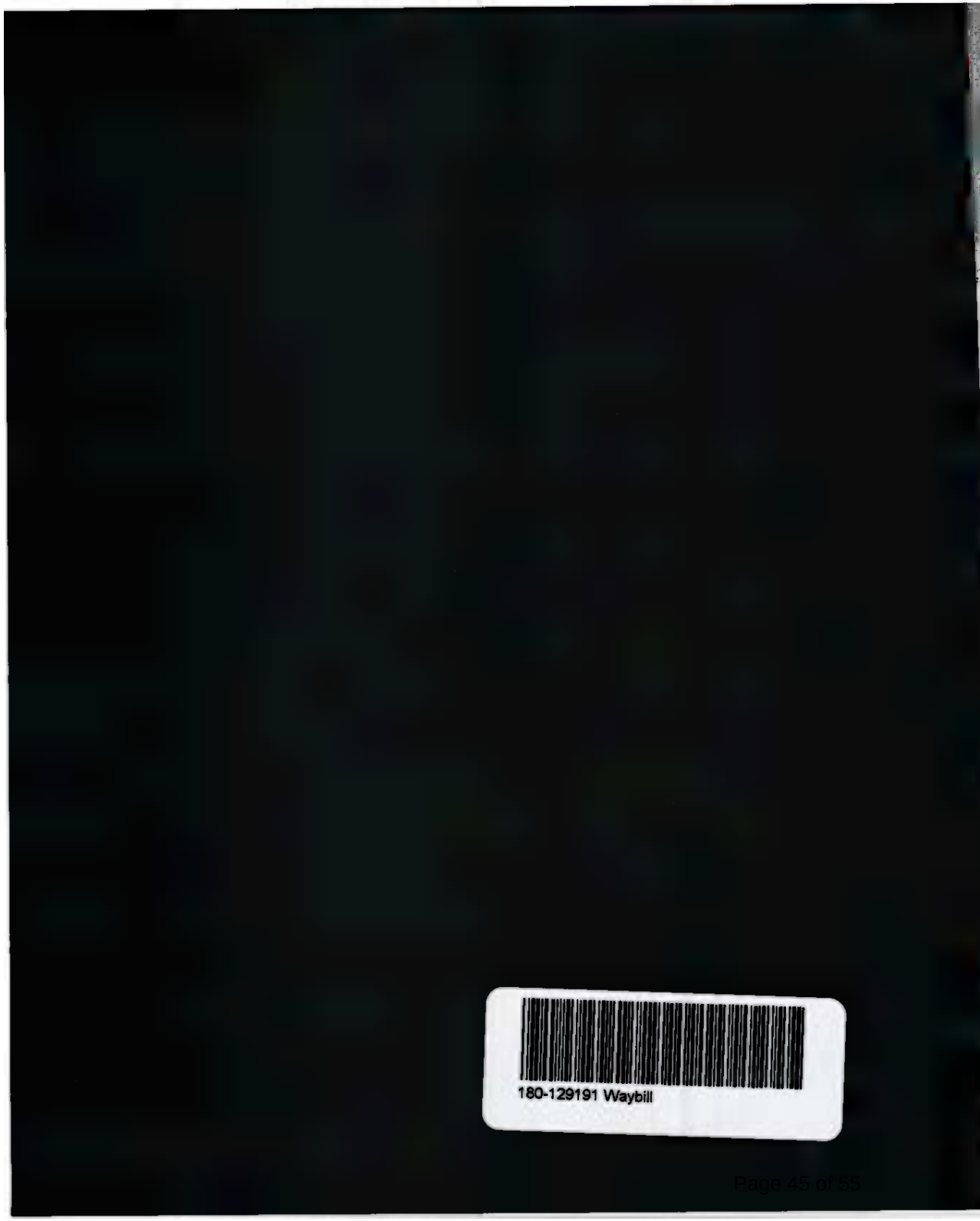
Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.30

Ver: 06/08/2021

12/21/2021


9298
0.28
Do not lift using
Part # 166469-434 Rit2 EXP 09/21
eurofins
Environment Testing
TestAmerica
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE: 27OCT21
ACTWGT: 62.90 LB
CAD: 859116/CAFE3507
BILL RECIPIENT
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLANT ARTWRIGHT
1600
FedEx
Express
1 of 2
TRK# 0201 5220 7113 9298
MASTER
THU - 28 OCT 10:30A
PRIORITY OVERNIGHT
15238
PIT
PA-US
NA AGCA
180-129189 Waybill
Uncorrected temp
Thermometer ID
4.1 °C
CF 0
Initials
PT-WI-SR-001 effective 11/8/18
12/21/2021



180-129191 Waybill

Svcs: PRIORITY OVERNIGHT Mast F
TRC

10.28

Do not

Part # 159469-494 RIT2 EXP 09/21

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 27OCT21
ACTWGT: 62.90 LB
CAD: 859116/CAFE3507

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLANT ARTWRIGHT

FedEx Express

2 of 2
MPS# 0263 5220 7113 9302
Mstr# 5220 7113 9298

THU - 28 OCT 10:30A
PRIORITY OVERNIGHT

0201

NA AGCA

15238
PIT

Uncorrected temp 5.1 °C
Thermometer ID 8
CF 0 Initials
PT-WI-SR-001 effective 11/8/18

12/21/2021

Part # 159469-434 RIT2 EXP 09/21

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 29OCT21
ACTWGT: 60.40 LB
CAD: 859116/CAFE3507

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLT- ARTWRIGHT

FedEx Express

1 of 2

TRK# 0201 5220 7114 0258

SATURDAY 12:00P
PRIORITY OVERNIGHT

MASTER

XO AGCA

15238
PA-US PIT

Uncorrected temp 4.7 °C
Thermometer ID 8
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

PLT- Artwright
Dep:
Date: 29Oct21
Wgt: 60.40 LBS
DV:
Svcs: PRIORITY OVERNIGHT Master 5220 7114 0258
TRCK: 5220 7114 0269

SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00

Part # 159469-434 RIT2 EXP 09/21

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 300
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 29OCT21
ACTWGT: 60.40 LB
CAD: 859116/CAFE3507

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: PLT - ARTWRIGHT

FedEx Express

J21102012110 1uv

2 of 2
MPS# 5220 7114 0269
Mstr# 5220 7114 0258

SATURDAY 12:00P
PRIORITY OVERNIGHT

0263 0201

15238
PIT

XO AGCA

4.2 °C
6
-US

Uncorrected temp
Thermometer ID
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-129306 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129189
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129189
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins TestAmerica, St. Louis
List Creation: 11/01/21 01:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129191
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129191
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins TestAmerica, St. Louis
List Creation: 11/01/21 01:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129304
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129304
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins TestAmerica, St. Louis
List Creation: 11/02/21 02:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129306
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-129189-2

Login Number: 129306
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins TestAmerica, St. Louis
List Creation: 11/02/21 02:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
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Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-133381-1
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
2/24/2022 10:35:39 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-133381-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-133381-1

Comments
No additional comments.

Receipt
The samples were received on 2/9/2022 10:30 AM and 2/10/2022 10:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.1º C, 2.5º C, 2.9º C and 3.1º C.

GC Semi VOA
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-388041 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: APIPZ-5 (180-133521-2) and APIPZ-6 (180-133523-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6020B: The continuing calibration verification (CCV) associated with batch 180-388040 recovered above the upper control limit for boron. The samples associated with this CCV were less than the RL for the affected analytes; therefore, the data have been reported. The associated samples are impacted: EB-1 (180-133381-1) and (CCV 180-388040/71).

Method 6020B: The (ICB 180-388561/9) and (ICV 180-388561/8) for analytical batch 3885671 recovered above the QA criteria for boron. Another ICV from a different stock was run and passes for all methods; therefore, the data has been reported

Method 6020B: The post digestion spike % recovery for boron and strontium associated with batch 180-388561 was outside of control limits. The associated sample is: APIPZ-6 (180-133523-1).

Method 7470A: The continuing calibration verification (CCV), low level continuing calibration verification (CCVL) and the laboratory control samples (LCS) and MS/MSD associated with batch 180-389210 recovered above the upper control limit for mercury. The samples associated with these QC were below the reporting limit for the affected analyte; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22 *
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-02-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22 *
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-133381-1	EB-1	Water	02/08/22 09:15	02/09/22 10:30
180-133381-2	APIPZ-3	Water	02/08/22 09:00	02/09/22 10:30
180-133381-3	APIPZ-4	Water	02/08/22 10:25	02/09/22 10:30
180-133381-4	APIPZ-8	Water	02/08/22 10:35	02/09/22 10:30
180-133381-5	DUP-1	Water	02/08/22 00:00	02/09/22 10:30
180-133386-1	FB-1	Water	02/07/22 14:05	02/09/22 10:30
180-133386-2	APIPZ-7	Water	02/07/22 15:35	02/09/22 10:30
180-133386-3	APIPZ-2	Water	02/07/22 15:20	02/09/22 10:30
180-133386-4	APIGWA-1	Water	02/07/22 15:10	02/09/22 10:30
180-133386-5	APIGWA-2	Water	02/07/22 17:05	02/09/22 10:30
180-133521-1	APIPZ-1	Water	02/08/22 11:05	02/10/22 10:15
180-133521-2	APIPZ-5	Water	02/08/22 14:35	02/10/22 10:15
180-133521-3	APIPZ-10	Water	02/09/22 10:02	02/10/22 10:15
180-133523-1	APIPZ-6	Water	02/08/22 12:40	02/10/22 10:15
180-133523-2	APIPZ-9	Water	02/08/22 14:00	02/10/22 10:15
180-133523-3	APIPZ-11	Water	02/08/22 16:15	02/10/22 10:15
180-133523-4	EB-2	Water	02/08/22 15:45	02/10/22 10:15

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: EB-1

Date Collected: 02/08/22 09:15
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 15:57	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:35	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388111	02/14/22 07:53	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 12:39	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387904	02/10/22 14:06	JCR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-3

Date Collected: 02/08/22 09:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 16:12	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			388041	02/12/22 16:27	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:46	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388111	02/14/22 07:53	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 12:40	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	388388	02/15/22 16:29	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388645	02/08/22 09:00	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-4

Date Collected: 02/08/22 10:25
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 16:42	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			388041	02/12/22 16:58	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:50	RSK	TAL PIT
	Instrument ID: A									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-4

Date Collected: 02/08/22 10:25
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	388111	02/14/22 07:53	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 12:41	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	387904	02/10/22 14:06	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388645	02/08/22 10:25	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-8

Date Collected: 02/08/22 10:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 17:13	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			388041	02/12/22 17:28	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 16:05	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388111	02/14/22 07:53	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 12:42	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387904	02/10/22 14:06	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388645	02/08/22 10:35	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1

Date Collected: 02/08/22 00:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 17:43	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			388041	02/12/22 17:58	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 16:19	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388111	02/14/22 07:53	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 12:43	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387749	02/10/22 13:35	JCR	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: DUP-1
Date Collected: 02/08/22 00:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			388645	02/08/22 00:00	FDS	TAL PIT

Client Sample ID: FB-1
Date Collected: 02/07/22 14:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 18:13	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 10:04	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 08:53	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388224	02/15/22 05:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 13:58	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387749	02/10/22 13:35	JCR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-7
Date Collected: 02/07/22 15:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 18:59	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		10			388041	02/12/22 19:11	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 10:34	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 09:05	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388224	02/15/22 05:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 13:59	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	387749	02/10/22 13:35	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388374	02/07/22 15:35	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-2

Date Collected: 02/07/22 15:20
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 19:24	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			388041	02/12/22 19:36	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 10:37	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 09:08	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388224	02/15/22 05:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 14:00	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387749	02/10/22 13:35	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388374	02/07/22 15:20	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIGWA-1

Date Collected: 02/07/22 15:10
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 20:14	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 10:41	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 09:10	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388224	02/15/22 05:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 14:03	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387749	02/10/22 13:35	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388374	02/07/22 15:10	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIGWA-2

Date Collected: 02/07/22 17:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388041	02/12/22 20:27	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 10:44	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387855	02/10/22 10:48	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 09:18	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388224	02/15/22 05:34	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			388367	02/15/22 14:04	KEM	TAL PIT
	Instrument ID: HGY									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387749	02/10/22 13:35	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388374	02/07/22 17:05	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-1

Date Collected: 02/08/22 11:05
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388140	02/14/22 19:38	JRB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			25 mL	25 mL	388057	02/12/22 10:08	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388564	02/16/22 11:45	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	388057	02/12/22 10:08	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 17:50	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388428	02/16/22 06:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 12:30	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387971	02/11/22 10:05	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388655	02/08/22 11:05	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-5

Date Collected: 02/08/22 14:35
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			388140	02/14/22 19:51	JRB	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-5

Date Collected: 02/08/22 14:35
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		25			388140	02/14/22 20:05	JRB	TAL PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	388057	02/12/22 10:08	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388564	02/16/22 11:48	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	388057	02/12/22 10:08	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 17:39	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388428	02/16/22 06:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 12:31	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	387971	02/11/22 10:05	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388655	02/08/22 14:35	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-10

Date Collected: 02/09/22 10:02
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388264	02/15/22 17:15	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	EPA 300.0 R2.1		5			388264	02/15/22 18:00	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			25 mL	25 mL	388057	02/12/22 10:08	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388564	02/16/22 11:52	RSK	TAL PIT
	Instrument ID: DORY									
Total Recoverable	Prep	3005A			25 mL	25 mL	388057	02/12/22 10:08	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388563	02/16/22 17:52	RSK	TAL PIT
	Instrument ID: NEMO									
Total/NA	Prep	7470A			25 mL	25 mL	388428	02/16/22 06:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 12:32	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387971	02/11/22 10:05	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388655	02/09/22 10:02	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-6

Date Collected: 02/08/22 12:40
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		2.5			388140	02/14/22 17:42	JRB	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-6

Date Collected: 02/08/22 12:40
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	25 mL	388058	02/12/22 10:10	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388561	02/16/22 14:30	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388428	02/16/22 06:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 12:33	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	387971	02/11/22 10:05	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388656	02/08/22 12:40	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-9

Date Collected: 02/08/22 14:00
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388140	02/14/22 18:13	JRB	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Analysis	EPA 300.0 R2.1		5			388140	02/14/22 18:28	JRB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			25 mL	25 mL	388058	02/12/22 10:10	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388561	02/16/22 15:32	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388428	02/16/22 06:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 12:35	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387971	02/11/22 10:05	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	Field Sampling		1			388656	02/08/22 14:00	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: APIPZ-11

Date Collected: 02/08/22 16:15
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388140	02/14/22 19:11	JRB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			25 mL	25 mL	388058	02/12/22 10:10	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388561	02/16/22 15:35	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388428	02/16/22 06:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 12:39	RJR	TAL PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-11

Date Collected: 02/08/22 16:15
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387971	02/11/22 10:05	JCR	TAL PIT
Total/NA	Analysis	Field Sampling		1			388656	02/08/22 16:15	FDS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2

Date Collected: 02/08/22 15:45
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			388140	02/14/22 19:24	JRB	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			25 mL	25 mL	388058	02/12/22 10:10	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388561	02/16/22 15:46	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			25 mL	25 mL	388428	02/16/22 06:02	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			389210	02/22/22 12:40	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387971	02/11/22 10:05	JCR	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KFS = Kelly Shannon
RJR = Ron Rosenbaum

Batch Type: Analysis

FDS = Sampler Field
JCR = Jessica Rodgers
JRB = James Burzio
KEM = Kimberly Mahoney
RJR = Ron Rosenbaum
RSK = Robert Kurtz

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: EB-1

Date Collected: 02/08/22 09:15
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/12/22 15:57	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 15:57	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 15:57	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:35	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:35	1
Barium	<0.0031		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:35	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:35	1
Boron	<0.060	^+	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:35	1
Calcium	<0.13		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:35	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:35	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:35	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:35	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:35	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:35	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:35	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:35	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/14/22 07:53	02/15/22 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/10/22 14:06	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-3
Date Collected: 02/08/22 09:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-2
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.2**		1.0	0.71	mg/L			02/12/22 16:12	1
Fluoride	**0.059**	**J**	0.10	0.026	mg/L			02/12/22 16:12	1
Sulfate	**1300**		10	7.6	mg/L			02/12/22 16:27	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:46	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:46	1
Barium	**0.026**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:46	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:46	1
Boron	**1.5**		0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:46	1
Cadmium	**0.0012**	**J**	0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:46	1
Calcium	**400**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:46	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:46	1
Cobalt	**0.058**		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:46	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:46	1
Lithium	**0.059**		0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:46	1
Molybdenum	**0.00065**	**J**	0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:46	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:46	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:46	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/14/22 07:53	02/15/22 12:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2100**		20	20	mg/L			02/15/22 16:29	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.63**				SU			02/08/22 09:00	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-4

Date Collected: 02/08/22 10:25
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.6**		1.0	0.71	mg/L			02/12/22 16:42	1
Fluoride	**0.20**		0.10	0.026	mg/L			02/12/22 16:42	1
Sulfate	**1400**		10	7.6	mg/L			02/12/22 16:58	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:50	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:50	1
Barium	**0.056**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:50	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:50	1
Boron	**3.6**		0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:50	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:50	1
Calcium	**380**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:50	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:50	1
Cobalt	**0.0012**	**J**	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:50	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:50	1
Lithium	**0.0060**		0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:50	1
Molybdenum	**0.0023**	**J**	0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:50	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:50	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:50	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/14/22 07:53	02/15/22 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2200**		20	20	mg/L			02/10/22 14:06	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.48**				SU			02/08/22 10:25	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-8

Date Collected: 02/08/22 10:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.1**		1.0	0.71	mg/L			02/12/22 17:13	1
Fluoride	**0.25**		0.10	0.026	mg/L			02/12/22 17:13	1
Sulfate	**680**		10	7.6	mg/L			02/12/22 17:28	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 16:05	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 16:05	1
Barium	**0.067**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 16:05	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 16:05	1
Boron	**2.6**		0.080	0.060	mg/L		02/10/22 10:47	02/11/22 16:05	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 16:05	1
Calcium	**300**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 16:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 16:05	1
Cobalt	**0.00047**	**J**	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 16:05	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 16:05	1
Lithium	**0.0030**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 16:05	1
Molybdenum	**0.35**		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 16:05	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 16:05	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 16:05	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/14/22 07:53	02/15/22 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1400**		10	10	mg/L			02/10/22 14:06	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.42**				SU			02/08/22 10:35	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: DUP-1
Date Collected: 02/08/22 00:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-5
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.2**		1.0	0.71	mg/L			02/12/22 17:43	1
Fluoride	**0.25**		0.10	0.026	mg/L			02/12/22 17:43	1
Sulfate	**680**		10	7.6	mg/L			02/12/22 17:58	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 16:19	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 16:19	1
Barium	**0.069**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 16:19	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 16:19	1
Boron	**2.7**		0.080	0.060	mg/L		02/10/22 10:47	02/11/22 16:19	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 16:19	1
Calcium	**300**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 16:19	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 16:19	1
Cobalt	**0.00058**	**J**	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 16:19	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 16:19	1
Lithium	**0.0030**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 16:19	1
Molybdenum	**0.36**		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 16:19	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 16:19	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 16:19	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/14/22 07:53	02/15/22 12:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1300**		10	10	mg/L			02/10/22 13:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.42**				SU			02/08/22 00:00	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: FB-1
Date Collected: 02/07/22 14:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-1
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/12/22 18:13	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 18:13	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 18:13	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:48	02/11/22 10:04	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:48	02/11/22 10:04	1
Barium	**0.0071**	**J**	0.010	0.0031	mg/L		02/10/22 10:48	02/11/22 10:04	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:48	02/11/22 10:04	1
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:48	02/12/22 08:53	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:48	02/11/22 10:04	1
Calcium	<0.13		0.50	0.13	mg/L		02/10/22 10:48	02/11/22 10:04	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:48	02/11/22 10:04	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:48	02/11/22 10:04	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:48	02/11/22 10:04	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/10/22 10:48	02/11/22 10:04	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:48	02/11/22 10:04	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:48	02/11/22 10:04	1
Thallium	**0.00057**	**J**	0.0010	0.00047	mg/L		02/10/22 10:48	02/11/22 10:04	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/15/22 05:34	02/15/22 13:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/10/22 13:35	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-7

Date Collected: 02/07/22 15:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.0**		1.0	0.71	mg/L			02/12/22 18:59	1
Fluoride	**0.14**		0.10	0.026	mg/L			02/12/22 18:59	1
Sulfate	**1500**		10	7.6	mg/L			02/12/22 19:11	10

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:48	02/11/22 10:34	1
Arsenic	**0.00037**	**J**	0.0010	0.00028	mg/L		02/10/22 10:48	02/11/22 10:34	1
Barium	**0.074**		0.010	0.0031	mg/L		02/10/22 10:48	02/11/22 10:34	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:48	02/11/22 10:34	1
Boron	**2.4**		0.080	0.060	mg/L		02/10/22 10:48	02/12/22 09:05	1
Cadmium	**0.00043**	**J**	0.0025	0.00022	mg/L		02/10/22 10:48	02/11/22 10:34	1
Calcium	**350**		0.50	0.13	mg/L		02/10/22 10:48	02/11/22 10:34	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:48	02/11/22 10:34	1
Cobalt	**0.0013**	**J**	0.0025	0.00026	mg/L		02/10/22 10:48	02/11/22 10:34	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:48	02/11/22 10:34	1
Lithium	**0.0031**	**J**	0.0050	0.00083	mg/L		02/10/22 10:48	02/11/22 10:34	1
Molybdenum	**0.0025**	**J**	0.015	0.00061	mg/L		02/10/22 10:48	02/11/22 10:34	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:48	02/11/22 10:34	1
Thallium	**0.00052**	**J**	0.0010	0.00047	mg/L		02/10/22 10:48	02/11/22 10:34	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/15/22 05:34	02/15/22 13:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**2100**		20	20	mg/L			02/10/22 13:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.42**				SU			02/07/22 15:35	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-2

Date Collected: 02/07/22 15:20
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		1.0	0.71	mg/L			02/12/22 19:24	1
Fluoride	0.090	J	0.10	0.026	mg/L			02/12/22 19:24	1
Sulfate	630	F1	5.0	3.8	mg/L			02/12/22 19:36	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:48	02/11/22 10:37	1
Arsenic	0.00031	J	0.0010	0.00028	mg/L		02/10/22 10:48	02/11/22 10:37	1
Barium	0.024		0.010	0.0031	mg/L		02/10/22 10:48	02/11/22 10:37	1
Beryllium	0.00030	J	0.0025	0.00027	mg/L		02/10/22 10:48	02/11/22 10:37	1
Boron	0.44		0.080	0.060	mg/L		02/10/22 10:48	02/12/22 09:08	1
Cadmium	0.00062	J	0.0025	0.00022	mg/L		02/10/22 10:48	02/11/22 10:37	1
Calcium	180		0.50	0.13	mg/L		02/10/22 10:48	02/11/22 10:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:48	02/11/22 10:37	1
Cobalt	0.11		0.0025	0.00026	mg/L		02/10/22 10:48	02/11/22 10:37	1
Lead	0.00025	J	0.0010	0.00017	mg/L		02/10/22 10:48	02/11/22 10:37	1
Lithium	0.016		0.0050	0.00083	mg/L		02/10/22 10:48	02/11/22 10:37	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:48	02/11/22 10:37	1
Selenium	0.00080	J	0.0050	0.00074	mg/L		02/10/22 10:48	02/11/22 10:37	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:48	02/11/22 10:37	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/15/22 05:34	02/15/22 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		10	10	mg/L			02/10/22 13:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.10				SU			02/07/22 15:20	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIGWA-1

Date Collected: 02/07/22 15:10
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.8**		1.0	0.71	mg/L			02/12/22 20:14	1
Fluoride	**0.27**		0.10	0.026	mg/L			02/12/22 20:14	1
Sulfate	**58**		1.0	0.76	mg/L			02/12/22 20:14	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:48	02/11/22 10:41	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:48	02/11/22 10:41	1
Barium	**0.053**		0.010	0.0031	mg/L		02/10/22 10:48	02/11/22 10:41	1
Beryllium	**0.0023**	**J**	0.0025	0.00027	mg/L		02/10/22 10:48	02/11/22 10:41	1
Boron	**0.13**		0.080	0.060	mg/L		02/10/22 10:48	02/12/22 09:10	1
Cadmium	**0.00046**	**J**	0.0025	0.00022	mg/L		02/10/22 10:48	02/11/22 10:41	1
Calcium	**20**		0.50	0.13	mg/L		02/10/22 10:48	02/11/22 10:41	1
Chromium	**0.0040**		0.0020	0.0015	mg/L		02/10/22 10:48	02/11/22 10:41	1
Cobalt	**0.010**		0.0025	0.00026	mg/L		02/10/22 10:48	02/11/22 10:41	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:48	02/11/22 10:41	1
Lithium	**0.011**		0.0050	0.00083	mg/L		02/10/22 10:48	02/11/22 10:41	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:48	02/11/22 10:41	1
Selenium	**0.0025**	**J**	0.0050	0.00074	mg/L		02/10/22 10:48	02/11/22 10:41	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:48	02/11/22 10:41	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/15/22 05:34	02/15/22 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**160**		10	10	mg/L			02/10/22 13:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.27**				SU			02/07/22 15:10	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIGWA-2

Date Collected: 02/07/22 17:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.2**		1.0	0.71	mg/L			02/12/22 20:27	1
Fluoride	**0.075**	**J**	0.10	0.026	mg/L			02/12/22 20:27	1
Sulfate	**1.8**		1.0	0.76	mg/L			02/12/22 20:27	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:48	02/11/22 10:44	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:48	02/11/22 10:44	1
Barium	**0.035**		0.010	0.0031	mg/L		02/10/22 10:48	02/11/22 10:44	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:48	02/11/22 10:44	1
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:48	02/12/22 09:18	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:48	02/11/22 10:44	1
Calcium	**5.6**		0.50	0.13	mg/L		02/10/22 10:48	02/11/22 10:44	1
Chromium	**0.0044**		0.0020	0.0015	mg/L		02/10/22 10:48	02/11/22 10:44	1
Cobalt	**0.0042**		0.0025	0.00026	mg/L		02/10/22 10:48	02/11/22 10:44	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:48	02/11/22 10:44	1
Lithium	**0.0017**	**J**	0.0050	0.00083	mg/L		02/10/22 10:48	02/11/22 10:44	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:48	02/11/22 10:44	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:48	02/11/22 10:44	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:48	02/11/22 10:44	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/15/22 05:34	02/15/22 14:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**64**		10	10	mg/L			02/10/22 13:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.98**				SU			02/07/22 17:05	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-1
Date Collected: 02/08/22 11:05
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-1
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.7**		1.0	0.71	mg/L			02/14/22 19:38	1
Fluoride	**0.079**	**J**	0.10	0.026	mg/L			02/14/22 19:38	1
Sulfate	**110**		1.0	0.76	mg/L			02/14/22 19:38	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:08	02/16/22 11:45	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/12/22 10:08	02/16/22 11:45	1
Barium	**0.053**		0.010	0.0031	mg/L		02/12/22 10:08	02/16/22 11:45	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/12/22 10:08	02/16/22 11:45	1
Boron	**0.33**		0.080	0.060	mg/L		02/12/22 10:08	02/16/22 17:50	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:08	02/16/22 11:45	1
Calcium	**32**		0.50	0.13	mg/L		02/12/22 10:08	02/16/22 11:45	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:08	02/16/22 11:45	1
Cobalt	**0.00054**	**J**	0.0025	0.00026	mg/L		02/12/22 10:08	02/16/22 11:45	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:08	02/16/22 11:45	1
Lithium	**0.0043**	**J**	0.0050	0.00083	mg/L		02/12/22 10:08	02/16/22 11:45	1
Molybdenum	**0.0010**	**J**	0.015	0.00061	mg/L		02/12/22 10:08	02/16/22 11:45	1
Selenium	**0.00096**	**J**	0.0050	0.00074	mg/L		02/12/22 10:08	02/16/22 11:45	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:08	02/16/22 11:45	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**250**		10	10	mg/L			02/11/22 10:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.57**				SU			02/08/22 11:05	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-5

Date Collected: 02/08/22 14:35
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.9**		2.5	1.8	mg/L			02/14/22 19:51	2.5
Fluoride	**0.34**		0.25	0.065	mg/L			02/14/22 19:51	2.5
Sulfate	**1900**		25	19	mg/L			02/14/22 20:05	25

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:08	02/16/22 11:48	1
Arsenic	**0.0011**		0.0010	0.00028	mg/L		02/12/22 10:08	02/16/22 11:48	1
Barium	**0.069**		0.010	0.0031	mg/L		02/12/22 10:08	02/16/22 11:48	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/12/22 10:08	02/16/22 11:48	1
Boron	**6.8**		0.080	0.060	mg/L		02/12/22 10:08	02/16/22 17:39	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:08	02/16/22 11:48	1
Calcium	**630**		0.50	0.13	mg/L		02/12/22 10:08	02/16/22 11:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:08	02/16/22 11:48	1
Cobalt	**0.019**		0.0025	0.00026	mg/L		02/12/22 10:08	02/16/22 11:48	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:08	02/16/22 11:48	1
Lithium	**0.16**		0.0050	0.00083	mg/L		02/12/22 10:08	02/16/22 11:48	1
Molybdenum	**0.029**		0.015	0.00061	mg/L		02/12/22 10:08	02/16/22 11:48	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:08	02/16/22 11:48	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:08	02/16/22 11:48	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**3000**		20	20	mg/L			02/11/22 10:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.43**				SU			02/08/22 14:35	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-10

Date Collected: 02/09/22 10:02
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.9**		1.0	0.71	mg/L			02/15/22 17:15	1
Fluoride	**0.47**		0.10	0.026	mg/L			02/15/22 17:15	1
Sulfate	**220**		5.0	3.8	mg/L			02/15/22 18:00	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:08	02/16/22 11:52	1
Arsenic	**0.0021**		0.0010	0.00028	mg/L		02/12/22 10:08	02/16/22 11:52	1
Barium	**0.036**		0.010	0.0031	mg/L		02/12/22 10:08	02/16/22 11:52	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/12/22 10:08	02/16/22 11:52	1
Boron	**0.33**		0.080	0.060	mg/L		02/12/22 10:08	02/16/22 17:52	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:08	02/16/22 11:52	1
Calcium	**84**		0.50	0.13	mg/L		02/12/22 10:08	02/16/22 11:52	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:08	02/16/22 11:52	1
Cobalt	**0.0021**	**J**	0.0025	0.00026	mg/L		02/12/22 10:08	02/16/22 11:52	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:08	02/16/22 11:52	1
Lithium	**0.015**		0.0050	0.00083	mg/L		02/12/22 10:08	02/16/22 11:52	1
Molybdenum	**0.0037**	**J**	0.015	0.00061	mg/L		02/12/22 10:08	02/16/22 11:52	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:08	02/16/22 11:52	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:08	02/16/22 11:52	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**490**		10	10	mg/L			02/11/22 10:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.19**				SU			02/09/22 10:02	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-6

Date Collected: 02/08/22 12:40
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.0**		2.5	1.8	mg/L			02/14/22 17:42	2.5
Fluoride	**0.089**	**J**	0.25	0.065	mg/L			02/14/22 17:42	2.5
Sulfate	<1.9		2.5	1.9	mg/L			02/14/22 17:42	2.5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.00051**	**J**	0.0020	0.00051	mg/L		02/12/22 10:10	02/16/22 14:30	1
Arsenic	**0.00081**	**J**	0.0010	0.00028	mg/L		02/12/22 10:10	02/16/22 14:30	1
Barium	**0.023**		0.010	0.0031	mg/L		02/12/22 10:10	02/16/22 14:30	1
Beryllium	**0.00036**	**J**	0.0025	0.00027	mg/L		02/12/22 10:10	02/16/22 14:30	1
Boron	**6.5**		0.080	0.060	mg/L		02/12/22 10:10	02/16/22 14:30	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:10	02/16/22 14:30	1
Calcium	**440**		0.50	0.13	mg/L		02/12/22 10:10	02/16/22 14:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:10	02/16/22 14:30	1
Cobalt	**0.41**		0.0025	0.00026	mg/L		02/12/22 10:10	02/16/22 14:30	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:10	02/16/22 14:30	1
Lithium	**0.011**		0.0050	0.00083	mg/L		02/12/22 10:10	02/16/22 14:30	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/22 10:10	02/16/22 14:30	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:10	02/16/22 14:30	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:10	02/16/22 14:30	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**3200**		20	20	mg/L			02/11/22 10:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.59**				SU			02/08/22 12:40	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-9

Date Collected: 02/08/22 14:00
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.8**		1.0	0.71	mg/L			02/14/22 18:13	1
Fluoride	**0.48**		0.10	0.026	mg/L			02/14/22 18:13	1
Sulfate	**300**		5.0	3.8	mg/L			02/14/22 18:28	5

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:10	02/16/22 15:32	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/12/22 10:10	02/16/22 15:32	1
Barium	**0.030**		0.010	0.0031	mg/L		02/12/22 10:10	02/16/22 15:32	1
Beryllium	**0.00036**	**J**	0.0025	0.00027	mg/L		02/12/22 10:10	02/16/22 15:32	1
Boron	**0.73**		0.080	0.060	mg/L		02/12/22 10:10	02/16/22 15:32	1
Cadmium	**0.00091**	**J**	0.0025	0.00022	mg/L		02/12/22 10:10	02/16/22 15:32	1
Calcium	**65**		0.50	0.13	mg/L		02/12/22 10:10	02/16/22 15:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:10	02/16/22 15:32	1
Cobalt	**0.088**		0.0025	0.00026	mg/L		02/12/22 10:10	02/16/22 15:32	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:10	02/16/22 15:32	1
Lithium	**0.12**		0.0050	0.00083	mg/L		02/12/22 10:10	02/16/22 15:32	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/22 10:10	02/16/22 15:32	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:10	02/16/22 15:32	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:10	02/16/22 15:32	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**600**		10	10	mg/L			02/11/22 10:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**4.63**				SU			02/08/22 14:00	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: APIPZ-11

Date Collected: 02/08/22 16:15
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.5**		1.0	0.71	mg/L			02/14/22 19:11	1
Fluoride	**0.094**	**J**	0.10	0.026	mg/L			02/14/22 19:11	1
Sulfate	**51**		1.0	0.76	mg/L			02/14/22 19:11	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:10	02/16/22 15:35	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/12/22 10:10	02/16/22 15:35	1
Barium	**0.021**		0.010	0.0031	mg/L		02/12/22 10:10	02/16/22 15:35	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/12/22 10:10	02/16/22 15:35	1
Boron	**0.24**		0.080	0.060	mg/L		02/12/22 10:10	02/16/22 15:35	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:10	02/16/22 15:35	1
Calcium	**23**		0.50	0.13	mg/L		02/12/22 10:10	02/16/22 15:35	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:10	02/16/22 15:35	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/12/22 10:10	02/16/22 15:35	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:10	02/16/22 15:35	1
Lithium	**0.0020**	**J**	0.0050	0.00083	mg/L		02/12/22 10:10	02/16/22 15:35	1
Molybdenum	**0.00069**	**J**	0.015	0.00061	mg/L		02/12/22 10:10	02/16/22 15:35	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:10	02/16/22 15:35	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:10	02/16/22 15:35	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**220**		10	10	mg/L			02/11/22 10:05	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.75**				SU			02/08/22 16:15	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Client Sample ID: EB-2

Date Collected: 02/08/22 15:45
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/14/22 19:24	1
Fluoride	<0.026		0.10	0.026	mg/L			02/14/22 19:24	1
Sulfate	<0.76		1.0	0.76	mg/L			02/14/22 19:24	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:10	02/16/22 15:46	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/12/22 10:10	02/16/22 15:46	1
Barium	<0.0031		0.010	0.0031	mg/L		02/12/22 10:10	02/16/22 15:46	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/12/22 10:10	02/16/22 15:46	1
Boron	**0.065**	**J**	0.080	0.060	mg/L		02/12/22 10:10	02/16/22 15:46	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:10	02/16/22 15:46	1
Calcium	<0.13		0.50	0.13	mg/L		02/12/22 10:10	02/16/22 15:46	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:10	02/16/22 15:46	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/12/22 10:10	02/16/22 15:46	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:10	02/16/22 15:46	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/12/22 10:10	02/16/22 15:46	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/22 10:10	02/16/22 15:46	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:10	02/16/22 15:46	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:10	02/16/22 15:46	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+ *+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/11/22 10:05	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-388041/7
Matrix: Water
Analysis Batch: 388041

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/12/22 09:50	1
Fluoride	<0.026		0.10	0.026	mg/L			02/12/22 09:50	1
Sulfate	<0.76		1.0	0.76	mg/L			02/12/22 09:50	1

Lab Sample ID: LCS 180-388041/5
Matrix: Water
Analysis Batch: 388041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.8		mg/L		98	90 - 110
Fluoride	2.50	2.51		mg/L		100	90 - 110
Sulfate	50.0	47.2		mg/L		94	90 - 110

Lab Sample ID: 180-133386-3 MS
Matrix: Water
Analysis Batch: 388041

Client Sample ID: APIPZ-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<3.6		250	255		mg/L		102	90 - 110
Fluoride	<0.13		12.5	12.5		mg/L		100	90 - 110
Sulfate	630	F1	250	827	F1	mg/L		77	90 - 110

Lab Sample ID: 180-133386-3 MSD
Matrix: Water
Analysis Batch: 388041

Client Sample ID: APIPZ-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<3.6		250	262		mg/L		105	90 - 110	3	20
Fluoride	<0.13		12.5	12.9		mg/L		103	90 - 110	3	20
Sulfate	630	F1	250	849	F1	mg/L		86	90 - 110	3	20

Lab Sample ID: MB 180-388140/7
Matrix: Water
Analysis Batch: 388140

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/14/22 15:41	1
Fluoride	<0.026		0.10	0.026	mg/L			02/14/22 15:41	1
Sulfate	<0.76		1.0	0.76	mg/L			02/14/22 15:41	1

Lab Sample ID: LCS 180-388140/6
Matrix: Water
Analysis Batch: 388140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Fluoride	2.50	2.62		mg/L		105	90 - 110
Sulfate	50.0	49.3		mg/L		99	90 - 110

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-388264/7
Matrix: Water
Analysis Batch: 388264

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/15/22 10:34	1
Fluoride	<0.026		0.10	0.026	mg/L			02/15/22 10:34	1
Sulfate	<0.76		1.0	0.76	mg/L			02/15/22 10:34	1

Lab Sample ID: LCS 180-388264/5
Matrix: Water
Analysis Batch: 388264

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Fluoride	2.50	2.53		mg/L		101	90 - 110
Sulfate	50.0	47.2		mg/L		94	90 - 110

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-387854/1-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 14:12	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 14:12	1
Barium	<0.0031		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 14:12	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 14:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 14:12	1
Calcium	<0.13		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 14:12	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:12	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 14:12	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 14:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 14:12	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 14:12	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 14:12	1

Lab Sample ID: LCS 180-387854/2-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.238		mg/L		95	80 - 120
Arsenic	1.00	0.934		mg/L		93	80 - 120
Barium	1.00	1.03		mg/L		103	80 - 120
Beryllium	0.500	0.544		mg/L		109	80 - 120
Cadmium	0.500	0.521		mg/L		104	80 - 120
Calcium	25.0	27.1		mg/L		109	80 - 120
Chromium	0.500	0.511		mg/L		102	80 - 120
Cobalt	0.500	0.506		mg/L		101	80 - 120
Lead	0.500	0.503		mg/L		101	80 - 120
Lithium	0.500	0.550		mg/L		110	80 - 120

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-387854/2-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.500	0.504		mg/L		101	80 - 120
Selenium	1.00	1.03		mg/L		103	80 - 120
Thallium	1.00	0.985		mg/L		99	80 - 120

Lab Sample ID: MB 180-387855/1-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:48	02/11/22 10:12	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:48	02/11/22 10:12	1
Barium	<0.0031		0.010	0.0031	mg/L		02/10/22 10:48	02/11/22 10:12	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:48	02/11/22 10:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:48	02/11/22 10:12	1
Calcium	<0.13		0.50	0.13	mg/L		02/10/22 10:48	02/11/22 10:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:48	02/11/22 10:12	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:48	02/11/22 10:12	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:48	02/11/22 10:12	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/10/22 10:48	02/11/22 10:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:48	02/11/22 10:12	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:48	02/11/22 10:12	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:48	02/11/22 10:12	1

Lab Sample ID: MB 180-387855/1-A
Matrix: Water
Analysis Batch: 388275

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:48	02/12/22 08:41	1

Lab Sample ID: LCS 180-387855/2-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.238		mg/L		95	80 - 120
Arsenic	1.00	0.950		mg/L		95	80 - 120
Barium	1.00	0.965		mg/L		96	80 - 120
Beryllium	0.500	0.510		mg/L		102	80 - 120
Cadmium	0.500	0.488		mg/L		98	80 - 120
Calcium	25.0	26.5		mg/L		106	80 - 120
Chromium	0.500	0.498		mg/L		100	80 - 120
Cobalt	0.500	0.489		mg/L		98	80 - 120
Lead	0.500	0.495		mg/L		99	80 - 120
Lithium	0.500	0.498		mg/L		100	80 - 120
Molybdenum	0.500	0.491		mg/L		98	80 - 120
Selenium	1.00	0.980		mg/L		98	80 - 120
Thallium	1.00	0.979		mg/L		98	80 - 120

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-387855/2-A
Matrix: Water
Analysis Batch: 388275

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron			1.25	1.26		mg/L		101	80 - 120		

Lab Sample ID: 180-133386-1 MS
Matrix: Water
Analysis Batch: 388040

Client Sample ID: FB-1
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	<0.00051		0.250	0.235		mg/L		94	75 - 125		
Arsenic	<0.00028		1.00	0.963		mg/L		96	75 - 125		
Barium	0.0071	J	1.00	0.980		mg/L		97	75 - 125		
Beryllium	<0.00027		0.500	0.513		mg/L		103	75 - 125		
Cadmium	<0.00022		0.500	0.495		mg/L		99	75 - 125		
Calcium	<0.13		25.0	26.3		mg/L		105	75 - 125		
Chromium	<0.0015		0.500	0.498		mg/L		100	75 - 125		
Cobalt	<0.00026		0.500	0.486		mg/L		97	75 - 125		
Lead	<0.00017		0.500	0.495		mg/L		99	75 - 125		
Lithium	<0.00083		0.500	0.495		mg/L		99	75 - 125		
Molybdenum	<0.00061		0.500	0.498		mg/L		100	75 - 125		
Selenium	<0.00074		1.00	0.979		mg/L		98	75 - 125		
Thallium	0.00057	J	1.00	0.982		mg/L		98	75 - 125		

Lab Sample ID: 180-133386-1 MS
Matrix: Water
Analysis Batch: 388275

Client Sample ID: FB-1
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Boron	<0.060		1.25	1.23		mg/L		98	75 - 125		

Lab Sample ID: 180-133386-1 MSD
Matrix: Water
Analysis Batch: 388040

Client Sample ID: FB-1
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.00051		0.250	0.238		mg/L		95	75 - 125	1	20
Arsenic	<0.00028		1.00	0.968		mg/L		97	75 - 125	1	20
Barium	0.0071	J	1.00	0.988		mg/L		98	75 - 125	1	20
Beryllium	<0.00027		0.500	0.515		mg/L		103	75 - 125	0	20
Cadmium	<0.00022		0.500	0.503		mg/L		101	75 - 125	2	20
Calcium	<0.13		25.0	26.2		mg/L		105	75 - 125	0	20
Chromium	<0.0015		0.500	0.492		mg/L		98	75 - 125	1	20
Cobalt	<0.00026		0.500	0.483		mg/L		97	75 - 125	1	20
Lead	<0.00017		0.500	0.495		mg/L		99	75 - 125	0	20
Lithium	<0.00083		0.500	0.494		mg/L		99	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.496		mg/L		99	75 - 125	0	20
Selenium	<0.00074		1.00	0.985		mg/L		98	75 - 125	1	20
Thallium	0.00057	J	1.00	0.978		mg/L		98	75 - 125	0	20

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-133386-1 MSD
Matrix: Water
Analysis Batch: 388275

Client Sample ID: FB-1
Prep Type: Total Recoverable
Prep Batch: 387855

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	<0.060		1.25	1.24		mg/L		100	75 - 125	1	20

Lab Sample ID: MB 180-388057/1-A
Matrix: Water
Analysis Batch: 388564

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 388057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:08	02/16/22 09:53	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/12/22 10:08	02/16/22 09:53	1
Barium	<0.0031		0.010	0.0031	mg/L		02/12/22 10:08	02/16/22 09:53	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/12/22 10:08	02/16/22 09:53	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:08	02/16/22 09:53	1
Calcium	<0.13		0.50	0.13	mg/L		02/12/22 10:08	02/16/22 09:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:08	02/16/22 09:53	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/12/22 10:08	02/16/22 09:53	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:08	02/16/22 09:53	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/12/22 10:08	02/16/22 09:53	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/22 10:08	02/16/22 09:53	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:08	02/16/22 09:53	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:08	02/16/22 09:53	1

Lab Sample ID: MB 180-388057/1-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 388057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/12/22 10:08	02/16/22 17:29	1

Lab Sample ID: LCS 180-388057/2-A
Matrix: Water
Analysis Batch: 388564

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 388057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.236		mg/L		95	80 - 120
Arsenic	1.00	0.977		mg/L		98	80 - 120
Barium	1.00	0.972		mg/L		97	80 - 120
Beryllium	0.500	0.490		mg/L		98	80 - 120
Cadmium	0.500	0.491		mg/L		98	80 - 120
Calcium	25.0	26.5		mg/L		106	80 - 120
Chromium	0.500	0.489		mg/L		98	80 - 120
Cobalt	0.500	0.490		mg/L		98	80 - 120
Lead	0.500	0.490		mg/L		98	80 - 120
Lithium	0.500	0.489		mg/L		98	80 - 120
Molybdenum	0.500	0.496		mg/L		99	80 - 120
Selenium	1.00	0.973		mg/L		97	80 - 120
Thallium	1.00	1.00		mg/L		100	80 - 120

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-388057/2-A
Matrix: Water
Analysis Batch: 388563

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 388057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.10		mg/L		88	80 - 120

Lab Sample ID: MB 180-388058/1-A
Matrix: Water
Analysis Batch: 388561

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 388058

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/12/22 10:10	02/16/22 13:57	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/12/22 10:10	02/16/22 13:57	1
Barium	<0.0031		0.010	0.0031	mg/L		02/12/22 10:10	02/16/22 13:57	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/12/22 10:10	02/16/22 13:57	1
Boron	<0.060		0.080	0.060	mg/L		02/12/22 10:10	02/16/22 13:57	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/22 10:10	02/16/22 13:57	1
Calcium	<0.13		0.50	0.13	mg/L		02/12/22 10:10	02/16/22 13:57	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/22 10:10	02/16/22 13:57	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/12/22 10:10	02/16/22 13:57	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/12/22 10:10	02/16/22 13:57	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/12/22 10:10	02/16/22 13:57	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/22 10:10	02/16/22 13:57	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/12/22 10:10	02/16/22 13:57	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/12/22 10:10	02/16/22 13:57	1

Lab Sample ID: LCS 180-388058/2-A
Matrix: Water
Analysis Batch: 388561

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 388058

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.247		mg/L		99	80 - 120
Arsenic	1.00	0.956		mg/L		96	80 - 120
Barium	1.00	1.01		mg/L		101	80 - 120
Beryllium	0.500	0.499		mg/L		100	80 - 120
Boron	1.25	1.16		mg/L		93	80 - 120
Cadmium	0.500	0.506		mg/L		101	80 - 120
Calcium	25.0	26.0		mg/L		104	80 - 120
Chromium	0.500	0.510		mg/L		102	80 - 120
Cobalt	0.500	0.486		mg/L		97	80 - 120
Lead	0.500	0.514		mg/L		103	80 - 120
Lithium	0.500	0.504		mg/L		101	80 - 120
Molybdenum	0.500	0.505		mg/L		101	80 - 120
Selenium	1.00	0.999		mg/L		100	80 - 120
Thallium	1.00	1.02		mg/L		102	80 - 120

Lab Sample ID: 180-133523-1 MS
Matrix: Water
Analysis Batch: 388561

Client Sample ID: APIPZ-6
Prep Type: Total Recoverable
Prep Batch: 388058

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00051	J	0.250	0.241		mg/L		96	75 - 125
Arsenic	0.00081	J	1.00	0.944		mg/L		94	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-133523-1 MS
Matrix: Water
Analysis Batch: 388561

Client Sample ID: APIPZ-6
Prep Type: Total Recoverable
Prep Batch: 388058

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.023		1.00	1.01		mg/L		99	75 - 125
Beryllium	0.00036	J	0.500	0.494		mg/L		99	75 - 125
Boron	6.5		1.25	7.19	4	mg/L		56	75 - 125
Cadmium	<0.00022		0.500	0.491		mg/L		98	75 - 125
Calcium	440		25.0	448	4	mg/L		32	75 - 125
Chromium	<0.0015		0.500	0.496		mg/L		99	75 - 125
Cobalt	0.41		0.500	0.888		mg/L		95	75 - 125
Lead	<0.00017		0.500	0.502		mg/L		100	75 - 125
Lithium	0.011		0.500	0.510		mg/L		100	75 - 125
Molybdenum	<0.00061		0.500	0.501		mg/L		100	75 - 125
Selenium	<0.00074		1.00	0.971		mg/L		97	75 - 125
Thallium	<0.00047		1.00	0.998		mg/L		100	75 - 125

Lab Sample ID: 180-133523-1 MSD
Matrix: Water
Analysis Batch: 388561

Client Sample ID: APIPZ-6
Prep Type: Total Recoverable
Prep Batch: 388058

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00051	J	0.250	0.249		mg/L		100	75 - 125	3	20
Arsenic	0.00081	J	1.00	0.943		mg/L		94	75 - 125	0	20
Barium	0.023		1.00	1.04		mg/L		102	75 - 125	3	20
Beryllium	0.00036	J	0.500	0.489		mg/L		98	75 - 125	1	20
Boron	6.5		1.25	7.58	4	mg/L		87	75 - 125	5	20
Cadmium	<0.00022		0.500	0.499		mg/L		100	75 - 125	2	20
Calcium	440		25.0	451	4	mg/L		46	75 - 125	1	20
Chromium	<0.0015		0.500	0.507		mg/L		101	75 - 125	2	20
Cobalt	0.41		0.500	0.897		mg/L		97	75 - 125	1	20
Lead	<0.00017		0.500	0.504		mg/L		101	75 - 125	0	20
Lithium	0.011		0.500	0.514		mg/L		100	75 - 125	1	20
Molybdenum	<0.00061		0.500	0.507		mg/L		101	75 - 125	1	20
Selenium	<0.00074		1.00	0.974		mg/L		97	75 - 125	0	20
Thallium	<0.00047		1.00	1.00		mg/L		100	75 - 125	1	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-388111/1-A
Matrix: Water
Analysis Batch: 388367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388111

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/14/22 07:53	02/15/22 12:27	1

Lab Sample ID: LCS 180-388111/2-A
Matrix: Water
Analysis Batch: 388367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00260		mg/L		104	80 - 120

Method: EPA 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 180-388224/1-A
Matrix: Water
Analysis Batch: 388367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		02/15/22 05:34	02/15/22 13:50	1

Lab Sample ID: LCS 180-388224/2-A
Matrix: Water
Analysis Batch: 388367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00261		mg/L		104	80 - 120

Lab Sample ID: MB 180-388428/1-A
Matrix: Water
Analysis Batch: 389210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 388428

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	^3+ ^+	0.00020	0.00013	mg/L		02/16/22 06:02	02/22/22 12:28	1

Lab Sample ID: LCS 180-388428/2-A
Matrix: Water
Analysis Batch: 389210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 388428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00411	^3+ ^+ *+	mg/L		165	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-387749/2
Matrix: Water
Analysis Batch: 387749

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/10/22 13:35	1

Lab Sample ID: LCS 180-387749/1
Matrix: Water
Analysis Batch: 387749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	150	140		mg/L		93	85 - 115

Lab Sample ID: MB 180-387904/2
Matrix: Water
Analysis Batch: 387904

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/10/22 14:06	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 180-387904/1
Matrix: Water
Analysis Batch: 387904

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	150	130		mg/L		87	85 - 115

Lab Sample ID: MB 180-387971/2
Matrix: Water
Analysis Batch: 387971

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/11/22 10:05	1

Lab Sample ID: LCS 180-387971/1
Matrix: Water
Analysis Batch: 387971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	150	128		mg/L		85	85 - 115

Lab Sample ID: MB 180-388388/2
Matrix: Water
Analysis Batch: 388388

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/15/22 16:29	1

Lab Sample ID: LCS 180-388388/1
Matrix: Water
Analysis Batch: 388388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	150	132		mg/L		88	85 - 115

HPLC/IC

Analysis Batch: 388041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-133381-2	APIPZ-3	Total/NA	Water	EPA 300.0 R2.1	
180-133381-2	APIPZ-3	Total/NA	Water	EPA 300.0 R2.1	
180-133381-3	APIPZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-133381-3	APIPZ-4	Total/NA	Water	EPA 300.0 R2.1	
180-133381-4	APIPZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-133381-4	APIPZ-8	Total/NA	Water	EPA 300.0 R2.1	
180-133381-5	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-133381-5	DUP-1	Total/NA	Water	EPA 300.0 R2.1	
180-133386-1	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-133386-2	APIPZ-7	Total/NA	Water	EPA 300.0 R2.1	
180-133386-2	APIPZ-7	Total/NA	Water	EPA 300.0 R2.1	
180-133386-3	APIPZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-133386-3	APIPZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-133386-4	APIGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-133386-5	APIGWA-2	Total/NA	Water	EPA 300.0 R2.1	
MB 180-388041/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-388041/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-133386-3 MS	APIPZ-2	Total/NA	Water	EPA 300.0 R2.1	
180-133386-3 MSD	APIPZ-2	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 388140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total/NA	Water	EPA 300.0 R2.1	
180-133521-2	APIPZ-5	Total/NA	Water	EPA 300.0 R2.1	
180-133521-2	APIPZ-5	Total/NA	Water	EPA 300.0 R2.1	
180-133523-1	APIPZ-6	Total/NA	Water	EPA 300.0 R2.1	
180-133523-2	APIPZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-133523-2	APIPZ-9	Total/NA	Water	EPA 300.0 R2.1	
180-133523-3	APIPZ-11	Total/NA	Water	EPA 300.0 R2.1	
180-133523-4	EB-2	Total/NA	Water	EPA 300.0 R2.1	
MB 180-388140/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-388140/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 388264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-3	APIPZ-10	Total/NA	Water	EPA 300.0 R2.1	
180-133521-3	APIPZ-10	Total/NA	Water	EPA 300.0 R2.1	
MB 180-388264/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-388264/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 387854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total Recoverable	Water	3005A	
180-133381-2	APIPZ-3	Total Recoverable	Water	3005A	
180-133381-3	APIPZ-4	Total Recoverable	Water	3005A	
180-133381-4	APIPZ-8	Total Recoverable	Water	3005A	
180-133381-5	DUP-1	Total Recoverable	Water	3005A	
MB 180-387854/1-A	Method Blank	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 387854 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-387854/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 387855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133386-1	FB-1	Total Recoverable	Water	3005A	
180-133386-2	APIPZ-7	Total Recoverable	Water	3005A	
180-133386-3	APIPZ-2	Total Recoverable	Water	3005A	
180-133386-4	APIGWA-1	Total Recoverable	Water	3005A	
180-133386-5	APIGWA-2	Total Recoverable	Water	3005A	
MB 180-387855/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-387855/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-133386-1 MS	FB-1	Total Recoverable	Water	3005A	
180-133386-1 MSD	FB-1	Total Recoverable	Water	3005A	

Analysis Batch: 388040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total Recoverable	Water	EPA 6020B	387854
180-133381-2	APIPZ-3	Total Recoverable	Water	EPA 6020B	387854
180-133381-3	APIPZ-4	Total Recoverable	Water	EPA 6020B	387854
180-133381-4	APIPZ-8	Total Recoverable	Water	EPA 6020B	387854
180-133381-5	DUP-1	Total Recoverable	Water	EPA 6020B	387854
180-133386-1	FB-1	Total Recoverable	Water	EPA 6020B	387855
180-133386-2	APIPZ-7	Total Recoverable	Water	EPA 6020B	387855
180-133386-3	APIPZ-2	Total Recoverable	Water	EPA 6020B	387855
180-133386-4	APIGWA-1	Total Recoverable	Water	EPA 6020B	387855
180-133386-5	APIGWA-2	Total Recoverable	Water	EPA 6020B	387855
MB 180-387854/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	387854
MB 180-387855/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	387855
LCS 180-387854/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	387854
LCS 180-387855/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	387855
180-133386-1 MS	FB-1	Total Recoverable	Water	EPA 6020B	387855
180-133386-1 MSD	FB-1	Total Recoverable	Water	EPA 6020B	387855

Prep Batch: 388057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total Recoverable	Water	3005A	
180-133521-2	APIPZ-5	Total Recoverable	Water	3005A	
180-133521-3	APIPZ-10	Total Recoverable	Water	3005A	
MB 180-388057/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-388057/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 388058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133523-1	APIPZ-6	Total Recoverable	Water	3005A	
180-133523-2	APIPZ-9	Total Recoverable	Water	3005A	
180-133523-3	APIPZ-11	Total Recoverable	Water	3005A	
180-133523-4	EB-2	Total Recoverable	Water	3005A	
MB 180-388058/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-388058/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-133523-1 MS	APIPZ-6	Total Recoverable	Water	3005A	
180-133523-1 MSD	APIPZ-6	Total Recoverable	Water	3005A	

Metals

Prep Batch: 388111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total/NA	Water	7470A	
180-133381-2	APIPZ-3	Total/NA	Water	7470A	
180-133381-3	APIPZ-4	Total/NA	Water	7470A	
180-133381-4	APIPZ-8	Total/NA	Water	7470A	
180-133381-5	DUP-1	Total/NA	Water	7470A	
MB 180-388111/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-388111/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 388224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133386-1	FB-1	Total/NA	Water	7470A	
180-133386-2	APIPZ-7	Total/NA	Water	7470A	
180-133386-3	APIPZ-2	Total/NA	Water	7470A	
180-133386-4	APIGWA-1	Total/NA	Water	7470A	
180-133386-5	APIGWA-2	Total/NA	Water	7470A	
MB 180-388224/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-388224/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 388275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133386-1	FB-1	Total Recoverable	Water	EPA 6020B	387855
180-133386-2	APIPZ-7	Total Recoverable	Water	EPA 6020B	387855
180-133386-3	APIPZ-2	Total Recoverable	Water	EPA 6020B	387855
180-133386-4	APIGWA-1	Total Recoverable	Water	EPA 6020B	387855
180-133386-5	APIGWA-2	Total Recoverable	Water	EPA 6020B	387855
MB 180-387855/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	387855
LCS 180-387855/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	387855
180-133386-1 MS	FB-1	Total Recoverable	Water	EPA 6020B	387855
180-133386-1 MSD	FB-1	Total Recoverable	Water	EPA 6020B	387855

Analysis Batch: 388367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total/NA	Water	EPA 7470A	388111
180-133381-2	APIPZ-3	Total/NA	Water	EPA 7470A	388111
180-133381-3	APIPZ-4	Total/NA	Water	EPA 7470A	388111
180-133381-4	APIPZ-8	Total/NA	Water	EPA 7470A	388111
180-133381-5	DUP-1	Total/NA	Water	EPA 7470A	388111
180-133386-1	FB-1	Total/NA	Water	EPA 7470A	388224
180-133386-2	APIPZ-7	Total/NA	Water	EPA 7470A	388224
180-133386-3	APIPZ-2	Total/NA	Water	EPA 7470A	388224
180-133386-4	APIGWA-1	Total/NA	Water	EPA 7470A	388224
180-133386-5	APIGWA-2	Total/NA	Water	EPA 7470A	388224
MB 180-388111/1-A	Method Blank	Total/NA	Water	EPA 7470A	388111
MB 180-388224/1-A	Method Blank	Total/NA	Water	EPA 7470A	388224
LCS 180-388111/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	388111
LCS 180-388224/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	388224

Prep Batch: 388428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total/NA	Water	7470A	
180-133521-2	APIPZ-5	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 388428 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-3	APIPZ-10	Total/NA	Water	7470A	
180-133523-1	APIPZ-6	Total/NA	Water	7470A	
180-133523-2	APIPZ-9	Total/NA	Water	7470A	
180-133523-3	APIPZ-11	Total/NA	Water	7470A	
180-133523-4	EB-2	Total/NA	Water	7470A	
MB 180-388428/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-388428/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 388561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133523-1	APIPZ-6	Total Recoverable	Water	EPA 6020B	388058
180-133523-2	APIPZ-9	Total Recoverable	Water	EPA 6020B	388058
180-133523-3	APIPZ-11	Total Recoverable	Water	EPA 6020B	388058
180-133523-4	EB-2	Total Recoverable	Water	EPA 6020B	388058
MB 180-388058/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	388058
LCS 180-388058/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	388058
180-133523-1 MS	APIPZ-6	Total Recoverable	Water	EPA 6020B	388058
180-133523-1 MSD	APIPZ-6	Total Recoverable	Water	EPA 6020B	388058

Analysis Batch: 388563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total Recoverable	Water	EPA 6020B	388057
180-133521-2	APIPZ-5	Total Recoverable	Water	EPA 6020B	388057
180-133521-3	APIPZ-10	Total Recoverable	Water	EPA 6020B	388057
MB 180-388057/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	388057
LCS 180-388057/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	388057

Analysis Batch: 388564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total Recoverable	Water	EPA 6020B	388057
180-133521-2	APIPZ-5	Total Recoverable	Water	EPA 6020B	388057
180-133521-3	APIPZ-10	Total Recoverable	Water	EPA 6020B	388057
MB 180-388057/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	388057
LCS 180-388057/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	388057

Analysis Batch: 389210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total/NA	Water	EPA 7470A	388428
180-133521-2	APIPZ-5	Total/NA	Water	EPA 7470A	388428
180-133521-3	APIPZ-10	Total/NA	Water	EPA 7470A	388428
180-133523-1	APIPZ-6	Total/NA	Water	EPA 7470A	388428
180-133523-2	APIPZ-9	Total/NA	Water	EPA 7470A	388428
180-133523-3	APIPZ-11	Total/NA	Water	EPA 7470A	388428
180-133523-4	EB-2	Total/NA	Water	EPA 7470A	388428
MB 180-388428/1-A	Method Blank	Total/NA	Water	EPA 7470A	388428
LCS 180-388428/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	388428

QC Association Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

General Chemistry

Analysis Batch: 387749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-5	DUP-1	Total/NA	Water	SM 2540C	
180-133386-1	FB-1	Total/NA	Water	SM 2540C	
180-133386-2	APIPZ-7	Total/NA	Water	SM 2540C	
180-133386-3	APIPZ-2	Total/NA	Water	SM 2540C	
180-133386-4	APIGWA-1	Total/NA	Water	SM 2540C	
180-133386-5	APIGWA-2	Total/NA	Water	SM 2540C	
MB 180-387749/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-387749/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 387904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total/NA	Water	SM 2540C	
180-133381-3	APIPZ-4	Total/NA	Water	SM 2540C	
180-133381-4	APIPZ-8	Total/NA	Water	SM 2540C	
MB 180-387904/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-387904/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 387971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total/NA	Water	SM 2540C	
180-133521-2	APIPZ-5	Total/NA	Water	SM 2540C	
180-133521-3	APIPZ-10	Total/NA	Water	SM 2540C	
180-133523-1	APIPZ-6	Total/NA	Water	SM 2540C	
180-133523-2	APIPZ-9	Total/NA	Water	SM 2540C	
180-133523-3	APIPZ-11	Total/NA	Water	SM 2540C	
180-133523-4	EB-2	Total/NA	Water	SM 2540C	
MB 180-387971/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-387971/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 388388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-2	APIPZ-3	Total/NA	Water	SM 2540C	
MB 180-388388/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-388388/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 388374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133386-2	APIPZ-7	Total/NA	Water	Field Sampling	
180-133386-3	APIPZ-2	Total/NA	Water	Field Sampling	
180-133386-4	APIGWA-1	Total/NA	Water	Field Sampling	
180-133386-5	APIGWA-2	Total/NA	Water	Field Sampling	

Analysis Batch: 388645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-2	APIPZ-3	Total/NA	Water	Field Sampling	
180-133381-3	APIPZ-4	Total/NA	Water	Field Sampling	
180-133381-4	APIPZ-8	Total/NA	Water	Field Sampling	
180-133381-5	DUP-1	Total/NA	Water	Field Sampling	

QC Association Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-1

Field Service / Mobile Lab

Analysis Batch: 388655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	APIPZ-1	Total/NA	Water	Field Sampling	
180-133521-2	APIPZ-5	Total/NA	Water	Field Sampling	
180-133521-3	APIPZ-10	Total/NA	Water	Field Sampling	

Analysis Batch: 388656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133523-1	APIPZ-6	Total/NA	Water	Field Sampling	
180-133523-2	APIPZ-9	Total/NA	Water	Field Sampling	
180-133523-3	APIPZ-11	Total/NA	Water	Field Sampling	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

ATLANTA 224-

Eurofins | Environment Testing America

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-0418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluouride Sulfate	Total Dissolved Solids	6020B (Custom 14 Appiii-IV)	(B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D		
EB-1	2/8/22	0915	G	W			X	X	X		X	X	4	—
APIPZ-3		0900	G	W			X	X	X		X	X	4	pH=5.63
APIPZ-4		1025	G	W			X	X	X		X	X	4	pH=6.48
APIPZ-8		1035	G	W			X	X	X		X	X	4	pH=6.42
DUP-1		—	G	W			X	X	X		X	X	4	pH=6.42

180-133381 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements: Courier

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Daniel Howard	Date/Time: 2/8/22 1215	Company: Wood	Received by: ETA	Date/Time: 15:02	Company: 2/8/22		
Relinquished by: 2/8/22 15:10	Date/Time:	Company: ETA	Received by:	Date/Time: 2-9-22	Company:		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:30	Company		

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

244-ATLANTA

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-0418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluouride Sulfate	Total Dissolved Solids	6020B (Custom 14 AppIII-IV) (B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D	
FB-1	2/7/22	1405	G	W			X	X	X		X	X	4 —
APIPZ-7		1535	G	W			X	X	X		X	X	4 pH=6.42
APIPZ-2		1520	G	W			X	X	X		X	X	4 pH=6.10
APIGWA-1		1510	G	W			X	X	X		X	X	4 pH=5.27
APIGWA-2		1705	G	W			X	X	X		X	X	4 pH=5.98

180-133386 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Courier

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Daniel Howard	2/8/22/1200	Wood		2/8/22 15:02	ETA
Relinquished by: 2/8/22	Date/Time: 15:10	Company ETA	Received by:	Date/Time: 2-9-22	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:30	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

#1

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-0418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power		Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: standard			Preservation Codes:
City: Atlanta	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			Other:
Email: SCS Contacts	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Georgia	SSOW#:			

24-ATLANTA

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluouride Sulfate	Total Dissolved Solids	6020B (Custom 14 Appiii-IV) (B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D	
APIPZ-1	2/8/22	1105	G	W			X	X	X		X	X	4 pH=6.57
APIPZ-5	2/8/22	1435	G	W			X	X	X		X	X	4 pH=6.43
APIPZ-10	2/9/22	1002	G	W			X	X	X		X	X	4 pH=6.19

180-133521 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) II	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Courier

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	2/9/22 / 1200	Wood		2/9/22 1503	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/9/22 1503		D Watson	2-10-22	ATL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				10:15	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-0418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluoride Sulfate	Total Dissolved Solids	6020B (Custom 14 Appiii-IV) (B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D	
APIPZ-6	2/8/22	1240	G	W			X	X	X	X	X	4	pH = 5.59
APIPZ-9		1400	G	W			X	X	X	X	X	4	pH = 4.63
APIPZ-11		1615	G	W			X	X	X	X	X	4	pH = 6.75
EB-2		1545	G	W			X	X	X	X	X	4	—

244-ATLANTA

180-133523 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed
☐ Return To Client ☒ Disposal By Lab — Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Courier

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Daniel Howard	2/9/22 1200	Wood		2/9/22 1500	
	2/9/22 1525			2-10 0900	BETAH
				2-10-22	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 10.1.5

Part # 159469-434 MTW EXP 09/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 08FEB22
ACTWGT: 65.20 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

Uncorrected temp 2.5 °C
Thermometer ID 11

CF 0 Initials MO

PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 2

TRK# 0201 5220 7116 0570

WED - 09 FEB 10:30A
PRIORITY OVERNIGHT

MASTER

NA AGCA

15238
PA-US PIT

180-133381 Waybill

2/24/2022

Part # 159469-434 MTW EXP 09/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 08FEB22
ACTWGT: 65.20 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF:
INV:
PO: DEPT:

Uncorrected temp 2.9 °C
Thermometer ID 16
CF 0 Initials MB
PT-WI-SR-001 effective 11/8/18

FedEx Express

180-133386 Waybill

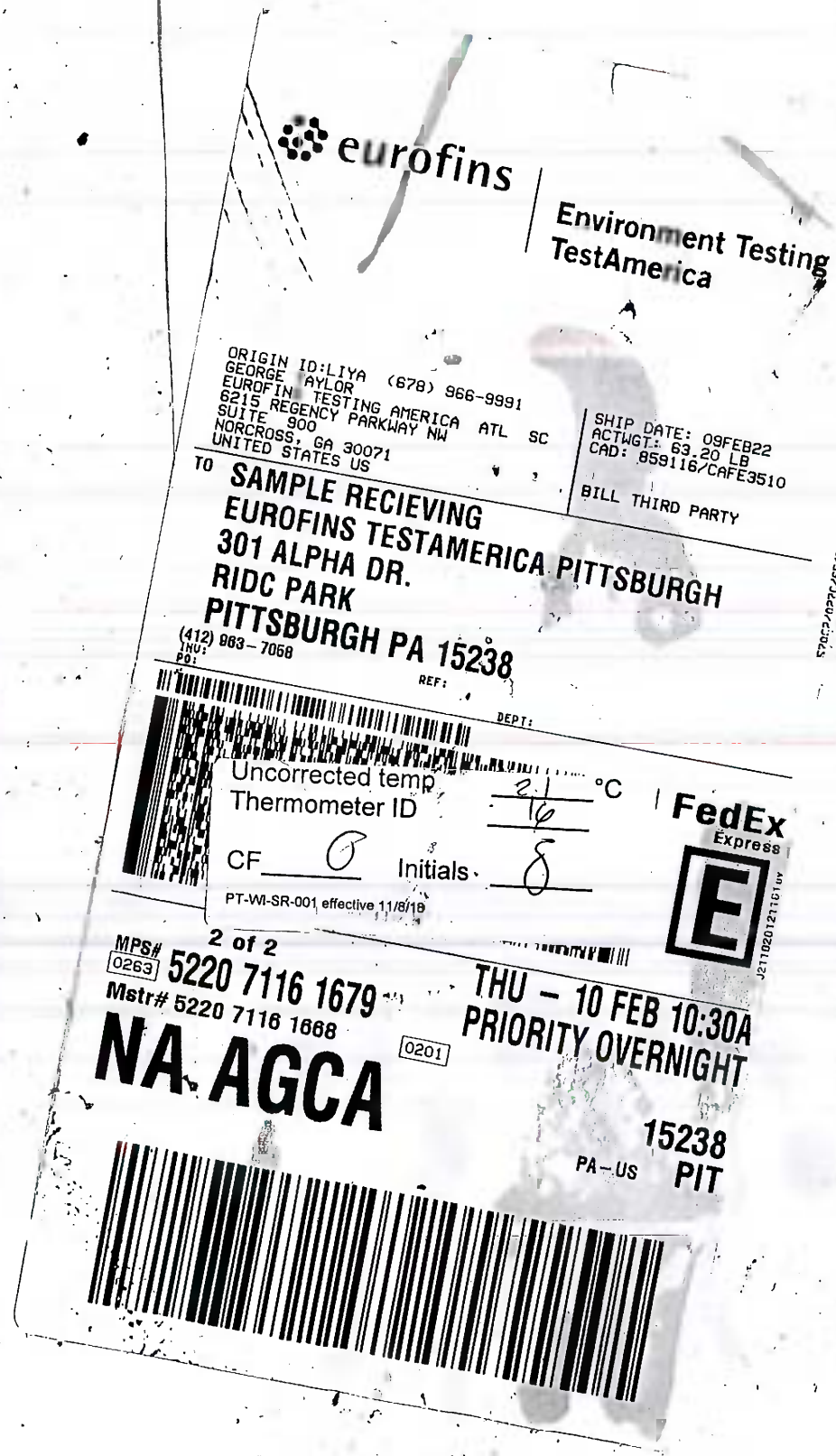
2 of 2
MPS# 0263 5220 7116 0580
Mstr# 5220 7116 0570 0201

WED - 09 FEB 10:30A
PRIORITY OVERNIGHT

NA AGCA

15238
PA-US PIT

Do not lift using this tag.



Pan 69434 MTW EXP 09/22

180-133521 Waybill

Do not lift using this tag.

Part # 159469-434 MTW EXP 09/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 09FEB22
ACTWGT: 63.20 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO **SAMPLE RECIEVING**
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

Uncorrected temp 3.1 °C
Thermometer ID 16
CF 0 Initials 8
PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 2

THU - 10 FEB 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5220 7116 1668

MASTER

NA AGCA

15238
PA-US PIT

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-1

Login Number: 133381
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-1

Login Number: 133386
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-1

Login Number: 133521
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-1

Login Number: 133523
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-133381-2
Client Project/Site: Plant Arkwright AP-1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
3/18/2022 6:42:57 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-133381-2

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-133381-2

Comments
No additional comments.

Receipt
The samples were received on 2/9/2022 10:30 AM and 2/10/2022 10:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.1º C, 2.5º C, 2.9º C and 3.1º C.

RAD
Methods 903.0, 9315: Radium 226 batch 550664
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference DateFB-1 (180-133386-1), APIPZ-7 (180-133386-2), APIPZ-2 (180-133386-3), APIGWA-1 (180-133386-4), APIGWA-2 (180-133386-5), (LCS 160-550664/1-A) and (MB 160-550664/23-A)

Methods 903.0, 9315: Radium 226 batch 550803
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.EB-1 (180-133381-1), APIPZ-3 (180-133381-2), APIPZ-4 (180-133381-3), APIPZ-8 (180-133381-4), DUP-1 (180-133381-5), (LCS 160-550803/1-A) and (MB 160-550803/20-A)

Method 9315: Radium 226 batch 551854
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference DateAPIPZ-1 (180-133521-1), APIPZ-5 (180-133521-2), APIPZ-10 (180-133521-3), APIPZ-6 (180-133523-1), APIPZ-9 (180-133523-2), APIPZ-11 (180-133523-3), EB-2 (180-133523-4), (LCS 160-551854/1-A), (LCSD 160-551854/2-A) and (MB 160-551854/21-A)

Methods 904.0, 9320: Radium 228 batch 550669
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference DateFB-1 (180-133386-1), APIPZ-7 (180-133386-2), APIPZ-2 (180-133386-3), APIGWA-1 (180-133386-4), APIGWA-2 (180-133386-5), (LCS 160-550669/1-A) and (MB 160-550669/23-A)

Methods 904.0, 9320: Radium 228 batch 550806
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.EB-1 (180-133381-1), APIPZ-3 (180-133381-2), APIPZ-4 (180-133381-3), APIPZ-8 (180-133381-4), DUP-1 (180-133381-5), (LCS 160-550806/1-A) and (MB 160-550806/20-A)

Method 9320: Radium 228 batch 551857
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date
APIPZ-1 (180-133521-1), APIPZ-5 (180-133521-2), APIPZ-10 (180-133521-3), APIPZ-6 (180-133523-1), APIPZ-9 (180-133523-2), APIPZ-11 (180-133523-3), EB-2 (180-133523-4), (LCS 160-551857/1-A), (LCSD 160-551857/2-A) and (MB 160-551857/21-A)

Method PrecSep_0: Radium-228 Prep Batch 160-551857
The following samples were prepared at a reduced aliquot due to Matrix: APIPZ-5 (180-133521-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium-226 Prep Batch 160-551854

Job ID: 180-133381-2 (Continued)

Laboratory: Eurofins Pittsburgh (Continued)

The following samples were prepared at a reduced aliquot due to Matrix: APIPZ-5 (180-133521-2). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-07-23
Arizona	State	AZ0813	12-08-22
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-22
Kentucky (DW)	State	KY90125	12-31-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-22
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-22
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	NELAP	9997	08-31-22
Oklahoma	State	9997	03-17-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	02-28-23
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-133381-1	EB-1	Water	02/08/22 09:15	02/09/22 10:30
180-133381-2	AP1PZ-3	Water	02/08/22 09:00	02/09/22 10:30
180-133381-3	AP1PZ-4	Water	02/08/22 10:25	02/09/22 10:30
180-133381-4	AP1PZ-8	Water	02/08/22 10:35	02/09/22 10:30
180-133381-5	DUP-1	Water	02/08/22 00:00	02/09/22 10:30
180-133386-1	FB-1	Water	02/07/22 14:05	02/09/22 10:30
180-133386-2	AP1PZ-7	Water	02/07/22 15:35	02/09/22 10:30
180-133386-3	AP1PZ-2	Water	02/07/22 15:20	02/09/22 10:30
180-133386-4	AP1GWA-1	Water	02/07/22 15:10	02/09/22 10:30
180-133386-5	AP1GWA-2	Water	02/07/22 17:05	02/09/22 10:30
180-133521-1	AP1PZ-1	Water	02/08/22 11:05	02/10/22 10:15
180-133521-2	AP1PZ-5	Water	02/08/22 14:35	02/10/22 10:15
180-133521-3	AP1PZ-10	Water	02/09/22 10:02	02/10/22 10:15
180-133523-1	AP1PZ-6	Water	02/08/22 12:40	02/10/22 10:15
180-133523-2	AP1PZ-9	Water	02/08/22 14:00	02/10/22 10:15
180-133523-3	AP1PZ-11	Water	02/08/22 16:15	02/10/22 10:15
180-133523-4	EB-2	Water	02/08/22 15:45	02/10/22 10:15

Method Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: EB-1
Date Collected: 02/08/22 09:15
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			993.83 mL	1.0 g	550803	02/16/22 13:27	HRT	TAL SL
Total/NA	Analysis	9315		1			554941	03/12/22 11:52	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			993.83 mL	1.0 g	550806	02/16/22 13:53	HRT	TAL SL
Total/NA	Analysis	9320		1			553105	03/02/22 13:54	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:05	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-3
Date Collected: 02/08/22 09:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.01 mL	1.0 g	550803	02/16/22 13:27	HRT	TAL SL
Total/NA	Analysis	9315		1			554763	03/11/22 13:36	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			999.01 mL	1.0 g	550806	02/16/22 13:53	HRT	TAL SL
Total/NA	Analysis	9320		1			553105	03/02/22 13:54	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:05	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-4
Date Collected: 02/08/22 10:25
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1003.87 mL	1.0 g	550803	02/16/22 13:27	HRT	TAL SL
Total/NA	Analysis	9315		1			554763	03/11/22 13:37	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1003.87 mL	1.0 g	550806	02/16/22 13:53	HRT	TAL SL
Total/NA	Analysis	9320		1			553105	03/02/22 13:54	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:05	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-8
Date Collected: 02/08/22 10:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			995.05 mL	1.0 g	550803	02/16/22 13:27	HRT	TAL SL
Total/NA	Analysis	9315		1			554763	03/11/22 13:37	FLC	TAL SL
	Instrument ID: GFPCRED									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-8
Date Collected: 02/08/22 10:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			995.05 mL	1.0 g	550806	02/16/22 13:53	HRT	TAL SL
Total/NA	Analysis	9320		1			553105	03/02/22 13:55	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:05	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1
Date Collected: 02/08/22 00:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.17 mL	1.0 g	550803	02/16/22 13:27	HRT	TAL SL
Total/NA	Analysis	9315		1			554763	03/11/22 13:37	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			749.17 mL	1.0 g	550806	02/16/22 13:53	HRT	TAL SL
Total/NA	Analysis	9320		1			553105	03/02/22 13:55	ANW	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:05	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1
Date Collected: 02/07/22 14:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.41 mL	1.0 g	550664	02/15/22 13:08	BMP	TAL SL
Total/NA	Analysis	9315		1			554310	03/09/22 12:09	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.41 mL	1.0 g	550669	02/15/22 14:18	BMP	TAL SL
Total/NA	Analysis	9320		1			552844	03/01/22 13:27	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:07	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-7
Date Collected: 02/07/22 15:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1001.01 mL	1.0 g	550664	02/15/22 13:08	BMP	TAL SL
Total/NA	Analysis	9315		1			554310	03/09/22 12:09	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1001.01 mL	1.0 g	550669	02/15/22 14:18	BMP	TAL SL
Total/NA	Analysis	9320		1			552844	03/01/22 13:27	FLC	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-7
Date Collected: 02/07/22 15:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:07	EMH	TAL SL

Client Sample ID: AP1PZ-2
Date Collected: 02/07/22 15:20
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.79 mL	1.0 g	550664	02/15/22 13:08	BMP	TAL SL
Total/NA	Analysis	9315		1			554310	03/09/22 12:09	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			999.79 mL	1.0 g	550669	02/15/22 14:18	BMP	TAL SL
Total/NA	Analysis	9320		1			552844	03/01/22 13:27	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:07	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1GWA-1
Date Collected: 02/07/22 15:10
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.65 mL	1.0 g	550664	02/15/22 13:08	BMP	TAL SL
Total/NA	Analysis	9315		1			554310	03/09/22 12:09	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1000.65 mL	1.0 g	550669	02/15/22 14:18	BMP	TAL SL
Total/NA	Analysis	9320		1			552844	03/01/22 13:27	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:07	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1GWA-2
Date Collected: 02/07/22 17:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1001.46 mL	1.0 g	550664	02/15/22 13:08	BMP	TAL SL
Total/NA	Analysis	9315		1			554310	03/09/22 12:08	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			1001.46 mL	1.0 g	550669	02/15/22 14:18	BMP	TAL SL
Total/NA	Analysis	9320		1			552844	03/01/22 13:27	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			555276	03/14/22 18:07	EMH	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-1
Date Collected: 02/08/22 11:05
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1002.30 mL	1.0 g	551854	02/22/22 15:45	LPS	TAL SL
Total/NA	Analysis	9315		1			555612	03/16/22 17:39	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1002.30 mL	1.0 g	551857	02/22/22 16:25	LPS	TAL SL
Total/NA	Analysis	9320		1			554507	03/09/22 13:20	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			555865	03/17/22 16:33	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-5
Date Collected: 02/08/22 14:35
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			754.99 mL	1.0 g	551854	02/22/22 15:45	LPS	TAL SL
Total/NA	Analysis	9315		1			555612	03/16/22 17:39	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			754.99 mL	1.0 g	551857	02/22/22 16:25	LPS	TAL SL
Total/NA	Analysis	9320		1			554507	03/09/22 13:20	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			555865	03/17/22 16:33	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-10
Date Collected: 02/09/22 10:02
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			998.73 mL	1.0 g	551854	02/22/22 15:45	LPS	TAL SL
Total/NA	Analysis	9315		1			555612	03/16/22 17:39	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			998.73 mL	1.0 g	551857	02/22/22 16:25	LPS	TAL SL
Total/NA	Analysis	9320		1			554507	03/09/22 13:20	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			555865	03/17/22 16:33	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-6
Date Collected: 02/08/22 12:40
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1001.86 mL	1.0 g	551854	02/22/22 15:45	LPS	TAL SL
Total/NA	Analysis	9315		1			555612	03/16/22 17:39	FLC	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-6
Date Collected: 02/08/22 12:40
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1001.86 mL	1.0 g	551857	02/22/22 16:25	LPS	TAL SL
Total/NA	Analysis	9320		1			554507	03/09/22 13:20	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			555865	03/17/22 16:33	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-9
Date Collected: 02/08/22 14:00
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1007.26 mL	1.0 g	551854	02/22/22 15:45	LPS	TAL SL
Total/NA	Analysis	9315		1			555612	03/16/22 17:39	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1007.26 mL	1.0 g	551857	02/22/22 16:25	LPS	TAL SL
Total/NA	Analysis	9320		1			554507	03/09/22 13:20	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			555865	03/17/22 16:33	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: AP1PZ-11
Date Collected: 02/08/22 16:15
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			995.97 mL	1.0 g	551854	02/22/22 15:45	LPS	TAL SL
Total/NA	Analysis	9315		1			555612	03/16/22 17:39	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			995.97 mL	1.0 g	551857	02/22/22 16:25	LPS	TAL SL
Total/NA	Analysis	9320		1			554507	03/09/22 13:21	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			555865	03/17/22 16:33	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2
Date Collected: 02/08/22 15:45
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1005.12 mL	1.0 g	551854	02/22/22 15:45	LPS	TAL SL
Total/NA	Analysis	9315		1			555612	03/16/22 17:39	FLC	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1005.12 mL	1.0 g	551857	02/22/22 16:25	LPS	TAL SL
Total/NA	Analysis	9320		1			554507	03/09/22 13:21	FLC	TAL SL
	Instrument ID: GFPCORANGE									

Lab Chronicle

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: EB-2
Date Collected: 02/08/22 15:45
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			555865	03/17/22 16:33	EMH	TAL SL

Laboratory References:

TAL SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: TAL SL

Batch Type: Prep

BMP = Bailey Pinette
HRT = Hannah Tomasovic
LPS = Lauren Szostak

Batch Type: Analysis

ANW = Aamber Woods
EMH = Elizabeth Hoerchler
FLC = Fernando Cruz

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: EB-1

Date Collected: 02/08/22 09:15
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00455	U	0.0606	0.0606	1.00	0.129	pCi/L	02/16/22 13:27	03/12/22 11:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*40 - 110*	*02/16/22 13:27*	*03/12/22 11:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.507**		0.280	0.284	1.00	0.418	pCi/L	02/16/22 13:53	03/02/22 13:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.3*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:54*	*1*
Y Carrier	*86.0*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:54*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.503**		0.286	0.290	5.00	0.418	pCi/L		03/14/22 18:05	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-3

Date Collected: 02/08/22 09:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0494	U	0.0742	0.0744	1.00	0.127	pCi/L	02/16/22 13:27	03/11/22 13:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*02/16/22 13:27*	*03/11/22 13:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.800**		0.283	0.293	1.00	0.378	pCi/L	02/16/22 13:53	03/02/22 13:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:54*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:54*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.850**		0.293	0.302	5.00	0.378	pCi/L		03/14/22 18:05	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-4

Date Collected: 02/08/22 10:25
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.129	U	0.0941	0.0948	1.00	0.134	pCi/L	02/16/22 13:27	03/11/22 13:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.6*		*40 - 110*	*02/16/22 13:27*	*03/11/22 13:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.208	U	0.304	0.304	1.00	0.509	pCi/L	02/16/22 13:53	03/02/22 13:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.6*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:54*	*1*
Y Carrier	*88.6*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:54*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.337	U	0.318	0.318	5.00	0.509	pCi/L		03/14/22 18:05	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-8

Date Collected: 02/08/22 10:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.426		0.131	0.137	1.00	0.120	pCi/L	02/16/22 13:27	03/11/22 13:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*02/16/22 13:27*	*03/11/22 13:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.789		0.325	0.333	1.00	0.455	pCi/L	02/16/22 13:53	03/02/22 13:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:55*	*1*
Y Carrier	*86.4*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:55*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.22		0.350	0.360	5.00	0.455	pCi/L		03/14/22 18:05	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: DUP-1

Date Collected: 02/08/22 00:00
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133381-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.134		0.0884	0.0892	1.00	0.115	pCi/L	02/16/22 13:27	03/11/22 13:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*02/16/22 13:27*	*03/11/22 13:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.745		0.351	0.358	1.00	0.510	pCi/L	02/16/22 13:53	03/02/22 13:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.0*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:55*	*1*
Y Carrier	*85.6*		*40 - 110*	*02/16/22 13:53*	*03/02/22 13:55*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.879		0.362	0.369	5.00	0.510	pCi/L		03/14/22 18:05	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: FB-1

Date Collected: 02/07/22 14:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00372	U	0.0469	0.0469	1.00	0.101	pCi/L	02/15/22 13:08	03/09/22 12:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.5*		*40 - 110*	*02/15/22 13:08*	*03/09/22 12:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.267	U	0.254	0.255	1.00	0.410	pCi/L	02/15/22 14:18	03/01/22 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.5*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*
Y Carrier	*84.5*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.263	U	0.258	0.259	5.00	0.410	pCi/L		03/14/22 18:07	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-7

Date Collected: 02/07/22 15:35
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.253		0.101	0.103	1.00	0.103	pCi/L	02/15/22 13:08	03/09/22 12:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*02/15/22 13:08*	*03/09/22 12:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.660		0.278	0.285	1.00	0.388	pCi/L	02/15/22 14:18	03/01/22 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.0*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*
Y Carrier	*81.9*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.913		0.296	0.303	5.00	0.388	pCi/L		03/14/22 18:07	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-2
Date Collected: 02/07/22 15:20
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-3
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0311	U	0.0571	0.0571	1.00	0.102	pCi/L	02/15/22 13:08	03/09/22 12:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*02/15/22 13:08*	*03/09/22 12:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.101	U	0.216	0.216	1.00	0.410	pCi/L	02/15/22 14:18	03/01/22 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*
Y Carrier	*83.7*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0696	U	0.223	0.223	5.00	0.410	pCi/L		03/14/22 18:07	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1GWA-1

Date Collected: 02/07/22 15:10
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.149		0.0838	0.0849	1.00	0.101	pCi/L	02/15/22 13:08	03/09/22 12:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*02/15/22 13:08*	*03/09/22 12:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.186	U	0.263	0.263	1.00	0.440	pCi/L	02/15/22 14:18	03/01/22 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*
Y Carrier	*84.5*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.335	U	0.276	0.276	5.00	0.440	pCi/L		03/14/22 18:07	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1GWA-2

Date Collected: 02/07/22 17:05
Date Received: 02/09/22 10:30

Lab Sample ID: 180-133386-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0447	U	0.0687	0.0688	1.00	0.118	pCi/L	02/15/22 13:08	03/09/22 12:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*40 - 110*	*02/15/22 13:08*	*03/09/22 12:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.217	U	0.254	0.254	1.00	0.418	pCi/L	02/15/22 14:18	03/01/22 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.0*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*
Y Carrier	*84.5*		*40 - 110*	*02/15/22 14:18*	*03/01/22 13:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.262	U	0.263	0.263	5.00	0.418	pCi/L		03/14/22 18:07	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-1

Date Collected: 02/08/22 11:05
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00990	U	0.0678	0.0678	1.00	0.134	pCi/L	02/22/22 15:45	03/16/22 17:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.0*		*40 - 110*	*02/22/22 15:45*	*03/16/22 17:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.336	U	0.319	0.320	1.00	0.516	pCi/L	02/22/22 16:25	03/09/22 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.0*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*
Y Carrier	*85.2*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.346	U	0.326	0.327	5.00	0.516	pCi/L		03/17/22 16:33	1

Client Sample ID: AP1PZ-5

Date Collected: 02/08/22 14:35
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.390		0.177	0.181	1.00	0.223	pCi/L	02/22/22 15:45	03/16/22 17:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*02/22/22 15:45*	*03/16/22 17:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.783		0.323	0.331	1.00	0.438	pCi/L	02/22/22 16:25	03/09/22 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*
Y Carrier	*85.6*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.17		0.368	0.377	5.00	0.438	pCi/L		03/17/22 16:33	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-10

Date Collected: 02/09/22 10:02
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133521-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.261**		0.118	0.121	1.00	0.143	pCi/L	02/22/22 15:45	03/16/22 17:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*02/22/22 15:45*	*03/16/22 17:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.303	U	0.253	0.255	1.00	0.400	pCi/L	02/22/22 16:25	03/09/22 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*
Y Carrier	*81.1*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.564**		0.279	0.282	5.00	0.400	pCi/L		03/17/22 16:33	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-6

Date Collected: 02/08/22 12:40
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.211		0.119	0.120	1.00	0.154	pCi/L	02/22/22 15:45	03/16/22 17:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.8*		*40 - 110*	*02/22/22 15:45*	*03/16/22 17:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.779		0.300	0.308	1.00	0.399	pCi/L	02/22/22 16:25	03/09/22 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.8*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*
Y Carrier	*83.7*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.990		0.323	0.331	5.00	0.399	pCi/L		03/17/22 16:33	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-9

Date Collected: 02/08/22 14:00
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.261		0.135	0.137	1.00	0.177	pCi/L	02/22/22 15:45	03/16/22 17:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.3*		*40 - 110*	*02/22/22 15:45*	*03/16/22 17:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.568		0.302	0.307	1.00	0.446	pCi/L	02/22/22 16:25	03/09/22 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.3*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*
Y Carrier	*84.9*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.830		0.331	0.336	5.00	0.446	pCi/L		03/17/22 16:33	1

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: AP1PZ-11

Date Collected: 02/08/22 16:15
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0141	U	0.0695	0.0695	1.00	0.133	pCi/L	02/22/22 15:45	03/16/22 17:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.5*		*40 - 110*	*02/22/22 15:45*	*03/16/22 17:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.200	U	0.233	0.234	1.00	0.384	pCi/L	02/22/22 16:25	03/09/22 13:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.5*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:21*	*1*
Y Carrier	*84.1*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.214	U	0.243	0.244	5.00	0.384	pCi/L		03/17/22 16:33	1

Client Sample Results

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Client Sample ID: EB-2

Date Collected: 02/08/22 15:45
Date Received: 02/10/22 10:15

Lab Sample ID: 180-133523-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.105	U	0.103	0.103	1.00	0.163	pCi/L	02/22/22 15:45	03/16/22 17:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*02/22/22 15:45*	*03/16/22 17:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0592	U	0.210	0.211	1.00	0.370	pCi/L	02/22/22 16:25	03/09/22 13:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:21*	*1*
Y Carrier	*83.0*		*40 - 110*	*02/22/22 16:25*	*03/09/22 13:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.164	U	0.234	0.235	5.00	0.370	pCi/L		03/17/22 16:33	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-550664/23-A
Matrix: Water
Analysis Batch: 554310

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550664

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02915	U	0.0622	0.0623	1.00	0.114	pCi/L	02/15/22 13:08	03/09/22 14:00	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.8*		*40 - 110*	*02/15/22 13:08*	*03/09/22 14:00*	*1*

Lab Sample ID: LCS 160-550664/1-A
Matrix: Water
Analysis Batch: 554310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550664

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.43		1.10	1.00	0.0929	pCi/L	92	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*88.0*		*40 - 110*

Lab Sample ID: MB 160-550803/20-A
Matrix: Water
Analysis Batch: 554763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550803

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04292	U	0.0619	0.0620	1.00	0.105	pCi/L	02/16/22 13:27	03/11/22 13:37	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*02/16/22 13:27*	*03/11/22 13:37*	*1*

Lab Sample ID: LCS 160-550803/1-A
Matrix: Water
Analysis Batch: 554763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550803

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	12.35		1.29	1.00	0.123	pCi/L	109	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*95.0*		*40 - 110*

Lab Sample ID: MB 160-551854/21-A
Matrix: Water
Analysis Batch: 555612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551854

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05472	U	0.0743	0.0745	1.00	0.125	pCi/L	02/22/22 15:45	03/16/22 19:26	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-551854/21-A
Matrix: Water
Analysis Batch: 555612

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551854

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		40 - 110	02/22/22 15:45	03/16/22 19:26	1

Lab Sample ID: LCS 160-551854/1-A
Matrix: Water
Analysis Batch: 555612

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551854

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.34		1.09	1.00	0.119	pCi/L	91	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	95.5		40 - 110

Lab Sample ID: LCSD 160-551854/2-A
Matrix: Water
Analysis Batch: 555612

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551854

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	10.95		1.15	1.00	0.116	pCi/L	97	75 - 125	0.27	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	91.3		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-550669/23-A
Matrix: Water
Analysis Batch: 552770

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550669

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4268	U	0.286	0.289	1.00	0.442	pCi/L	02/15/22 14:18	03/01/22 13:33	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110	02/15/22 14:18	03/01/22 13:33	1
Y Carrier	88.2		40 - 110	02/15/22 14:18	03/01/22 13:33	1

Lab Sample ID: LCS 160-550669/1-A
Matrix: Water
Analysis Batch: 552844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550669

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.83	10.01		1.16	1.00	0.402	pCi/L	113	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-550669/1-A
Matrix: Water
Analysis Batch: 552844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550669

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	88.0		40 - 110
Y Carrier	88.2		40 - 110

Lab Sample ID: MB 160-550806/20-A
Matrix: Water
Analysis Batch: 553105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550806

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.002165	U	0.196	0.196	1.00	0.355	pCi/L	02/16/22 13:53	03/02/22 13:55	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.0		40 - 110	02/16/22 13:53	03/02/22 13:55	1
Y Carrier	88.2		40 - 110	02/16/22 13:53	03/02/22 13:55	1

Lab Sample ID: LCS 160-550806/1-A
Matrix: Water
Analysis Batch: 552954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550806

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.83	9.043		1.06	1.00	0.374	pCi/L	102	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	95.0		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: MB 160-551857/21-A
Matrix: Water
Analysis Batch: 554308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551857

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4240		0.264	0.267	1.00	0.403	pCi/L	02/22/22 16:25	03/09/22 13:25	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.3		40 - 110	02/22/22 16:25	03/09/22 13:25	1
Y Carrier	83.7		40 - 110	02/22/22 16:25	03/09/22 13:25	1

Lab Sample ID: LCS 160-551857/1-A
Matrix: Water
Analysis Batch: 554507

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551857

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.81	9.313		1.08	1.00	0.373	pCi/L	106	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-551857/1-A
Matrix: Water
Analysis Batch: 554507

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551857

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	95.5		40 - 110
Y Carrier	84.9		40 - 110

Lab Sample ID: LCSD 160-551857/2-A
Matrix: Water
Analysis Batch: 554507

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551857

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			8.81	9.732		1.13	1.00	0.378	pCi/L	110	75 - 125	0.19	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	91.3		40 - 110
Y Carrier	85.2		40 - 110

Rad

Prep Batch: 550664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133386-1	FB-1	Total/NA	Water	PrecSep-21	
180-133386-2	AP1PZ-7	Total/NA	Water	PrecSep-21	
180-133386-3	AP1PZ-2	Total/NA	Water	PrecSep-21	
180-133386-4	AP1GWA-1	Total/NA	Water	PrecSep-21	
180-133386-5	AP1GWA-2	Total/NA	Water	PrecSep-21	
MB 160-550664/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-550664/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 550669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133386-1	FB-1	Total/NA	Water	PrecSep_0	
180-133386-2	AP1PZ-7	Total/NA	Water	PrecSep_0	
180-133386-3	AP1PZ-2	Total/NA	Water	PrecSep_0	
180-133386-4	AP1GWA-1	Total/NA	Water	PrecSep_0	
180-133386-5	AP1GWA-2	Total/NA	Water	PrecSep_0	
MB 160-550669/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-550669/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 550803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total/NA	Water	PrecSep-21	
180-133381-2	AP1PZ-3	Total/NA	Water	PrecSep-21	
180-133381-3	AP1PZ-4	Total/NA	Water	PrecSep-21	
180-133381-4	AP1PZ-8	Total/NA	Water	PrecSep-21	
180-133381-5	DUP-1	Total/NA	Water	PrecSep-21	
MB 160-550803/20-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-550803/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 550806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133381-1	EB-1	Total/NA	Water	PrecSep_0	
180-133381-2	AP1PZ-3	Total/NA	Water	PrecSep_0	
180-133381-3	AP1PZ-4	Total/NA	Water	PrecSep_0	
180-133381-4	AP1PZ-8	Total/NA	Water	PrecSep_0	
180-133381-5	DUP-1	Total/NA	Water	PrecSep_0	
MB 160-550806/20-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-550806/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 551854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	AP1PZ-1	Total/NA	Water	PrecSep-21	
180-133521-2	AP1PZ-5	Total/NA	Water	PrecSep-21	
180-133521-3	AP1PZ-10	Total/NA	Water	PrecSep-21	
180-133523-1	AP1PZ-6	Total/NA	Water	PrecSep-21	
180-133523-2	AP1PZ-9	Total/NA	Water	PrecSep-21	
180-133523-3	AP1PZ-11	Total/NA	Water	PrecSep-21	
180-133523-4	EB-2	Total/NA	Water	PrecSep-21	
MB 160-551854/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-551854/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-551854/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

QC Association Summary

Client: Southern Company
Project/Site: Plant Arkwright AP-1

Job ID: 180-133381-2

Rad

Prep Batch: 551857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133521-1	AP1PZ-1	Total/NA	Water	PrecSep_0	
180-133521-2	AP1PZ-5	Total/NA	Water	PrecSep_0	
180-133521-3	AP1PZ-10	Total/NA	Water	PrecSep_0	
180-133523-1	AP1PZ-6	Total/NA	Water	PrecSep_0	
180-133523-2	AP1PZ-9	Total/NA	Water	PrecSep_0	
180-133523-3	AP1PZ-11	Total/NA	Water	PrecSep_0	
180-133523-4	EB-2	Total/NA	Water	PrecSep_0	
MB 160-551857/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-551857/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-551857/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

ATLANTA -224

Eurofins | Environment Testing America

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-0418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluouride Sulfate	Total Dissolved Solids	6020B (Custom 14 Appiii-IV)	(B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D		
EB-1	2/8/22	0915	G	W			X	X	X		X	X	4	—
APIPZ-3		0900	G	W			X	X	X		X	X	4	pH=5.63
APIPZ-4		1025	G	W			X	X	X		X	X	4	pH=6.48
APIPZ-8		1035	G	W			X	X	X		X	X	4	pH=6.42
DUP-1		—	G	W			X	X	X		X	X	4	pH=6.42

180-133381 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements: Courier

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Daniel Howard	Date/Time: 2/8/22 1215	Company: Wood	Received by: ETA	Date/Time: 15:02	Company: 2/8/22		
Relinquished by: 2/8/22 15:10	Date/Time:	Company: ETA	Received by:	Date/Time: 2-9-22	Company:		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:30	Company		

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

244-ATLANTA

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-9418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluouride Sulfate	Total Dissolved Solids	6020B (Custom 14 AppIII-IV) (B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D	
FB-1	2/7/22	1405	G	W			X	X	X		X	X	4 —
APIPZ-7		1535	G	W			X	X	X		X	X	4 pH=6.42
APIPZ-2		1520	G	W			X	X	X		X	X	4 pH=6.10
APIGWA-1		1510	G	W			X	X	X		X	X	4 pH=5.27
APIGWA-2		1705	G	W			X	X	X		X	X	4 pH=5.98

180-133386 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Courier

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Daniel Howard	2/8/22/1200	Wood		2/8/22 15:02	ETA
Relinquished by: 2/8/22	Date/Time: 15:10	Company ETA	Received by:	Date/Time: 2-9-22	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:30	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

#1

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-0418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power		Analysis Requested		Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: standard			Preservation Codes:
City: Atlanta	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: GA, 30308	PO #:			
Phone: 404-506-7116(Tel)	WO #:			Other:
Email: SCS Contacts	Project #: 18020201			
Project Name: Plant Arkwright AP-1	SSOW#:			
Site: Georgia				

24-ATLANTA

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluouride Sulfate	Total Dissolved Solids	6020B (Custom 14 Appiii-IV) (B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D	
APIPZ-1	2/8/22	1105	G	W			X	X	X		X	X	4 pH=6.57
APIPZ-5	2/8/22	1435	G	W			X	X	X		X	X	4 pH=6.43
APIPZ-10	2/9/22	1002	G	W			X	X	X		X	X	4 pH=6.19

180-133521 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) II	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Courier

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Daniel Howard	2/9/22 / 1200	Wood		2/9/22 1503	
	2/9/22 1503		D Watson	2-10-22	ABC Anlt
				10:15	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Daniel Howard	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 404-273-0418	E-Mail: shali.brown@eurofinset.com		Page: 1
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested: Standard			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Georgia	SSOW#:			

Analysis Requested

244-ATLANTA

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride Fluoride Sulfate	Total Dissolved Solids	6020B (Custom 14 Appiii-IV) (B Ca Sb As Ba Be Cd Cr Co Pb Li Mo Se Tl)	Mercury	RAD - 226 228 Combined	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	D	D	D	
APIPZ-6	2/8/22	1240	G	W			X	X	X	X	X	4	pH = 5.59
APIPZ-9		1400	G	W			X	X	X	X	X	4	pH = 4.63
APIPZ-11		1615	G	W			X	X	X	X	X	4	pH = 6.75
EB-2		1545	G	W			X	X	X	X	X	4	—

180-133523 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed
☐ Return To Client ☒ Disposal By Lab — Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Courier		
Relinquished by: Daniel Howard	Date/Time: 2/9/22 1200	Company Wood	Received by:	Date/Time: 2/9/22 1504	Company
Relinquished by:	Date/Time: 2/9/22 1525	Company	Received by:	Date/Time: 2-10-22	Company BETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2-10-22	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 10.1 5

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Part # 159469-434 MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 08FEB22
ACTWGT: 65.20 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

Uncorrected temp 2.5 °C
Thermometer ID 11

CF 0 Initials MO

PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 2

TRK# 0201 5220 7116 0570

WED - 09 FEB 10:30A
PRIORITY OVERNIGHT

MASTER

NA AGCA

15238
PA-US PIT

180-133381 Waybill

3/18/2022

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 08FEB22
ACTWGT: 65.20 LB
CAD: 859116/CAFE3510

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF:
INV:
PO: DEPT:

Uncorrected temp 2.9 °C
Thermometer ID 16
CF 0 Initials MB
PT-WI-SR-001 effective 11/8/18

FedEx Express

2 of 2
MPS# 0263 5220 7116 0580
Mstr# 5220 7116 0570 0201

WED - 09 FEB 10:30A
PRIORITY OVERNIGHT

NA AGCA

15238
PA-US PIT

Do not lift using this tag.

eurofins | Environment Testing TestAmerica

Part # 99469-434 MTW EXP 09/22

180-133521 Waybill

ORIGIN ID:LIYA (678) 966-9991
GEORGE AYLOR
EUROFIN TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 09FEB22
ACTWGT: 63.20 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
INV:
PO:
REF:
DEPT:

Uncorrected temp ____ °C
Thermometer ID ____
CF ____ Initials ____

PT-WI-SR-001 effective 11/8/18

FedEx Express

J211020121161uv

2 of 2
MPS# 5220 7116 1679
Mstr# 5220 7116 1668

THU – 10 FEB 10:30A
PRIORITY OVERNIGHT

0263

0201

NA AGCA

15238
PA-US PIT

Do not lift using this tag.

Part # 159469-434 MTW EXP 09/22

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 09FEB22
ACTWGT: 63.20 LB
CAD: 859116/CAFE3510

BILL THIRD PARTY

TO **SAMPLE RECIEVING**
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

Uncorrected temp 3.1 °C
Thermometer ID 16
CF 0 Initials 8
PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 2

THU - 10 FEB 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5220 7116 1668

MASTER

NA AGCA

15238
PA-US PIT

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-454570.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-133381-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/15/2022			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium 228	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
EB-1 (180-133381-1)	2/8/22	09:15 Eastern		Water			X	X	X	2	
APIPZ-3 (180-133381-2)	2/8/22	09:00 Eastern		Water			X	X	X	2	
APIPZ-4 (180-133381-3)	2/8/22	10:25 Eastern		Water			X	X	X	2	
APIPZ-8 (180-133381-4)	2/8/22	10:35 Eastern		Water			X	X	X	2	
DUP-1 (180-133381-5)	2/8/22	Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
MO	2-10-22 1700	ETAST	FED EX		
Relinquished by: FED EX	Date/Time:	Company	Received by:	Date/Time: FEB 11 2022 0945	Company ETAST
Relinquished by:	Date/Time:	Company	Received by: Autumn R. Johnson	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

3/18/2022

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-454570.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-133386-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/15/2022			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium 228	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
FB-1 (180-133386-1)	2/7/22	14:05 Eastern		Water			X	X	X	2	
APIPZ-7 (180-133386-2)	2/7/22	15:35 Eastern		Water			X	X	X	2	
APIPZ-2 (180-133386-3)	2/7/22	15:20 Eastern		Water			X	X	X	2	
APIGWA-1 (180-133386-4)	2/7/22	15:10 Eastern		Water			X	X	X	2	
APIGWA-2 (180-133386-5)	2/7/22	17:05 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[illegible]	2-10-22 1700	[illegible]	FED EX		
Relinquished by: FED EX	Date/Time:	Company	Received by: [signature]	Date/Time: FEB 11 2022 0945	Company ETA STL
Relinquished by:	Date/Time:	Company	Received by: Autumn R. Johnson	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-454733.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-133521-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/16/2022	Analysis Requested		Preservation Codes:
City: Earth City	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			Other:
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium 228	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APIPZ-1 (180-133521-1)	2/8/22	11:05 Eastern		Water			X	X	X	2	
APIPZ-5 (180-133521-2)	2/8/22	14:35 Eastern		Water			X	X	X	2	
APIPZ-10 (180-133521-3)	2/9/22	10:02 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: MO	Date/Time: 2-11-22 1700	Company: ETPGH	Received by: FED EX	Date/Time:	Company
Relinquished by: FED EX	Date/Time:	Company	Received by: Sierra Worthington	Date/Time: 2-12-22 0825	Company: ETPGH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-454733.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-133523-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/16/2022			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Plant Arkwright AP-1	Project #: 18020201			
Site: Arkwright	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCl	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium 228	9315_Ra226/PrecSep_21 Radium-226 (GFPC) - 21 day decay	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
APIPZ-6 (180-133523-1)	2/8/22	12:40 Eastern		Water			X	X	X	2	
APIPZ-9 (180-133523-2)	2/8/22	14:00 Eastern		Water			X	X	X	2	
APIPZ-11 (180-133523-3)	2/8/22	16:15 Eastern		Water			X	X	X	2	
EB-2 (180-133523-4)	2/8/22	15:45 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Pittsburgh.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	MO	2-11-22 1700	ECTA PIT	FED EX		
2	Relinquished by: FED EX	Date/Time:	Company	Received by: Sierra Worthington	Date/Time: 2-12-22 0825	Company ETPIT
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133381
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133381
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins St. Louis
List Creation: 02/11/22 04:41 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133386
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133386
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins St. Louis
List Creation: 02/11/22 04:41 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133521
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133521
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins St. Louis
List Creation: 02/14/22 10:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133523
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133381-2

Login Number: 133523
List Number: 2
Creator: Johnson, Autumn R

List Source: Eurofins St. Louis
List Creation: 02/14/22 10:32 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Plant Arkwright AP-2 (Beaverdam Creek) Surface Water Samples 09/30/2021

Sample ID	Time	Temp(C)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Conductance – (mS/cm)	Coordinates
BC-0.8a	18:55	21.6	7.27	44.3	9.15	4.19	0.140	32.922739, -83.705772
BC-0.5.7	17:20	21.9	7.24	43.5	7.59	4.27	0.142	32.921547, -83.702854
BC-0.5.6	17:05	21.9	7.32	63.2	7.99	4.66	0.147	32.921195, -83.701934
BC-0.5.5	16:41	22.0	7.32	68.7	7.89	4.06	0.146	32.920697,-83.701798
BC-BR	16:16	22.2	7.42	69.1	7.85	5.69	0.138	32.920207,-83.696481
BC-0.3	15:46	22.2	7.39	153.7	8.72	4.48	0.141	32.920207,-83.696481

Plant Arkwright (Ocmulgee River) Surface Water Samples 09/30/2021

Sample ID	Total Depth	Sample Depth	Time	Temp(C)	pH	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Conductance – (mS/cm)	Coordinates
OR-0.8	2.5	1.0	14:40	25.1	8.03	195.0	12.77	7.47	0.112	32.920367,-83.696559
OR-0.3	7.3	3.5	14:00	24.9	7.96	167.7	12.47	8.09	0.113	32.920814, -83.697856
OR-0.1	3.5	1.5	13:16	24.7	7.83	141.0	13.53	3.89	0.113	32.916342,-83.696092
BC-0.1	1.4	0.75	12:47	21.2	7.55	136.2	10.33	4.84	0.152	32.916017,-83.696292
OR+0.25	2.2	1.0	12:43	24.6	7.79	175.9	15.07	4.70	0.113	32.914186,-83.691789
OR+1.0	3.4	1.5	12:13	24.3	7.81	183.9	10.21	4.32	0.113	32.908661,-83.684478

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-127990-1
Client Project/Site: Arkwright Surfacewater

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
10/18/2021 5:31:00 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-127990-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-127990-1

Comments
No additional comments.

Receipt
The samples were received on 10/4/2021 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.7º C, 3.4º C and 8.4º C.

Receipt Exceptions
The following samples were listed on the Chain of Custody (COC); however, no samples were received: BC-0.8a (180-127990-1), BC-0.5.7 (180-127990-2), BC-0.5.6 (180-127990-3), BC-0.5.5 (180-127990-4) and BC-BR (180-127990-5). The delayed cooler for the following samples were received at the laboratory outside the required temperature criteria of 8.4°C. The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis.

GC Semi VOA
Method 300.0: The matrix spike duplicate (MSD) recoveries for the following sample associated with analytical batch 180-374012 was low outside control limits for Chloride, Fluoride, and Sulfate: (180-127990-C-6 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21 *
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-127990-1	BC-0.8a	Water	09/30/21 18:55	10/04/21 09:35
180-127990-2	BC-0.5.7	Water	09/30/21 17:20	10/04/21 09:35
180-127990-3	BC-0.5.6	Water	09/30/21 17:05	10/04/21 09:35
180-127990-4	BC-0.5.5	Water	09/30/21 16:41	10/04/21 09:35
180-127990-5	BC-BR	Water	09/30/21 16:16	10/04/21 09:35
180-127990-6	BC-0.3	Water	09/30/21 15:46	10/02/21 09:30

Method Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM2320 B	Alkalinity, Total	SM18	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-0.8a
Date Collected: 09/30/21 18:55
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			374012	10/05/21 11:04	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 15:52	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374236	10/06/21 11:39	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 13:41	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-0.5.7
Date Collected: 09/30/21 17:20
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			374012	10/05/21 11:22	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 15:56	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374236	10/06/21 11:39	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 13:47	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-0.5.6
Date Collected: 09/30/21 17:05
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			374012	10/05/21 13:27	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 15:59	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374236	10/06/21 11:39	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 14:19	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-0.5.5

Date Collected: 09/30/21 16:41
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			374012	10/05/21 13:45	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:03	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374236	10/06/21 11:39	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 14:25	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-BR

Date Collected: 09/30/21 16:16
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			374012	10/05/21 14:03	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:07	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374236	10/06/21 11:39	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 14:32	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-0.3

Date Collected: 09/30/21 15:46
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127990-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			374012	10/05/21 14:21	J1T	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:10	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374236	10/06/21 11:39	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 14:37	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

Batch Type: Analysis

CMT = Cassandra Tlumac
J1T = Jianwu Tang
KMM = Kendric Moore
RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-0.8a

Date Collected: 09/30/21 18:55
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.8**		1.0	0.71	mg/L			10/05/21 11:04	1
Fluoride	**0.16**		0.10	0.026	mg/L			10/05/21 11:04	1
Sulfate	**4.2**		1.0	0.76	mg/L			10/05/21 11:04	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		10/13/21 09:09	10/14/21 15:52	1
Calcium	**9.4**		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 15:52	1
Cobalt	**0.00031**	**J**	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 15:52	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 15:52	1
Magnesium	**4.7**		0.50	0.083	mg/L		10/13/21 09:09	10/14/21 15:52	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 15:52	1
Potassium	**2.3**		0.50	0.16	mg/L		10/13/21 09:09	10/14/21 15:52	1
Sodium	**9.3**		0.50	0.35	mg/L		10/13/21 09:09	10/14/21 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**92**		10	10	mg/L			10/06/21 11:39	1
Total Alkalinity as CaCO3 to pH 4.5	**54**		5.0	5.0	mg/L			10/05/21 13:41	1
Bicarbonate Alkalinity as CaCO3	**54**		5.0	5.0	mg/L			10/05/21 13:41	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-0.5.7

Date Collected: 09/30/21 17:20
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.9		1.0	0.71	mg/L			10/05/21 11:22	1
Fluoride	0.13		0.10	0.026	mg/L			10/05/21 11:22	1
Sulfate	6.7		1.0	0.76	mg/L			10/05/21 11:22	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.043	J	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 15:56	1
Calcium	9.9		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 15:56	1
Cobalt	0.00045	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 15:56	1
Magnesium	5.0		0.50	0.083	mg/L		10/13/21 09:09	10/14/21 15:56	1
Potassium	2.4		0.50	0.16	mg/L		10/13/21 09:09	10/14/21 15:56	1
Sodium	9.6		0.50	0.35	mg/L		10/13/21 09:09	10/14/21 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	100		10	10	mg/L			10/06/21 11:39	1
Total Alkalinity as CaCO3 to pH 4.5	54		5.0	5.0	mg/L			10/05/21 13:47	1
Bicarbonate Alkalinity as CaCO3	54		5.0	5.0	mg/L			10/05/21 13:47	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-0.5.6

Date Collected: 09/30/21 17:05
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.2		1.0	0.71	mg/L			10/05/21 13:27	1
Fluoride	0.15		0.10	0.026	mg/L			10/05/21 13:27	1
Sulfate	6.7		1.0	0.76	mg/L			10/05/21 13:27	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		10/13/21 09:09	10/14/21 15:59	1
Calcium	9.7		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 15:59	1
Cobalt	0.00033	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 15:59	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 15:59	1
Magnesium	4.9		0.50	0.083	mg/L		10/13/21 09:09	10/14/21 15:59	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 15:59	1
Potassium	2.3		0.50	0.16	mg/L		10/13/21 09:09	10/14/21 15:59	1
Sodium	9.2		0.50	0.35	mg/L		10/13/21 09:09	10/14/21 15:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	97		10	10	mg/L			10/06/21 11:39	1
Total Alkalinity as CaCO3 to pH 4.5	55		5.0	5.0	mg/L			10/05/21 14:19	1
Bicarbonate Alkalinity as CaCO3	55		5.0	5.0	mg/L			10/05/21 14:19	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-0.5.5

Date Collected: 09/30/21 16:41
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.0		1.0	0.71	mg/L			10/05/21 13:45	1
Fluoride	0.11		0.10	0.026	mg/L			10/05/21 13:45	1
Sulfate	6.6		1.0	0.76	mg/L			10/05/21 13:45	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.041	J	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:03	1
Calcium	10		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:03	1
Cobalt	0.00056	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:03	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:03	1
Magnesium	4.9		0.50	0.083	mg/L		10/13/21 09:09	10/14/21 16:03	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:03	1
Potassium	2.3		0.50	0.16	mg/L		10/13/21 09:09	10/14/21 16:03	1
Sodium	9.5		0.50	0.35	mg/L		10/13/21 09:09	10/14/21 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		10	10	mg/L			10/06/21 11:39	1
Total Alkalinity as CaCO3 to pH 4.5	52		5.0	5.0	mg/L			10/05/21 14:25	1
Bicarbonate Alkalinity as CaCO3	52		5.0	5.0	mg/L			10/05/21 14:25	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-BR

Date Collected: 09/30/21 16:16
Date Received: 10/04/21 09:35

Lab Sample ID: 180-127990-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.3		1.0	0.71	mg/L			10/05/21 14:03	1
Fluoride	0.12		0.10	0.026	mg/L			10/05/21 14:03	1
Sulfate	7.0		1.0	0.76	mg/L			10/05/21 14:03	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:07	1
Calcium	10		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:07	1
Cobalt	0.00042	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:07	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:07	1
Magnesium	5.0		0.50	0.083	mg/L		10/13/21 09:09	10/14/21 16:07	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:07	1
Potassium	2.4		0.50	0.16	mg/L		10/13/21 09:09	10/14/21 16:07	1
Sodium	9.5		0.50	0.35	mg/L		10/13/21 09:09	10/14/21 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	96		10	10	mg/L			10/06/21 11:39	1
Total Alkalinity as CaCO3 to pH 4.5	52		5.0	5.0	mg/L			10/05/21 14:32	1
Bicarbonate Alkalinity as CaCO3	52		5.0	5.0	mg/L			10/05/21 14:32	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127990-1

Client Sample ID: BC-0.3

Date Collected: 09/30/21 15:46
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127990-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.3	F1	1.0	0.71	mg/L			10/05/21 14:21	1
Fluoride	0.12	F1	0.10	0.026	mg/L			10/05/21 14:21	1
Sulfate	6.3	F1	1.0	0.76	mg/L			10/05/21 14:21	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:10	1
Calcium	10		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:10	1
Cobalt	0.00029	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:10	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:10	1
Magnesium	4.9		0.50	0.083	mg/L		10/13/21 09:09	10/14/21 16:10	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:10	1
Potassium	2.4		0.50	0.16	mg/L		10/13/21 09:09	10/14/21 16:10	1
Sodium	9.4		0.50	0.35	mg/L		10/13/21 09:09	10/14/21 16:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	96		10	10	mg/L			10/06/21 11:39	1
Total Alkalinity as CaCO3 to pH 4.5	54		5.0	5.0	mg/L			10/05/21 14:37	1
Bicarbonate Alkalinity as CaCO3	54		5.0	5.0	mg/L			10/05/21 14:37	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-374012/7
Matrix: Water
Analysis Batch: 374012

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			10/05/21 09:35	1
Fluoride	<0.026		0.10	0.026	mg/L			10/05/21 09:35	1
Sulfate	<0.76		1.0	0.76	mg/L			10/05/21 09:35	1

Lab Sample ID: LCS 180-374012/6
Matrix: Water
Analysis Batch: 374012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	54.6		mg/L		109	90 - 110
Fluoride	2.50	2.68		mg/L		107	90 - 110
Sulfate	50.0	53.4		mg/L		107	90 - 110

Lab Sample ID: 180-127990-6 MS
Matrix: Water
Analysis Batch: 374012

Client Sample ID: BC-0.3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.3	F1	50.0	58.6		mg/L		99	90 - 110
Fluoride	0.12	F1	2.50	2.69		mg/L		103	90 - 110
Sulfate	6.3	F1	50.0	56.3		mg/L		100	90 - 110

Lab Sample ID: 180-127990-6 MSD
Matrix: Water
Analysis Batch: 374012

Client Sample ID: BC-0.3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.3	F1	50.0	50.2	F1	mg/L		82	90 - 110	16	20
Fluoride	0.12	F1	2.50	2.24	F1	mg/L		85	90 - 110	18	20
Sulfate	6.3	F1	50.0	46.9	F1	mg/L		81	90 - 110	18	20

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-375056/1-A
Matrix: Water
Analysis Batch: 375344

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 375056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		10/13/21 09:09	10/14/21 13:26	1
Calcium	<0.13		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 13:26	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 13:26	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 13:26	1
Magnesium	<0.083		0.50	0.083	mg/L		10/13/21 09:09	10/14/21 13:26	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 13:26	1
Potassium	<0.16		0.50	0.16	mg/L		10/13/21 09:09	10/14/21 13:26	1
Sodium	<0.35		0.50	0.35	mg/L		10/13/21 09:09	10/14/21 13:26	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-375056/2-A
Matrix: Water
Analysis Batch: 375344

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 375056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.20		mg/L		96	80 - 120
Calcium	25.0	25.3		mg/L		101	80 - 120
Cobalt	0.500	0.504		mg/L		101	80 - 120
Lithium	0.500	0.502		mg/L		100	80 - 120
Magnesium	25.0	23.8		mg/L		95	80 - 120
Molybdenum	0.500	0.514		mg/L		103	80 - 120
Potassium	25.0	23.5		mg/L		94	80 - 120
Sodium	25.0	24.4		mg/L		98	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-374236/2
Matrix: Water
Analysis Batch: 374236

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			10/06/21 11:39	1

Lab Sample ID: LCS 180-374236/1
Matrix: Water
Analysis Batch: 374236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	422	406		mg/L		96	80 - 120

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-374194/6
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			10/05/21 13:03	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			10/05/21 13:03	1

Lab Sample ID: LCS 180-374194/5
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	250	246		mg/L		98	90 - 110

Lab Sample ID: LLCS 180-374194/4
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	15.0	17.1		mg/L		114	75 - 125

HPLC/IC

Analysis Batch: 374012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127990-1	BC-0.8a	Total/NA	Water	EPA 300.0 R2.1	
180-127990-2	BC-0.5.7	Total/NA	Water	EPA 300.0 R2.1	
180-127990-3	BC-0.5.6	Total/NA	Water	EPA 300.0 R2.1	
180-127990-4	BC-0.5.5	Total/NA	Water	EPA 300.0 R2.1	
180-127990-5	BC-BR	Total/NA	Water	EPA 300.0 R2.1	
180-127990-6	BC-0.3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-374012/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-374012/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-127990-6 MS	BC-0.3	Total/NA	Water	EPA 300.0 R2.1	
180-127990-6 MSD	BC-0.3	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 375056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127990-1	BC-0.8a	Total Recoverable	Water	3005A	
180-127990-2	BC-0.5.7	Total Recoverable	Water	3005A	
180-127990-3	BC-0.5.6	Total Recoverable	Water	3005A	
180-127990-4	BC-0.5.5	Total Recoverable	Water	3005A	
180-127990-5	BC-BR	Total Recoverable	Water	3005A	
180-127990-6	BC-0.3	Total Recoverable	Water	3005A	
MB 180-375056/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-375056/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 375344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127990-1	BC-0.8a	Total Recoverable	Water	EPA 6020B	375056
180-127990-2	BC-0.5.7	Total Recoverable	Water	EPA 6020B	375056
180-127990-3	BC-0.5.6	Total Recoverable	Water	EPA 6020B	375056
180-127990-4	BC-0.5.5	Total Recoverable	Water	EPA 6020B	375056
180-127990-5	BC-BR	Total Recoverable	Water	EPA 6020B	375056
180-127990-6	BC-0.3	Total Recoverable	Water	EPA 6020B	375056
MB 180-375056/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	375056
LCS 180-375056/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	375056

General Chemistry

Analysis Batch: 374194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127990-1	BC-0.8a	Total/NA	Water	SM2320 B	
180-127990-2	BC-0.5.7	Total/NA	Water	SM2320 B	
180-127990-3	BC-0.5.6	Total/NA	Water	SM2320 B	
180-127990-4	BC-0.5.5	Total/NA	Water	SM2320 B	
180-127990-5	BC-BR	Total/NA	Water	SM2320 B	
180-127990-6	BC-0.3	Total/NA	Water	SM2320 B	
MB 180-374194/6	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-374194/5	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-374194/4	Lab Control Sample	Total/NA	Water	SM2320 B	

Analysis Batch: 374236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127990-1	BC-0.8a	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 374236 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127990-2	BC-0.5.7	Total/NA	Water	SM 2540C	
180-127990-3	BC-0.5.6	Total/NA	Water	SM 2540C	
180-127990-4	BC-0.5.5	Total/NA	Water	SM 2540C	
180-127990-5	BC-BR	Total/NA	Water	SM 2540C	
180-127990-6	BC-0.3	Total/NA	Water	SM 2540C	
MB 180-374236/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-374236/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Johnson/Rago	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 678.485.5298	E-Mail: shali.brown@eurofinset.com		Page:
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: CCR - Plant Arkwright Surfacewater	Project #: 18023157			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	CCR App III[1]	Major Ions[2]	CCR App IV Metals[3]	Cobalt	Molybdenum	Lithium	Total Number of containers	Special Instructions/Note:
	9/30/21		Preservation Code:											
BC-0.8a	9/30/21	1855	G	W			x	x		x	x	x		CCR App III[1] - Boron, Calcium, Chloride, Fluoride, Sulfate, TDS
BC-0.5.7	9/30/21	1720	G	W			x	x		x				
BC-0.5.6	9/30/21	1705	G	W			x	x		x	x	x		Major Ions[2] - Mg, Na, K, total alkalinity, bicarbonate alkalinity
BC-0.5.5	9/30/21	1641	G	W			x	x		x	x	x		
BC-BR	9/30/21	1616	G	W			x	x		x	x	x		CCR App IV Metals[3] - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Floride, Lead, Lithium, Molydbenum, Selenium, Radium 226 and 228 combined
BC-0.3	9/30/21	1546	G	W			x	x		x	x	x		

180-127990 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10-1-21 1715			10/1/21 1715	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/1/21 1715				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Johnson/Rago	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 678.485.5298	E-Mail: shali.brown@eurofinset.com		Page:
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: CCR - Plant Arkwright Surfacewater	Project #: 18023157			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	S I	CCR App III	Major Ions	CCR App IV Metals	Cobalt	Molybdenum	Lithium	Total Number of containers	Special Instructions/Note:
	Preservation Code:													
BC-0.8a	9/30/21	1855	G	W			x	x		x	x	x		CCR App III[1] - Boron, Calcium, Chloride, Fluoride, Sulfate, TDS
BC-0.5.7	9/30/21	1720	G	W			x	x		x				
BC-0.5.6	9/30/21	1705	G	W			x	x		x	x	x		Major Ions[2] - Mg, Na, K, total alkalinity, bicarbonate alkalinity
BC-0.5.5	9/30/21	1641	G	W			x	x		x	x	x		
BC-BR	9/30/21	1616	G	W			x	x		x	x	x		CCR App IV Metals[3] - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Floride, Lead, Lithium, Molydbenum, Selenium, Radium 226 and 228 combined
BC-0.3	9/30/21	1546	G	W			x	x		x	x	x		

180-127990-02 Chain of Custody

Rcd 9/4/21 9:35

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 10-1-21 1715	Company	Received by:	Date/Time: 10/1/21 1715	Company
Relinquished by:	Date/Time: 10/1/21 1715	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

eurofins | En... Test... ...ng

Part # 159469-434 RIT2 EXP 11/21

639

12:00

4745 1002

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE:
ACTWGT: 59
CAD: 859116/ E3506

BILL THIRD PARTY

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

REF:

DEPT:

FedEx Express

2 of 3

MPS# 0263 5220 7113 4745

Mstr# 5220 7113 4734 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

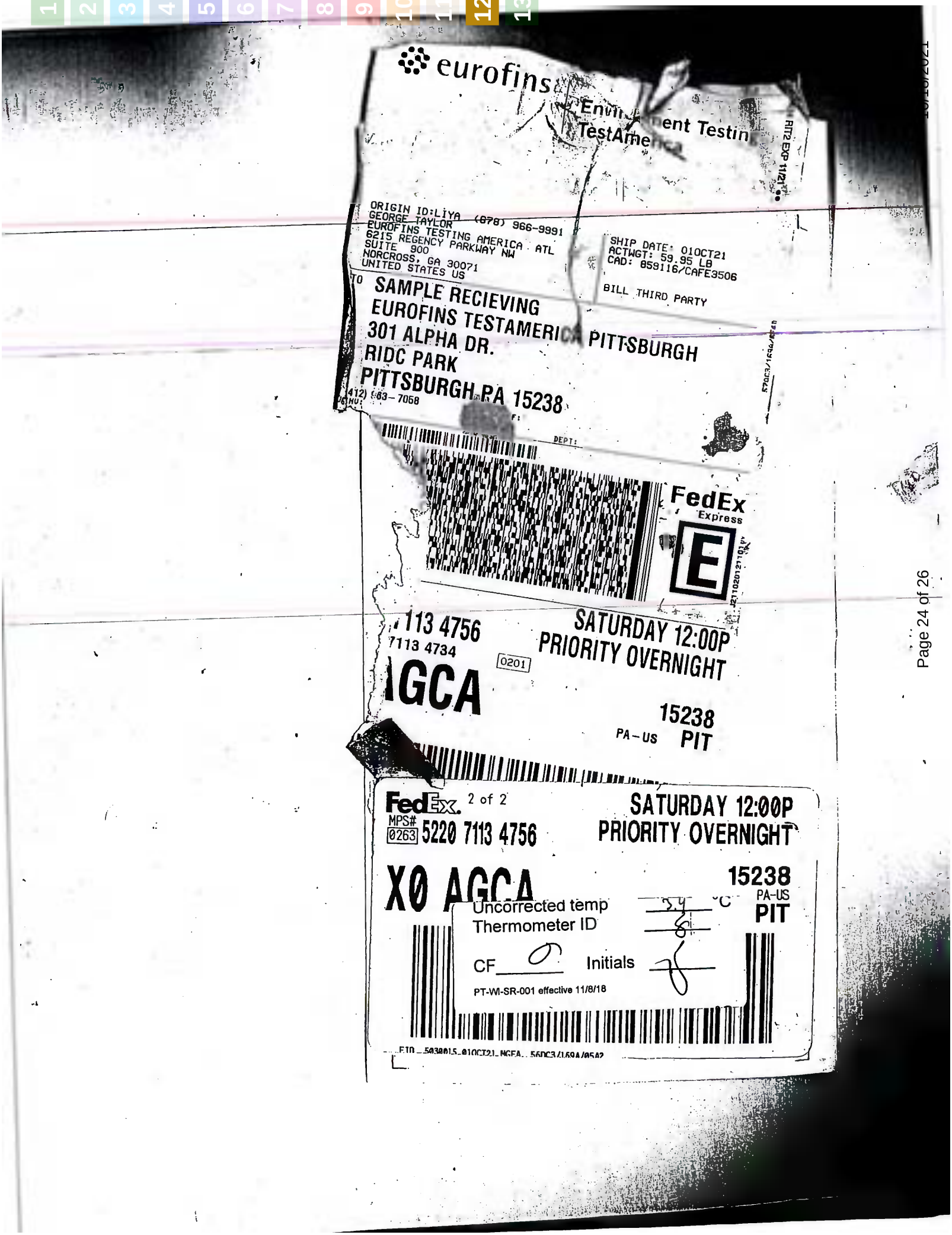
15238
PIT

PA-US

Uncorrected temp 2.7 °C
Thermometer ID 8
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

180-127990 Waybill


eurofins
TestAme
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE: 01OCT21
ACTWGT: 59.95 LB
CAD: 859116/CAFE3506
BILL THIRD PARTY
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
DEPT:
FedEx
Express
7113 4756
7113 4734
0201
SATURDAY 12:00P
PRIORITY OVERNIGHT
AGCA
15238
PA-US
PIT
FedEx
2 of 2
MPS#
0263 5220 7113 4756
SATURDAY 12:00P
PRIORITY OVERNIGHT
X0 AGCA
15238
PA-US
PIT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-127990-1

Login Number: 127990
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-127990-1

Login Number: 127990
List Number: 2
Creator: Kovitch, Christina M

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-127991-1
Client Project/Site: Arkwright Surfacewater
Revision: 1

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
7/25/2022 8:27:34 AM
Andy Johnson, Manager of Project Management
(615)301-5045
Andy.Johnson@et.eurofinsus.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@et.eurofinsus.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Job ID: 180-127991-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-127991-1

Revised Report
Thallium is being reported per client request. This report replaces the report generated on 10/18/21.

Comments
No additional comments.

Receipt
The samples were received on 10/2/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.7º C and 3.4º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	12-21-21
California	State	2891	04-30-22
Connecticut	State	PH-0688	05-19-22
Florida	NELAP	E871008	11-11-21
Georgia	State	PA 02-00416	10-26-21
Illinois	NELAP	004375	10-26-21
Kansas	NELAP	E-10350	10-26-21
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	11-11-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	10-26-21
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-04-22
New Jersey	NELAP	PA005	10-26-21
New York	NELAP	11182	10-26-21
North Carolina (WW/SW)	State	434	11-11-21
North Dakota	State	R-227	11-11-21
Oregon	NELAP	PA-2151	11-11-21
Pennsylvania	NELAP	02-00416	10-26-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	11-11-21
Texas	NELAP	T104704528	10-26-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	11-11-21
Virginia	NELAP	10043	10-26-21
West Virginia DEP	State	142	10-26-21
Wisconsin	State	998027800	11-11-21

Sample Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-127991-1	OR + 1.0	Water	09/30/21 12:13	10/02/21 09:30
180-127991-2	OR + 0.25	Water	09/30/21 12:43	10/02/21 09:30
180-127991-3	BC - 0.1	Water	09/30/21 12:52	10/02/21 09:30
180-127991-4	OR - 0.1	Water	09/30/21 13:16	10/02/21 09:30
180-127991-5	OR - 0.3	Water	09/30/21 14:00	10/02/21 09:30
180-127991-6	OR + 0.8	Water	09/30/21 14:40	10/02/21 09:30

Method Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM2320 B	Alkalinity, Total	SM18	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: OR + 1.0

Date Collected: 09/30/21 12:13
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			373784	10/02/21 22:16	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:14	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374236	10/06/21 11:39	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 14:48	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: OR + 0.25

Date Collected: 09/30/21 12:43
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			373784	10/02/21 23:09	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:17	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374416	10/07/21 11:38	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 14:54	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC - 0.1

Date Collected: 09/30/21 12:52
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			373784	10/02/21 23:27	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:28	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374416	10/07/21 11:38	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 15:00	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: OR - 0.1

Date Collected: 09/30/21 13:16
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			373784	10/02/21 23:45	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:32	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374416	10/07/21 11:38	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 15:40	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: OR - 0.3

Date Collected: 09/30/21 14:00
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			373784	10/03/21 00:03	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:36	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374416	10/07/21 11:38	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 15:52	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: OR + 0.8

Date Collected: 09/30/21 14:40
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			373784	10/03/21 00:21	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	375056	10/13/21 09:09	MM1	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			375344	10/14/21 16:39	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	374416	10/07/21 11:38	KMM	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			374194	10/05/21 13:09	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MM1 = Mary Beth Miller

Batch Type: Analysis

CMT = Cassandra Tlumac

JRB = James Burzio

KMM = Kendric Moore

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: OR + 1.0

Date Collected: 09/30/21 12:13
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.2**		1.0	0.71	mg/L			10/02/21 22:16	1
Fluoride	**0.16**		0.10	0.026	mg/L			10/02/21 22:16	1
Sulfate	**6.4**		1.0	0.76	mg/L			10/02/21 22:16	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		10/13/21 09:09	10/14/21 16:14	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/13/21 09:09	10/14/21 16:14	1
Barium	**0.021**		0.010	0.0016	mg/L		10/13/21 09:09	10/14/21 16:14	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/13/21 09:09	10/14/21 16:14	1
Boron	**0.041**	**J**	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:14	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/13/21 09:09	10/14/21 16:14	1
Calcium	**7.2**		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/13/21 09:09	10/14/21 16:14	1
Cobalt	**0.00015**	**J**	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:14	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/13/21 09:09	10/14/21 16:14	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:14	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/13/21 09:09	10/14/21 16:14	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/13/21 09:09	10/14/21 16:14	1
Potassium	**2900**		500	160	ug/L		10/13/21 09:09	10/14/21 16:14	1
Magnesium	**2200**		500	83	ug/L		10/13/21 09:09	10/14/21 16:14	1
Sodium	**8100**		500	350	ug/L		10/13/21 09:09	10/14/21 16:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**73**		10	10	mg/L			10/06/21 11:39	1
Total Alkalinity as CaCO3 to pH 4.5	**34**		5.0	5.0	mg/L			10/05/21 14:48	1
Bicarbonate Alkalinity as CaCO3	**34**		5.0	5.0	mg/L			10/05/21 14:48	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: OR + 0.25

Date Collected: 09/30/21 12:43
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.7**		1.0	0.71	mg/L			10/02/21 23:09	1
Fluoride	**0.12**		0.10	0.026	mg/L			10/02/21 23:09	1
Sulfate	**6.0**		1.0	0.76	mg/L			10/02/21 23:09	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		10/13/21 09:09	10/14/21 16:17	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/13/21 09:09	10/14/21 16:17	1
Barium	**0.023**		0.010	0.0016	mg/L		10/13/21 09:09	10/14/21 16:17	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/13/21 09:09	10/14/21 16:17	1
Boron	**0.044**	**J**	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:17	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/13/21 09:09	10/14/21 16:17	1
Calcium	**7.4**		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/13/21 09:09	10/14/21 16:17	1
Cobalt	**0.00013**	**J**	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:17	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/13/21 09:09	10/14/21 16:17	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:17	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:17	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/13/21 09:09	10/14/21 16:17	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/13/21 09:09	10/14/21 16:17	1
Potassium	**3000**		500	160	ug/L		10/13/21 09:09	10/14/21 16:17	1
Magnesium	**2300**		500	83	ug/L		10/13/21 09:09	10/14/21 16:17	1
Sodium	**8200**		500	350	ug/L		10/13/21 09:09	10/14/21 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**66**		10	10	mg/L			10/07/21 11:38	1
Total Alkalinity as CaCO3 to pH 4.5	**35**		5.0	5.0	mg/L			10/05/21 14:54	1
Bicarbonate Alkalinity as CaCO3	**35**		5.0	5.0	mg/L			10/05/21 14:54	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: BC - 0.1

Date Collected: 09/30/21 12:52
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.7**		1.0	0.71	mg/L			10/02/21 23:27	1
Fluoride	**0.098**	**J**	0.10	0.026	mg/L			10/02/21 23:27	1
Sulfate	**9.2**		1.0	0.76	mg/L			10/02/21 23:27	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		10/13/21 09:09	10/14/21 16:28	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/13/21 09:09	10/14/21 16:28	1
Barium	**0.038**		0.010	0.0016	mg/L		10/13/21 09:09	10/14/21 16:28	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/13/21 09:09	10/14/21 16:28	1
Boron	**0.045**	**J**	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:28	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/13/21 09:09	10/14/21 16:28	1
Calcium	**10**		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:28	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/13/21 09:09	10/14/21 16:28	1
Cobalt	**0.00071**	**J**	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/13/21 09:09	10/14/21 16:28	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:28	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/13/21 09:09	10/14/21 16:28	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/13/21 09:09	10/14/21 16:28	1
Potassium	**2400**		500	160	ug/L		10/13/21 09:09	10/14/21 16:28	1
Magnesium	**4900**		500	83	ug/L		10/13/21 09:09	10/14/21 16:28	1
Sodium	**9100**		500	350	ug/L		10/13/21 09:09	10/14/21 16:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**93**		10	10	mg/L			10/07/21 11:38	1
Total Alkalinity as CaCO3 to pH 4.5	**52**		5.0	5.0	mg/L			10/05/21 15:00	1
Bicarbonate Alkalinity as CaCO3	**52**		5.0	5.0	mg/L			10/05/21 15:00	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: OR - 0.1

Date Collected: 09/30/21 13:16
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.5		1.0	0.71	mg/L			10/02/21 23:45	1
Fluoride	0.12		0.10	0.026	mg/L			10/02/21 23:45	1
Sulfate	5.7		1.0	0.76	mg/L			10/02/21 23:45	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		10/13/21 09:09	10/14/21 16:32	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/13/21 09:09	10/14/21 16:32	1
Barium	0.022		0.010	0.0016	mg/L		10/13/21 09:09	10/14/21 16:32	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/13/21 09:09	10/14/21 16:32	1
Boron	0.041	J	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:32	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/13/21 09:09	10/14/21 16:32	1
Calcium	7.1		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/13/21 09:09	10/14/21 16:32	1
Cobalt	0.00016	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:32	1
Lead	0.00016	J	0.0010	0.00013	mg/L		10/13/21 09:09	10/14/21 16:32	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:32	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:32	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/13/21 09:09	10/14/21 16:32	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/13/21 09:09	10/14/21 16:32	1
Potassium	3000		500	160	ug/L		10/13/21 09:09	10/14/21 16:32	1
Magnesium	2300		500	83	ug/L		10/13/21 09:09	10/14/21 16:32	1
Sodium	8100		500	350	ug/L		10/13/21 09:09	10/14/21 16:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	61		10	10	mg/L			10/07/21 11:38	1
Total Alkalinity as CaCO3 to pH 4.5	33		5.0	5.0	mg/L			10/05/21 15:40	1
Bicarbonate Alkalinity as CaCO3	33		5.0	5.0	mg/L			10/05/21 15:40	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: OR - 0.3

Date Collected: 09/30/21 14:00
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.9		1.0	0.71	mg/L			10/03/21 00:03	1
Fluoride	0.11		0.10	0.026	mg/L			10/03/21 00:03	1
Sulfate	6.0		1.0	0.76	mg/L			10/03/21 00:03	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		10/13/21 09:09	10/14/21 16:36	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/13/21 09:09	10/14/21 16:36	1
Barium	0.023		0.010	0.0016	mg/L		10/13/21 09:09	10/14/21 16:36	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/13/21 09:09	10/14/21 16:36	1
Boron	0.042	J	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:36	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/13/21 09:09	10/14/21 16:36	1
Calcium	7.5		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:36	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/13/21 09:09	10/14/21 16:36	1
Cobalt	0.00018	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:36	1
Lead	0.00013	J	0.0010	0.00013	mg/L		10/13/21 09:09	10/14/21 16:36	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:36	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:36	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/13/21 09:09	10/14/21 16:36	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/13/21 09:09	10/14/21 16:36	1
Potassium	3000		500	160	ug/L		10/13/21 09:09	10/14/21 16:36	1
Magnesium	2300		500	83	ug/L		10/13/21 09:09	10/14/21 16:36	1
Sodium	8300		500	350	ug/L		10/13/21 09:09	10/14/21 16:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	62		10	10	mg/L			10/07/21 11:38	1
Total Alkalinity as CaCO3 to pH 4.5	34		5.0	5.0	mg/L			10/05/21 15:52	1
Bicarbonate Alkalinity as CaCO3	34		5.0	5.0	mg/L			10/05/21 15:52	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-1

Client Sample ID: OR + 0.8

Date Collected: 09/30/21 14:40
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.7		1.0	0.71	mg/L			10/03/21 00:21	1
Fluoride	0.13		0.10	0.026	mg/L			10/03/21 00:21	1
Sulfate	5.8		1.0	0.76	mg/L			10/03/21 00:21	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		10/13/21 09:09	10/14/21 16:39	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/13/21 09:09	10/14/21 16:39	1
Barium	0.021		0.010	0.0016	mg/L		10/13/21 09:09	10/14/21 16:39	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/13/21 09:09	10/14/21 16:39	1
Boron	0.039	J	0.080	0.039	mg/L		10/13/21 09:09	10/14/21 16:39	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/13/21 09:09	10/14/21 16:39	1
Calcium	7.3		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 16:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/13/21 09:09	10/14/21 16:39	1
Cobalt	0.00015	J	0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 16:39	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/13/21 09:09	10/14/21 16:39	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 16:39	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 16:39	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/13/21 09:09	10/14/21 16:39	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/13/21 09:09	10/14/21 16:39	1
Potassium	3100		500	160	ug/L		10/13/21 09:09	10/14/21 16:39	1
Magnesium	2300		500	83	ug/L		10/13/21 09:09	10/14/21 16:39	1
Sodium	8300		500	350	ug/L		10/13/21 09:09	10/14/21 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	65		10	10	mg/L			10/07/21 11:38	1
Total Alkalinity as CaCO3 to pH 4.5	34		5.0	5.0	mg/L			10/05/21 13:09	1
Bicarbonate Alkalinity as CaCO3	34		5.0	5.0	mg/L			10/05/21 13:09	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-373784/7
Matrix: Water
Analysis Batch: 373784

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			10/02/21 14:02	1
Fluoride	<0.026		0.10	0.026	mg/L			10/02/21 14:02	1
Sulfate	<0.76		1.0	0.76	mg/L			10/02/21 14:02	1

Lab Sample ID: LCS 180-373784/6
Matrix: Water
Analysis Batch: 373784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.8		mg/L		98	90 - 110
Fluoride	2.50	2.40		mg/L		96	90 - 110
Sulfate	50.0	47.8		mg/L		96	90 - 110

Lab Sample ID: 180-127991-1 MS
Matrix: Water
Analysis Batch: 373784

Client Sample ID: OR + 1.0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	8.2		50.0	54.9		mg/L		93	90 - 110
Fluoride	0.16		2.50	2.63		mg/L		99	90 - 110
Sulfate	6.4		50.0	54.2		mg/L		95	90 - 110

Lab Sample ID: 180-127991-1 MSD
Matrix: Water
Analysis Batch: 373784

Client Sample ID: OR + 1.0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.2		50.0	55.5		mg/L		95	90 - 110	1	20
Fluoride	0.16		2.50	2.63		mg/L		99	90 - 110	0	20
Sulfate	6.4		50.0	54.6		mg/L		96	90 - 110	1	20

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-375056/1-A
Matrix: Water
Analysis Batch: 375344

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 375056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		10/13/21 09:09	10/14/21 13:26	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/13/21 09:09	10/14/21 13:26	1
Barium	<0.0016		0.010	0.0016	mg/L		10/13/21 09:09	10/14/21 13:26	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/13/21 09:09	10/14/21 13:26	1
Boron	<0.039		0.080	0.039	mg/L		10/13/21 09:09	10/14/21 13:26	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/13/21 09:09	10/14/21 13:26	1
Calcium	<0.13		0.50	0.13	mg/L		10/13/21 09:09	10/14/21 13:26	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/13/21 09:09	10/14/21 13:26	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/13/21 09:09	10/14/21 13:26	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/13/21 09:09	10/14/21 13:26	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/13/21 09:09	10/14/21 13:26	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/13/21 09:09	10/14/21 13:26	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-375056/1-A
Matrix: Water
Analysis Batch: 375344

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 375056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.0015		0.0050	0.0015	mg/L		10/13/21 09:09	10/14/21 13:26	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/13/21 09:09	10/14/21 13:26	1
Potassium	<160		500	160	ug/L		10/13/21 09:09	10/14/21 13:26	1
Magnesium	<83		500	83	ug/L		10/13/21 09:09	10/14/21 13:26	1
Sodium	<350		500	350	ug/L		10/13/21 09:09	10/14/21 13:26	1

Lab Sample ID: LCS 180-375056/2-A
Matrix: Water
Analysis Batch: 375344

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 375056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.250	0.238		mg/L		95	80 - 120
Arsenic	1.00	1.02		mg/L		102	80 - 120
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.510		mg/L		102	80 - 120
Boron	1.25	1.20		mg/L		96	80 - 120
Cadmium	0.500	0.504		mg/L		101	80 - 120
Calcium	25.0	25.3		mg/L		101	80 - 120
Chromium	0.500	0.510		mg/L		102	80 - 120
Cobalt	0.500	0.504		mg/L		101	80 - 120
Lead	0.500	0.511		mg/L		102	80 - 120
Lithium	0.500	0.502		mg/L		100	80 - 120
Molybdenum	0.500	0.514		mg/L		103	80 - 120
Selenium	1.00	1.02		mg/L		102	80 - 120
Thallium	1.00	1.03		mg/L		103	80 - 120
Potassium	25000	23500		ug/L		94	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120
Sodium	25000	24400		ug/L		98	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-374236/2
Matrix: Water
Analysis Batch: 374236

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			10/06/21 11:39	1

Lab Sample ID: LCS 180-374236/1
Matrix: Water
Analysis Batch: 374236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	422	406		mg/L		96	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 180-374416/2
Matrix: Water
Analysis Batch: 374416

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			10/07/21 11:38	1

Lab Sample ID: LCS 180-374416/1
Matrix: Water
Analysis Batch: 374416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	422	418		mg/L		99	80 - 120

Lab Sample ID: 180-127991-2 DU
Matrix: Water
Analysis Batch: 374416

Client Sample ID: OR + 0.25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	66		62.0		mg/L		6	10

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-374194/30
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			10/05/21 15:35	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			10/05/21 15:35	1

Lab Sample ID: MB 180-374194/6
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			10/05/21 13:03	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			10/05/21 13:03	1

Lab Sample ID: LCS 180-374194/29
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	250	244		mg/L		97	90 - 110

Lab Sample ID: LCS 180-374194/5
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	250	246		mg/L		98	90 - 110

Method: SM2320 B - Alkalinity, Total (Continued)

Lab Sample ID: LLCS 180-374194/28
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	15.0	15.8		mg/L		105	75 - 125

Lab Sample ID: LLCS 180-374194/4
Matrix: Water
Analysis Batch: 374194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	15.0	17.1		mg/L		114	75 - 125

Lab Sample ID: 180-127991-4 DU
Matrix: Water
Analysis Batch: 374194

Client Sample ID: OR - 0.1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	33		34.3		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	33		34.3		mg/L		3	20

Lab Sample ID: 180-127991-6 DU
Matrix: Water
Analysis Batch: 374194

Client Sample ID: OR + 0.8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	34		33.6		mg/L		0.7	20
Bicarbonate Alkalinity as CaCO3	34		33.6		mg/L		0.7	20

HPLC/IC

Analysis Batch: 373784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-1	OR + 1.0	Total/NA	Water	EPA 300.0 R2.1	
180-127991-2	OR + 0.25	Total/NA	Water	EPA 300.0 R2.1	
180-127991-3	BC - 0.1	Total/NA	Water	EPA 300.0 R2.1	
180-127991-4	OR - 0.1	Total/NA	Water	EPA 300.0 R2.1	
180-127991-5	OR - 0.3	Total/NA	Water	EPA 300.0 R2.1	
180-127991-6	OR + 0.8	Total/NA	Water	EPA 300.0 R2.1	
MB 180-373784/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-373784/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-127991-1 MS	OR + 1.0	Total/NA	Water	EPA 300.0 R2.1	
180-127991-1 MSD	OR + 1.0	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 375056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-1	OR + 1.0	Total Recoverable	Water	3005A	
180-127991-2	OR + 0.25	Total Recoverable	Water	3005A	
180-127991-3	BC - 0.1	Total Recoverable	Water	3005A	
180-127991-4	OR - 0.1	Total Recoverable	Water	3005A	
180-127991-5	OR - 0.3	Total Recoverable	Water	3005A	
180-127991-6	OR + 0.8	Total Recoverable	Water	3005A	
MB 180-375056/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-375056/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 375344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-1	OR + 1.0	Total Recoverable	Water	EPA 6020B	375056
180-127991-2	OR + 0.25	Total Recoverable	Water	EPA 6020B	375056
180-127991-3	BC - 0.1	Total Recoverable	Water	EPA 6020B	375056
180-127991-4	OR - 0.1	Total Recoverable	Water	EPA 6020B	375056
180-127991-5	OR - 0.3	Total Recoverable	Water	EPA 6020B	375056
180-127991-6	OR + 0.8	Total Recoverable	Water	EPA 6020B	375056
MB 180-375056/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	375056
LCS 180-375056/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	375056

General Chemistry

Analysis Batch: 374194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-1	OR + 1.0	Total/NA	Water	SM2320 B	
180-127991-2	OR + 0.25	Total/NA	Water	SM2320 B	
180-127991-3	BC - 0.1	Total/NA	Water	SM2320 B	
180-127991-4	OR - 0.1	Total/NA	Water	SM2320 B	
180-127991-5	OR - 0.3	Total/NA	Water	SM2320 B	
180-127991-6	OR + 0.8	Total/NA	Water	SM2320 B	
MB 180-374194/30	Method Blank	Total/NA	Water	SM2320 B	
MB 180-374194/6	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-374194/29	Lab Control Sample	Total/NA	Water	SM2320 B	
LCS 180-374194/5	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-374194/28	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-374194/4	Lab Control Sample	Total/NA	Water	SM2320 B	
180-127991-4 DU	OR - 0.1	Total/NA	Water	SM2320 B	

General Chemistry (Continued)

Analysis Batch: 374194 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-6 DU	OR + 0.8	Total/NA	Water	SM2320 B	

Analysis Batch: 374236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-1	OR + 1.0	Total/NA	Water	SM 2540C	
MB 180-374236/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-374236/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 374416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-2	OR + 0.25	Total/NA	Water	SM 2540C	
180-127991-3	BC - 0.1	Total/NA	Water	SM 2540C	
180-127991-4	OR - 0.1	Total/NA	Water	SM 2540C	
180-127991-5	OR - 0.3	Total/NA	Water	SM 2540C	
180-127991-6	OR + 0.8	Total/NA	Water	SM 2540C	
MB 180-374416/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-374416/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-127991-2 DU	OR + 0.25	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

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Client Information	Sampler: Johnson/Rago	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 678.485.5298	E-Mail: shali.brown@eurofinset.com		Page:
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: CCR - Plant Arkwright Surfacewater	Project #: 18023157			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	CCR App III[1]	Major Ions[2]	CCR App IV Metals[3]	Cobalt	Molybdenum	Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
OR + 1.0	9/30/21	1213	G	W			✓	✓	✓					CCR App III[1] - Boron, Calcium, Chloride, Fluoride, Sulfate, TDS
OR + 0.25	9/30/21	1243	G	W			✓	✓	✓					Major Ions[2] - Mg, Na, K, total alkalinity, bicarbonate alkalinity
BC - 0.1	9/30/21	1252	G	W			✓	✓	✓					CCR App IV Metals[3] - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Floride, Lead, Lithium, Molydbenum, Selenium, Radium 226 and 228 combined
OR - 0.1	9/30/21	1316	G	W			✓	✓	✓					
OR - 0.3	9/30/21	1400	G	W			✓	✓	✓					
OR + 0.8	9/30/21	1440	G	W			✓	✓	✓					

180-127991 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

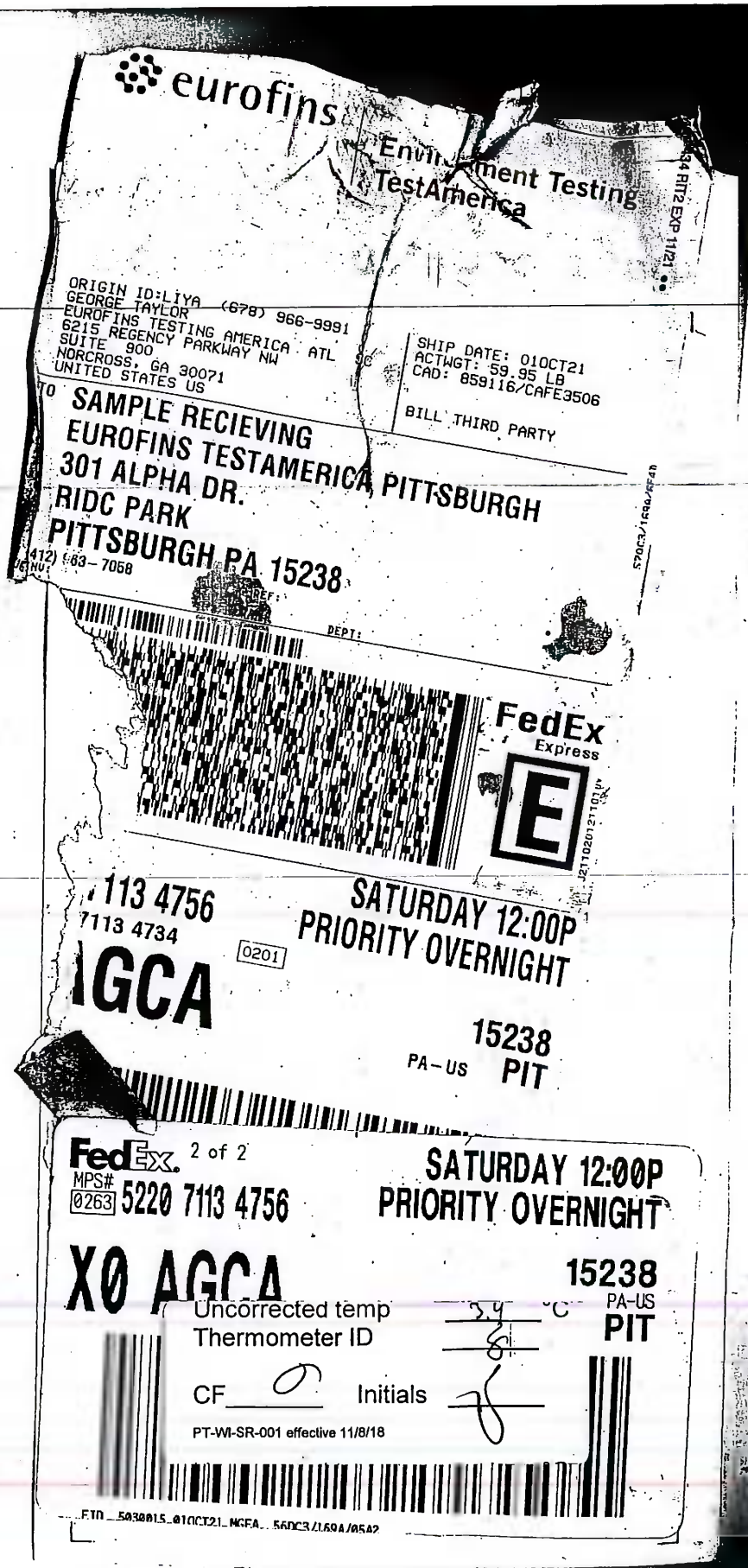
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10-1-21 1715			10/1/21 1715	
2		10/1/21 1715			10/2/21 945	EDD PM
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

eurofins
Part # 159469-434 RIT2 EXP 11/21
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE:
ACTWGT: 59
CAD: 859116 E3506
BILL THIRD PARTY
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
REF:
DEPT:
FedEx Express
2 of 3
MPS# 5220 7113 4745
Mstr# 5220 7113 4734
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO AGCA
15238
PIT
PA-US
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18
180-127991 Waybill


eurofins
Environment Testing
TestAmerica
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA, ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE: 01OCT21
ACTWGT: 59.95 LB
CAD: 859116/CAFE3506
BILL THIRD PARTY
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA, PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT:
FedEx
Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
0201
15238
PA-US
PIT
FedEx
2 of 2
MPS# 5220 7113 4756
0263
SATURDAY 12:00P
PRIORITY OVERNIGHT
X0 AGCA
15238
PA-US
PIT
Uncorrected temp
°C
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-127991-1

Login Number: 127991
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-127991-2
Client Project/Site: Arkwright Surfacewater

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
11/13/2021 2:28:11 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Job ID: 180-127991-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-127991-2

Comments
No additional comments.

Receipt
The samples were received on 10/2/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.7º C and 3.4º C.

RAD
Methods 903.0, 9315: Radium 226 batch 530550
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. OR + 1.0 (180-127991-1), OR + 0.25 (180-127991-2), BC - 0.1 (180-127991-3), OR - 0.1 (180-127991-4), OR - 0.3 (180-127991-5), OR + 0.8 (180-127991-6), (LCS 160-530550/1-A) and (MB 160-530550/24-A)

Methods 904.0, 9320: Ra-228 batch 160-530555
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. OR + 1.0 (180-127991-1), OR + 0.25 (180-127991-2), BC - 0.1 (180-127991-3), OR - 0.1 (180-127991-4), OR - 0.3 (180-127991-5), OR + 0.8 (180-127991-6), (LCS 160-530555/1-A) and (MB 160-530555/24-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	200023	11-30-22
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21 *
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-127991-1	OR + 1.0	Water	09/30/21 12:13	10/02/21 09:30
180-127991-2	OR + 0.25	Water	09/30/21 12:43	10/02/21 09:30
180-127991-3	BC - 0.1	Water	09/30/21 12:52	10/02/21 09:30
180-127991-4	OR - 0.1	Water	09/30/21 13:16	10/02/21 09:30
180-127991-5	OR - 0.3	Water	09/30/21 14:00	10/02/21 09:30
180-127991-6	OR + 0.8	Water	09/30/21 14:40	10/02/21 09:30

Method Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: OR + 1.0

Date Collected: 09/30/21 12:13
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.28 mL	1.0 g	530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1			535390	11/08/21 10:46	JLP	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			750.28 mL	1.0 g	530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1			535030	11/04/21 17:01	FLC	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			536226	11/12/21 00:56	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: OR + 0.25

Date Collected: 09/30/21 12:43
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.37 mL	1.0 g	530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1			535397	11/08/21 11:11	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.37 mL	1.0 g	530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1			535180	11/04/21 17:03	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			536226	11/12/21 00:56	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: BC - 0.1

Date Collected: 09/30/21 12:52
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.57 mL	1.0 g	530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1			535397	11/08/21 11:12	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.57 mL	1.0 g	530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1			535180	11/04/21 17:04	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			536226	11/12/21 00:56	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: OR - 0.1

Date Collected: 09/30/21 13:16
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.07 mL	1.0 g	530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1			535397	11/08/21 11:12	FLC	TAL SL
	Instrument ID: GFPCRED									

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: OR - 0.1

Date Collected: 09/30/21 13:16
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			749.07 mL	1.0 g	530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1			535180	11/04/21 17:04	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			536226	11/12/21 00:56	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: OR - 0.3

Date Collected: 09/30/21 14:00
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.39 mL	1.0 g	530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1			535397	11/08/21 11:12	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.39 mL	1.0 g	530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1			535180	11/04/21 17:04	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			536226	11/12/21 00:56	EMH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: OR + 0.8

Date Collected: 09/30/21 14:40
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.27 mL	1.0 g	530550	10/08/21 10:44	BMP	TAL SL
Total/NA	Analysis	9315		1			535397	11/08/21 11:13	FLC	TAL SL
	Instrument ID: GFPCRED									
Total/NA	Prep	PrecSep_0			750.27 mL	1.0 g	530555	10/08/21 11:26	BMP	TAL SL
Total/NA	Analysis	9320		1			535180	11/04/21 17:04	FLC	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			536226	11/12/21 00:56	EMH	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Analyst References:

Lab: TAL SL

Batch Type: Prep

BMP = Bailey Pinette

Batch Type: Analysis

EMH = Elizabeth Hoerchler

FLC = Fernando Cruz

JLP = James Porter

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: OR + 1.0

Date Collected: 09/30/21 12:13
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0406	U	0.127	0.127	1.00	0.233	pCi/L	10/08/21 10:44	11/08/21 10:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*10/08/21 10:44*	*11/08/21 10:46*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.118	U	0.218	0.218	1.00	0.423	pCi/L	10/08/21 11:26	11/04/21 17:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:01*	*1*
Y Carrier	*85.6*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:01*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0774	U	0.252	0.252	5.00	0.423	pCi/L		11/12/21 00:56	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: OR + 0.25

Date Collected: 09/30/21 12:43
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0767	U	0.138	0.138	1.00	0.241	pCi/L	10/08/21 10:44	11/08/21 11:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.4*		*40 - 110*	*10/08/21 10:44*	*11/08/21 11:11*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.160	U	0.327	0.327	1.00	0.558	pCi/L	10/08/21 11:26	11/04/21 17:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.4*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:03*	*1*
Y Carrier	*80.0*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:03*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.236	U	0.355	0.355	5.00	0.558	pCi/L		11/12/21 00:56	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: BC - 0.1

Date Collected: 09/30/21 12:52
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0285	U	0.101	0.101	1.00	0.215	pCi/L	10/08/21 10:44	11/08/21 11:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*10/08/21 10:44*	*11/08/21 11:12*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0481	U	0.229	0.229	1.00	0.409	pCi/L	10/08/21 11:26	11/04/21 17:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0196	U	0.250	0.250	5.00	0.409	pCi/L		11/12/21 00:56	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: OR - 0.1

Date Collected: 09/30/21 13:16
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0547	U	0.116	0.116	1.00	0.207	pCi/L	10/08/21 10:44	11/08/21 11:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*10/08/21 10:44*	*11/08/21 11:12*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.307	U	0.293	0.295	1.00	0.474	pCi/L	10/08/21 11:26	11/04/21 17:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*
Y Carrier	*83.7*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.362	U	0.315	0.317	5.00	0.474	pCi/L		11/12/21 00:56	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: OR - 0.3

Date Collected: 09/30/21 14:00
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0515	U	0.0973	0.0974	1.00	0.174	pCi/L	10/08/21 10:44	11/08/21 11:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*10/08/21 10:44*	*11/08/21 11:12*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.231	U	0.285	0.286	1.00	0.471	pCi/L	10/08/21 11:26	11/04/21 17:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*
Y Carrier	*84.9*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.282	U	0.301	0.302	5.00	0.471	pCi/L		11/12/21 00:56	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Client Sample ID: OR + 0.8

Date Collected: 09/30/21 14:40
Date Received: 10/02/21 09:30

Lab Sample ID: 180-127991-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.110	U	0.107	0.107	1.00	0.164	pCi/L	10/08/21 10:44	11/08/21 11:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*10/08/21 10:44*	*11/08/21 11:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0322	U	0.238	0.238	1.00	0.426	pCi/L	10/08/21 11:26	11/04/21 17:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*
Y Carrier	*85.2*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.142	U	0.261	0.261	5.00	0.426	pCi/L		11/12/21 00:56	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-530550/24-A
Matrix: Water
Analysis Batch: 535397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 530550

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02880	U	0.0975	0.0976	1.00	0.185	pCi/L	10/08/21 10:44	11/08/21 11:13	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*10/08/21 10:44*	*11/08/21 11:13*	*1*

Lab Sample ID: LCS 160-530550/1-A
Matrix: Water
Analysis Batch: 535397

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 530550

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	13.70		1.49	1.00	0.237	pCi/L	91	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*101*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-530555/24-A
Matrix: Water
Analysis Batch: 535180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 530555

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2477	U	0.259	0.260	1.00	0.422	pCi/L	10/08/21 11:26	11/04/21 17:04	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*
Y Carrier	*87.1*		*40 - 110*	*10/08/21 11:26*	*11/04/21 17:04*	*1*

Lab Sample ID: LCS 160-530555/1-A
Matrix: Water
Analysis Batch: 535031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 530555

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			12.2	12.42		1.44	1.00	0.489	pCi/L	102	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*101*		*40 - 110*
Y Carrier	*85.2*		*40 - 110*

QC Association Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-127991-2

Rad

Prep Batch: 530550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-1	OR + 1.0	Total/NA	Water	PrecSep-21	
180-127991-2	OR + 0.25	Total/NA	Water	PrecSep-21	
180-127991-3	BC - 0.1	Total/NA	Water	PrecSep-21	
180-127991-4	OR - 0.1	Total/NA	Water	PrecSep-21	
180-127991-5	OR - 0.3	Total/NA	Water	PrecSep-21	
180-127991-6	OR + 0.8	Total/NA	Water	PrecSep-21	
MB 160-530550/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-530550/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 530555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-127991-1	OR + 1.0	Total/NA	Water	PrecSep_0	
180-127991-2	OR + 0.25	Total/NA	Water	PrecSep_0	
180-127991-3	BC - 0.1	Total/NA	Water	PrecSep_0	
180-127991-4	OR - 0.1	Total/NA	Water	PrecSep_0	
180-127991-5	OR - 0.3	Total/NA	Water	PrecSep_0	
180-127991-6	OR + 0.8	Total/NA	Water	PrecSep_0	
MB 160-530555/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-530555/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Johnson/Rago	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 678.485.5298	E-Mail: shali.brown@eurofinset.com		Page:
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: CCR - Plant Arkwright Surfacewater	Project #: 18023157			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	CCR App III[1]	Major Ions[2]	CCR App IV Metals[3]	Cobalt	Molybdenum	Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
OR + 1.0	9/30/21	1213	G	W			✓	✓	✓					
OR + 0.25	9/30/21	1243	G	W			✓	✓	✓					
BC - 0.1	9/30/21	1252	G	W			✓	✓	✓					
OR - 0.1	9/30/21	1316	G	W			✓	✓	✓					
OR - 0.3	9/30/21	1400	G	W			✓	✓	✓					
OR + 0.8	9/30/21	1440	G	W			✓	✓	✓					

180-127991 Chain of Custody

CCR App III[1] - Boron, Calcium, Chloride, Fluoride, Sulfate, TDS

Major Ions[2] - Mg, Na, K, total alkalinity, bicarbonate alkalinity

CCR App IV Metals[3] - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Floride, Lead, Lithium, Molydbenum, Selenium, Radium 226 and 228 combined

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

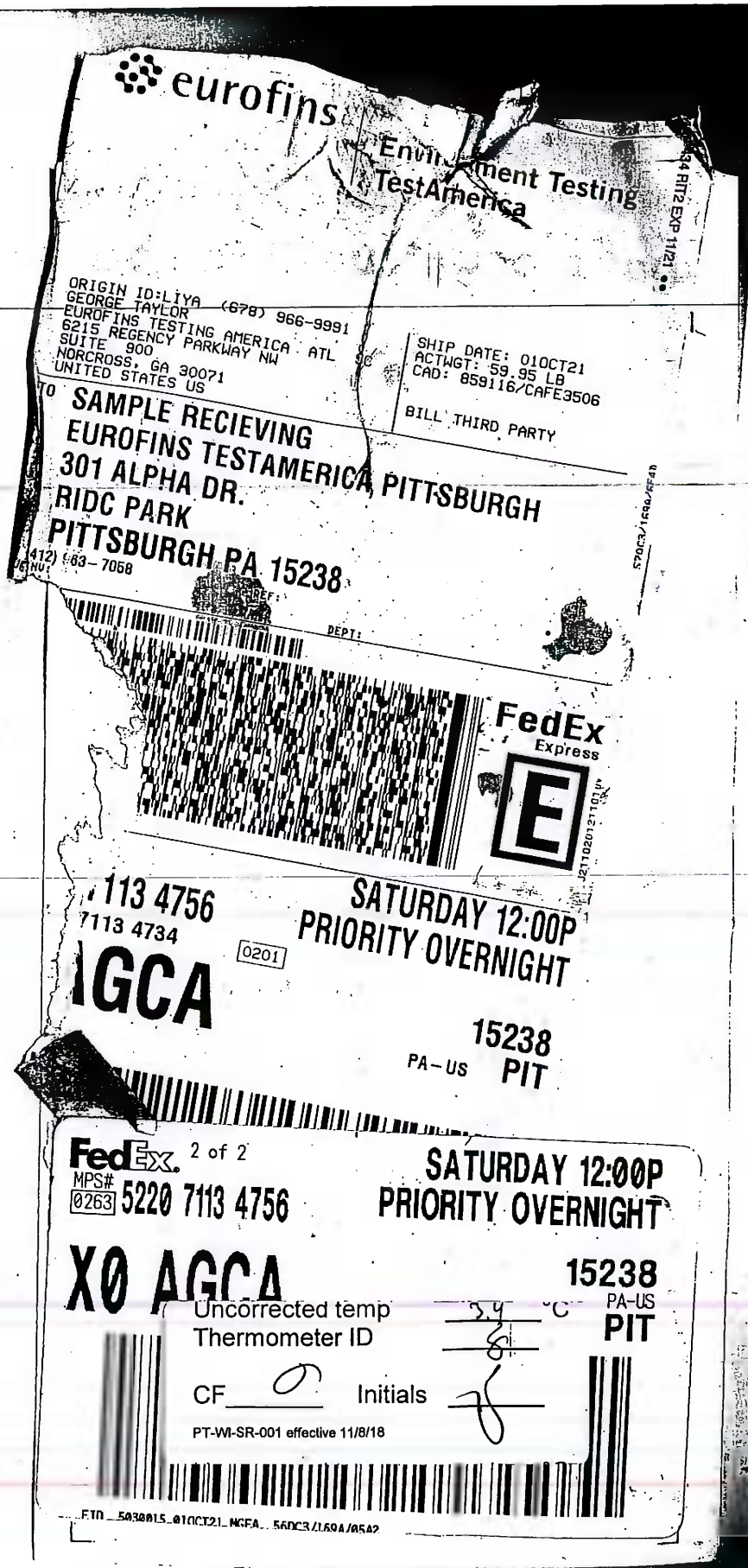
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10-1-21 1715			10/1/21 1715	
2		10/1/21 1715			10/2/21 945	EST PH
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

eurofins
Part # 159469-434 RIT2 EXP 11/21
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE:
ACTWGT: 59
CAD: 859116 E3506
BILL THIRD PARTY
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
REF:
DEPT:
FedEx Express
SATURDAY 12:00P
PRIORITY OVERNIGHT
2 of 3
MPS# 5220 7113 4745
Mstr# 5220 7113 4734
0201
XO AGCA
15238
PIT
PA-US
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18
180-127991 Waybill


eurofins
Environment Testing
TestAmerica
ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA, ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE: 01OCT21
ACTWGT: 59.95 LB
CAD: 859116/CAFE3506
BILL THIRD PARTY
TO SAMPLE RECIEVING
EUROFINS TESTAMERICA, PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF:
DEPT:
FedEx
Express
7113 4756
7113 4734
0201
SATURDAY 12:00P
PRIORITY OVERNIGHT
AGCA
15238
PA-US
PIT
FedEx
2 of 2
MPS# 5220 7113 4756
0263
SATURDAY 12:00P
PRIORITY OVERNIGHT
X0 AGCA
15238
PA-US
PIT
Uncorrected temp
°C
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-445988.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-127991-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/10/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Arkwright Surfacewater	Project #: 18023157			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium 226	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
OR + 1.0 (180-127991-1)	9/30/21	12:13 Eastern		Water			X	X	X	2	
OR + 0.25 (180-127991-2)	9/30/21	12:43 Eastern		Water			X	X	X	2	
BC - 0.1 (180-127991-3)	9/30/21	12:52 Eastern		Water			X	X	X	2	
OR - 0.1 (180-127991-4)	9/30/21	13:16 Eastern		Water			X	X	X	2	
OR - 0.3 (180-127991-5)	9/30/21	14:00 Eastern		Water			X	X	X	2	
OR + 0.8 (180-127991-6)	9/30/21	14:40 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: MO	Date/Time: 10-4-21 1700	Company: Eta Pitt	Received by: FED EX.	Date/Time:	Company
Relinquished by: FED EX	Date/Time:	Company	Received by: Micha Kornhinger	Date/Time: OCT 05 2021 09:10	Company: ETA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

11/13/2021

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-127991-2

Login Number: 127991
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-127991-2

Login Number: 127991
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 10/05/21 03:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-133312-1
Client Project/Site: Arkwright Surfacewater

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
2/18/2022 2:06:18 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Job ID: 180-133312-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-133312-1

Receipt
The samples were received on 2/8/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.5°C, 2.8°C, 2.9°C and 3.0°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The continuing calibration verification (CCV) associated with batch 180-388040 recovered above the upper control limit for boron. The samples associated with this CCV were less than the RL for the affected analytes; therefore, the data have been reported. The associated samples are impacted: OR-0.8 (MID) (180-133312-1), OR-0.3 (MID) (180-133312-2), OR-0.1 (MID) (180-133312-3), BC-0.1 (MID) (180-133312-4), OR+0.25 (MID) (180-133312-5), OR+1.0 (MID) (180-133312-6) and (CCV 180-388040/71).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22 *
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-02-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22 *
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-133312-1	OR-0.8 (MID)	Water	02/02/22 13:23	02/08/22 10:30
180-133312-2	OR-0.3 (MID)	Water	02/02/22 13:00	02/08/22 10:30
180-133312-3	OR-0.1 (MID)	Water	02/02/22 12:15	02/08/22 10:30
180-133312-4	BC-0.1 (MID)	Water	02/02/22 11:20	02/08/22 10:30
180-133312-5	OR+0.25 (MID)	Water	02/02/22 11:10	02/08/22 10:30
180-133312-6	OR+1.0 (MID)	Water	02/02/22 10:45	02/08/22 10:30

Method Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM2320 B	Alkalinity, Total	SM18	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: OR-0.8 (MID)

Lab Sample ID: 180-133312-1

Date Collected: 02/02/22 13:23

Matrix: Water

Date Received: 02/08/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387956	02/11/22 17:22	JRB	TAL PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:14	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388593	02/16/22 13:34	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: OR-0.3 (MID)

Lab Sample ID: 180-133312-2

Date Collected: 02/02/22 13:00

Matrix: Water

Date Received: 02/08/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387954	02/11/22 19:46	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:17	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388593	02/16/22 13:41	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: OR-0.1 (MID)

Lab Sample ID: 180-133312-3

Date Collected: 02/02/22 12:15

Matrix: Water

Date Received: 02/08/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387954	02/11/22 20:23	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:21	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388593	02/16/22 13:49	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: BC-0.1 (MID)

Lab Sample ID: 180-133312-4

Date Collected: 02/02/22 11:20

Matrix: Water

Date Received: 02/08/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387954	02/11/22 20:36	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:25	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388593	02/16/22 13:56	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: OR+0.25 (MID)

Lab Sample ID: 180-133312-5

Date Collected: 02/02/22 11:10

Matrix: Water

Date Received: 02/08/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387954	02/11/22 20:49	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:28	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 18:32	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: OR+1.0 (MID)

Lab Sample ID: 180-133312-6

Date Collected: 02/02/22 10:45

Matrix: Water

Date Received: 02/08/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387954	02/11/22 21:02	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:32	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 18:47	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KFS = Kelly Shannon

Batch Type: Analysis

CMT = Cassandra Tlumac

JCR = Jessica Rodgers

JRB = James Burzio

RSK = Robert Kurtz

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: OR-0.8 (MID)

Date Collected: 02/02/22 13:23
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133312-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.3**		1.0	0.71	mg/L			02/11/22 17:22	1
Fluoride	**0.066**	**J**	0.10	0.026	mg/L			02/11/22 17:22	1
Sulfate	**6.4**		1.0	0.76	mg/L			02/11/22 17:22	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:14	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:14	1
Barium	**0.027**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:14	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:14	1
Boron	**0.065**	**J ^+**	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:14	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:14	1
Calcium	**6.3**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:14	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:14	1
Lead	**0.00024**	**J**	0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:14	1
Lithium	**0.0010**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:14	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:14	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:14	1
Potassium	**2.4**		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 15:14	1
Magnesium	**2.1**		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 15:14	1
Sodium	**7.6**		0.50	0.18	mg/L		02/10/22 10:47	02/11/22 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**61**		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	**26**		5.0	5.0	mg/L			02/16/22 13:34	1
Bicarbonate Alkalinity as CaCO3	**26**		5.0	5.0	mg/L			02/16/22 13:34	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: OR-0.3 (MID)

Date Collected: 02/02/22 13:00
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133312-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.7**		1.0	0.71	mg/L			02/11/22 19:46	1
Fluoride	**0.057**	**J**	0.10	0.026	mg/L			02/11/22 19:46	1
Sulfate	**6.6**		1.0	0.76	mg/L			02/11/22 19:46	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:17	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:17	1
Barium	**0.027**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:17	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:17	1
Boron	**0.060**	**J ^+**	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:17	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:17	1
Calcium	**6.1**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:17	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:17	1
Lead	**0.00023**	**J**	0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:17	1
Lithium	**0.0012**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:17	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:17	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:17	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:17	1
Potassium	**2.3**		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 15:17	1
Magnesium	**2.0**		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 15:17	1
Sodium	**7.3**		0.50	0.18	mg/L		02/10/22 10:47	02/11/22 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**54**		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	**24**		5.0	5.0	mg/L			02/16/22 13:41	1
Bicarbonate Alkalinity as CaCO3	**24**		5.0	5.0	mg/L			02/16/22 13:41	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: OR-0.1 (MID)

Date Collected: 02/02/22 12:15
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133312-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.7**		1.0	0.71	mg/L			02/11/22 20:23	1
Fluoride	**0.055**	**J**	0.10	0.026	mg/L			02/11/22 20:23	1
Sulfate	**6.6**		1.0	0.76	mg/L			02/11/22 20:23	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:21	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:21	1
Barium	**0.026**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:21	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:21	1
Boron	<0.060	^+	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:21	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:21	1
Calcium	**6.1**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:21	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:21	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:21	1
Lead	**0.00023**	**J**	0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:21	1
Lithium	**0.0010**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:21	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:21	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:21	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:21	1
Potassium	**2.3**		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 15:21	1
Magnesium	**2.0**		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 15:21	1
Sodium	**7.4**		0.50	0.18	mg/L		02/10/22 10:47	02/11/22 15:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**60**		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	**25**		5.0	5.0	mg/L			02/16/22 13:49	1
Bicarbonate Alkalinity as CaCO3	**25**		5.0	5.0	mg/L			02/16/22 13:49	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: BC-0.1 (MID)

Lab Sample ID: 180-133312-4

Date Collected: 02/02/22 11:20

Matrix: Water

Date Received: 02/08/22 10:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.8**		1.0	0.71	mg/L			02/11/22 20:36	1
Fluoride	**0.048**	**J**	0.10	0.026	mg/L			02/11/22 20:36	1
Sulfate	**9.1**		1.0	0.76	mg/L			02/11/22 20:36	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:25	1
Arsenic	**0.00049**	**J**	0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:25	1
Barium	**0.036**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:25	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:25	1
Boron	<0.060	^+	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:25	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:25	1
Calcium	**9.3**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:25	1
Cobalt	**0.00078**	**J**	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:25	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:25	1
Lithium	**0.0011**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:25	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:25	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:25	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:25	1
Potassium	**1.7**		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 15:25	1
Magnesium	**4.2**		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 15:25	1
Sodium	**8.8**		0.50	0.18	mg/L		02/10/22 10:47	02/11/22 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**86**		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	**44**		5.0	5.0	mg/L			02/16/22 13:56	1
Bicarbonate Alkalinity as CaCO3	**44**		5.0	5.0	mg/L			02/16/22 13:56	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: OR+0.25 (MID)

Date Collected: 02/02/22 11:10
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133312-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.8**		1.0	0.71	mg/L			02/11/22 20:49	1
Fluoride	**0.055**	**J**	0.10	0.026	mg/L			02/11/22 20:49	1
Sulfate	**6.6**		1.0	0.76	mg/L			02/11/22 20:49	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:28	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:28	1
Barium	**0.027**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:28	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:28	1
Boron	<0.060	^+	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:28	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:28	1
Calcium	**6.2**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:28	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:28	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:28	1
Lead	**0.00028**	**J**	0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:28	1
Lithium	**0.00085**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:28	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:28	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:28	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:28	1
Potassium	**2.4**		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 15:28	1
Magnesium	**2.1**		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 15:28	1
Sodium	**7.7**		0.50	0.18	mg/L		02/10/22 10:47	02/11/22 15:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**62**		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	**25**		5.0	5.0	mg/L			02/15/22 18:32	1
Bicarbonate Alkalinity as CaCO3	**25**		5.0	5.0	mg/L			02/15/22 18:32	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

Client Sample ID: OR+1.0 (MID)

Date Collected: 02/02/22 10:45
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133312-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.6**		1.0	0.71	mg/L			02/11/22 21:02	1
Fluoride	**0.056**	**J**	0.10	0.026	mg/L			02/11/22 21:02	1
Sulfate	**6.6**		1.0	0.76	mg/L			02/11/22 21:02	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 15:32	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 15:32	1
Barium	**0.027**		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 15:32	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 15:32	1
Boron	<0.060	^+	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:32	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 15:32	1
Calcium	**6.3**		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 15:32	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:32	1
Lead	**0.00022**	**J**	0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 15:32	1
Lithium	**0.00094**	**J**	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:32	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:32	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 15:32	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 15:32	1
Potassium	**2.4**		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 15:32	1
Magnesium	**2.0**		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 15:32	1
Sodium	**7.6**		0.50	0.18	mg/L		02/10/22 10:47	02/11/22 15:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**67**		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	**25**		5.0	5.0	mg/L			02/15/22 18:47	1
Bicarbonate Alkalinity as CaCO3	**25**		5.0	5.0	mg/L			02/15/22 18:47	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-387954/7
Matrix: Water
Analysis Batch: 387954

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/11/22 09:47	1
Fluoride	<0.026		0.10	0.026	mg/L			02/11/22 09:47	1
Sulfate	<0.76		1.0	0.76	mg/L			02/11/22 09:47	1

Lab Sample ID: LCS 180-387954/5
Matrix: Water
Analysis Batch: 387954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.6		mg/L		99	90 - 110
Fluoride	2.50	2.52		mg/L		101	90 - 110
Sulfate	50.0	47.5		mg/L		95	90 - 110

Lab Sample ID: 180-133312-2 MS
Matrix: Water
Analysis Batch: 387954

Client Sample ID: OR-0.3 (MID)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.7		50.0	60.2		mg/L		105	90 - 110
Fluoride	0.057	J	2.50	2.78		mg/L		109	90 - 110
Sulfate	6.6		50.0	57.4		mg/L		102	90 - 110

Lab Sample ID: 180-133312-2 MSD
Matrix: Water
Analysis Batch: 387954

Client Sample ID: OR-0.3 (MID)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.7		50.0	57.7		mg/L		100	90 - 110	4	20
Fluoride	0.057	J	2.50	2.65		mg/L		104	90 - 110	5	20
Sulfate	6.6		50.0	54.8		mg/L		96	90 - 110	5	20

Lab Sample ID: MB 180-387956/7
Matrix: Water
Analysis Batch: 387956

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/11/22 10:49	1
Fluoride	<0.026		0.10	0.026	mg/L			02/11/22 10:49	1
Sulfate	<0.76		1.0	0.76	mg/L			02/11/22 10:49	1

Lab Sample ID: LCS 180-387956/6
Matrix: Water
Analysis Batch: 387956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.9		mg/L		100	90 - 110
Fluoride	2.50	2.63		mg/L		105	90 - 110
Sulfate	50.0	49.7		mg/L		99	90 - 110

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-387854/1-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00051		0.0020	0.00051	mg/L		02/10/22 10:47	02/11/22 14:12	1
Arsenic	<0.00028		0.0010	0.00028	mg/L		02/10/22 10:47	02/11/22 14:12	1
Barium	<0.0031		0.010	0.0031	mg/L		02/10/22 10:47	02/11/22 14:12	1
Beryllium	<0.00027		0.0025	0.00027	mg/L		02/10/22 10:47	02/11/22 14:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/10/22 10:47	02/11/22 14:12	1
Calcium	<0.13		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/10/22 10:47	02/11/22 14:12	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:12	1
Lead	<0.00017		0.0010	0.00017	mg/L		02/10/22 10:47	02/11/22 14:12	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 14:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 14:12	1
Selenium	<0.00074		0.0050	0.00074	mg/L		02/10/22 10:47	02/11/22 14:12	1
Thallium	<0.00047		0.0010	0.00047	mg/L		02/10/22 10:47	02/11/22 14:12	1
Potassium	<0.16		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 14:12	1
Magnesium	<0.050		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 14:12	1
Sodium	0.230	J	0.50	0.18	mg/L		02/10/22 10:47	02/11/22 14:12	1

Lab Sample ID: LCS 180-387854/2-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.250	0.238		mg/L		95	80 - 120
Arsenic	1.00	0.934		mg/L		93	80 - 120
Barium	1.00	1.03		mg/L		103	80 - 120
Beryllium	0.500	0.544		mg/L		109	80 - 120
Cadmium	0.500	0.521		mg/L		104	80 - 120
Calcium	25.0	27.1		mg/L		109	80 - 120
Chromium	0.500	0.511		mg/L		102	80 - 120
Cobalt	0.500	0.506		mg/L		101	80 - 120
Lead	0.500	0.503		mg/L		101	80 - 120
Lithium	0.500	0.550		mg/L		110	80 - 120
Molybdenum	0.500	0.504		mg/L		101	80 - 120
Selenium	1.00	1.03		mg/L		103	80 - 120
Thallium	1.00	0.985		mg/L		99	80 - 120
Potassium	25.0	25.4		mg/L		101	80 - 120
Magnesium	25.0	24.5		mg/L		98	80 - 120
Sodium	25.0	25.3		mg/L		101	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-387591/2
Matrix: Water
Analysis Batch: 387591

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/08/22 16:40	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 180-387591/1
Matrix: Water
Analysis Batch: 387591

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			150	134		mg/L		89	85 - 115		

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-388447/16
Matrix: Water
Analysis Batch: 388447

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/15/22 18:25	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/15/22 18:25	1

Lab Sample ID: LCS 180-388447/15
Matrix: Water
Analysis Batch: 388447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3 to pH 4.5			132	122		mg/L		93	90 - 110		

Lab Sample ID: LLCS 180-388447/5
Matrix: Water
Analysis Batch: 388447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity as CaCO3 to pH 4.5			15.9	14.5		mg/L		91	75 - 125		

Lab Sample ID: 180-133312-5 DU
Matrix: Water
Analysis Batch: 388447

Client Sample ID: OR+0.25 (MID)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	25			23.9		mg/L				3	20
Bicarbonate Alkalinity as CaCO3	25			23.9		mg/L				3	20

Lab Sample ID: MB 180-388593/6
Matrix: Water
Analysis Batch: 388593

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/16/22 13:05	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/16/22 13:05	1

Method: SM2320 B - Alkalinity, Total (Continued)

Lab Sample ID: LCS 180-388593/5
Matrix: Water
Analysis Batch: 388593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	265	237		mg/L		90	90 - 110

Lab Sample ID: LLCS 180-388593/4
Matrix: Water
Analysis Batch: 388593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	15.9	15.3		mg/L		96	75 - 125

HPLC/IC

Analysis Batch: 387954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133312-2	OR-0.3 (MID)	Total/NA	Water	EPA 300.0 R2.1	
180-133312-3	OR-0.1 (MID)	Total/NA	Water	EPA 300.0 R2.1	
180-133312-4	BC-0.1 (MID)	Total/NA	Water	EPA 300.0 R2.1	
180-133312-5	OR+0.25 (MID)	Total/NA	Water	EPA 300.0 R2.1	
180-133312-6	OR+1.0 (MID)	Total/NA	Water	EPA 300.0 R2.1	
MB 180-387954/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-387954/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-133312-2 MS	OR-0.3 (MID)	Total/NA	Water	EPA 300.0 R2.1	
180-133312-2 MSD	OR-0.3 (MID)	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 387956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133312-1	OR-0.8 (MID)	Total/NA	Water	EPA 300.0 R2.1	
MB 180-387956/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-387956/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 387854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133312-1	OR-0.8 (MID)	Total Recoverable	Water	3005A	
180-133312-2	OR-0.3 (MID)	Total Recoverable	Water	3005A	
180-133312-3	OR-0.1 (MID)	Total Recoverable	Water	3005A	
180-133312-4	BC-0.1 (MID)	Total Recoverable	Water	3005A	
180-133312-5	OR+0.25 (MID)	Total Recoverable	Water	3005A	
180-133312-6	OR+1.0 (MID)	Total Recoverable	Water	3005A	
MB 180-387854/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-387854/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 388040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133312-1	OR-0.8 (MID)	Total Recoverable	Water	EPA 6020B	387854
180-133312-2	OR-0.3 (MID)	Total Recoverable	Water	EPA 6020B	387854
180-133312-3	OR-0.1 (MID)	Total Recoverable	Water	EPA 6020B	387854
180-133312-4	BC-0.1 (MID)	Total Recoverable	Water	EPA 6020B	387854
180-133312-5	OR+0.25 (MID)	Total Recoverable	Water	EPA 6020B	387854
180-133312-6	OR+1.0 (MID)	Total Recoverable	Water	EPA 6020B	387854
MB 180-387854/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	387854
LCS 180-387854/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	387854

General Chemistry

Analysis Batch: 387591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133312-1	OR-0.8 (MID)	Total/NA	Water	SM 2540C	
180-133312-2	OR-0.3 (MID)	Total/NA	Water	SM 2540C	
180-133312-3	OR-0.1 (MID)	Total/NA	Water	SM 2540C	
180-133312-4	BC-0.1 (MID)	Total/NA	Water	SM 2540C	
180-133312-5	OR+0.25 (MID)	Total/NA	Water	SM 2540C	
180-133312-6	OR+1.0 (MID)	Total/NA	Water	SM 2540C	
MB 180-387591/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-387591/1	Lab Control Sample	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133312-1

General Chemistry

Analysis Batch: 388447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133312-5	OR+0.25 (MID)	Total/NA	Water	SM2320 B	
180-133312-6	OR+1.0 (MID)	Total/NA	Water	SM2320 B	
MB 180-388447/16	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-388447/15	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-388447/5	Lab Control Sample	Total/NA	Water	SM2320 B	
180-133312-5 DU	OR+0.25 (MID)	Total/NA	Water	SM2320 B	

Analysis Batch: 388593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133312-1	OR-0.8 (MID)	Total/NA	Water	SM2320 B	
180-133312-2	OR-0.3 (MID)	Total/NA	Water	SM2320 B	
180-133312-3	OR-0.1 (MID)	Total/NA	Water	SM2320 B	
180-133312-4	BC-0.1 (MID)	Total/NA	Water	SM2320 B	
MB 180-388593/6	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-388593/5	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-388593/4	Lab Control Sample	Total/NA	Water	SM2320 B	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

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Client Information	Sampler: Johnson/Swanson	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 678.485.5298	E-Mail: shali.brown@eurofinset.com		Page:
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: CCR - Plant Arkwright Surfacewater	Project #: 18023157			
Site: Georgia	SSOW#:			

Analysis Requested

244-ATLAN

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - Di Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	CCR App III[1]	Major Ions[2]	CCR App IV Metals[3]	Total Number of containers	Special Instructions/Note:
OR-0.8 (mid)	2/2/22	1323	G	W			x	x	x		CCR App III[1] - Boron, Calcium, Chloride, Fluoride, Sulfate, TDS
OR-0.3 (mid)	2/2/22	1300	G	W			x	x	x		
OR-0.1 (mid)	2/2/22	1215	G	W			x	x	x		Major Ions[2] - Mg, Na, K, total alkalinity, bicarbonate alkalinity
BC-0.1 (mid)	2/2/22	1120	G	W			x	x	x		
OR+0.25 (mid)	2/2/22	1110	G	W			x	x	x		CCR App IV Metals[3] - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Floride, Lead, Lithium, Molybdenum, Radium 226 and 228 combined
OR+1.0 (mid)	2/2/22	1045	G	W			x	x	x		

180-133312 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 02/03/22 1130	Company Arcadis	Received by:	Date/Time: 2/3/22 11:30	Company ETA
Relinquished by:	Date/Time: 2/3/22 16:02	Company ETA	Received by:	Date/Time: 2-8-22	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 19:30	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

eurofins | Environment Testing TestAmerica

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 03FEB22
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: ARCADIS - ARKWRIGHT

Uncorrected temp 2.9 °C
Thermometer ID 6
CF
Initials MO
PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 4
TRK# 0201 5220 7115 9808
MASTER
FRI - 04 FEB 10:30A
PRIORITY OVERNIGHT
NA AGCA
15238
PA-US PIT

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 03FEB22
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: ARCADIS - ARKWRIGHT

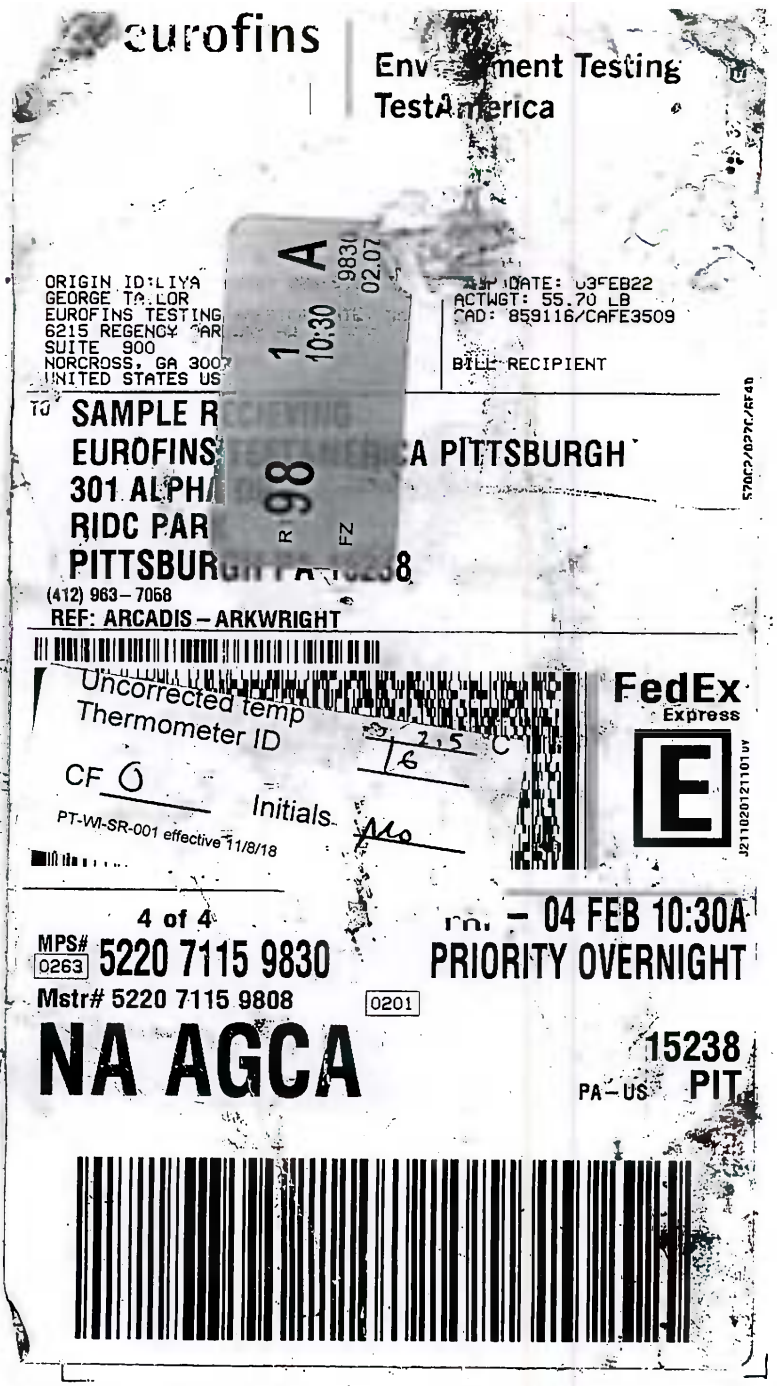
Uncorrected temp 2.9 °C
Thermometer ID 6
CF
Initials MO
PT-WI-SR-001 effective 11/8/18

FedEx Express

3 of 4
MPS# 0263 5220 7115 9820
Mstr# 5220 7115 9808 0201
FRI - 04 FEB 10:30A
PRIORITY OVERNIGHT
NA AGCA
15238
PA-US PIT

180-133312 Waybill


SHIP DATE: 03FEB22
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509
BILL RECIPIENT
PITTSBURGH PA 15238
ARCADIS – ARKWRIGHT
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18
FedEx Express
FRI – 04 FEB 10:30A
PRIORITY OVERNIGHT
2 of 4
MPS# 5220 7115 9819
Mstr# 5220 7115 9808
0201
15238
PA–US
PIT
NA AGCA


Eurofins
TestAmerica
ORIGIN ID:LIYA
GEORGE TAYLOR
EUROFINS TESTING
6215 REGENCY PARK
SUITE 900
NORCROSS, GA 30071
UNITED STATES US
SHIP DATE: 03FEB22
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509
BILL RECIPIENT
TO SAMPLE RECEIVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963–7068
REF: ARCADIS – ARKWRIGHT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
FedEx Express
4 of 4
MPS# 5220 7115 9830
Mstr# 5220 7115 9808
0263
0201
FRI – 04 FEB 10:30A
PRIORITY OVERNIGHT
NA AGCA
15238
PA–US
PIT

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133312-1

Login Number: 133312

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-133313-1
Client Project/Site: Arkwright Surfacewater

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
2/22/2022 3:29:28 PM

Shali Brown, Project Manager II
(615)301-5031
Shali.Brown@Eurofinset.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-133313-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-133313-1

Receipt
The samples were received on 2/8/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.5°C, 2.8°C, 2.9°C and 3.0°C

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The continuing calibration verification (CCV) associated with batch 180-388040 recovered above the upper control limit for boron. The samples associated with this CCV were less than the RL for the affected analytes; therefore, the data have been reported. The associated samples are impacted: BC-0.3 (180-133313-6) and (CCV 180-388040/71).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22 *
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-02-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22 *
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-133313-1	BC-0.8A	Water	02/02/22 18:31	02/08/22 10:30
180-133313-2	BC-0.5.7	Water	02/02/22 16:05	02/08/22 10:30
180-133313-3	BC-0.5.6	Water	02/02/22 15:53	02/08/22 10:30
180-133313-4	BC-0.5.5	Water	02/02/22 15:32	02/08/22 10:30
180-133313-5	BC-BR	Water	02/02/22 15:05	02/08/22 10:30
180-133313-6	BC-0.3	Water	02/02/22 11:44	02/08/22 10:30

Method Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM2320 B	Alkalinity, Total	SM18	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.8A
Date Collected: 02/02/22 18:31
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387630	02/09/22 09:57	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 14:26	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 08:11	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 18:54	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-0.5.7
Date Collected: 02/02/22 16:05
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387630	02/09/22 10:43	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 14:44	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 08:23	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 19:02	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-0.5.6
Date Collected: 02/02/22 15:53
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387630	02/09/22 10:55	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 14:48	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 08:25	RJR	TAL PIT
	Instrument ID: NEMO									

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.5.6

Date Collected: 02/02/22 15:53
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 19:09	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-0.5.5

Date Collected: 02/02/22 15:32
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387630	02/09/22 11:08	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 14:52	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 08:33	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 19:16	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Client Sample ID: BC-BR

Date Collected: 02/02/22 15:05
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387630	02/09/22 11:20	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 14:55	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388275	02/12/22 08:36	RJR	TAL PIT
	Instrument ID: NEMO									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 19:24	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Lab Chronicle

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.3

Date Collected: 02/02/22 11:44
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			387630	02/09/22 11:33	JRB	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	387854	02/10/22 10:47	KFS	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			388040	02/11/22 15:06	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	387591	02/08/22 16:40	JCR	TAL PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM2320 B		1			388447	02/15/22 19:31	CMT	TAL PIT
	Instrument ID: PCTITRATOR									

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KFS = Kelly Shannon

Batch Type: Analysis

CMT = Cassandra Tlumac
JCR = Jessica Rodgers
JRB = James Burzio
RJR = Ron Rosenbaum
RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.8A

Date Collected: 02/02/22 18:31
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.2		1.0	0.71	mg/L			02/09/22 09:57	1
Fluoride	0.074	J	0.10	0.026	mg/L			02/09/22 09:57	1
Sulfate	5.7		1.0	0.76	mg/L			02/09/22 09:57	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:47	02/12/22 08:11	1
Calcium	8.3		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:26	1
Cobalt	0.00057	J	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:26	1
Lithium	0.0011	J	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 14:26	1
Magnesium	3.9		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 14:26	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 14:26	1
Potassium	1.8		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 14:26	1
Sodium	8.8	B	0.50	0.18	mg/L		02/10/22 10:47	02/11/22 14:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	75		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	41		5.0	5.0	mg/L			02/15/22 18:54	1
Bicarbonate Alkalinity as CaCO3	41		5.0	5.0	mg/L			02/15/22 18:54	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.5.7

Date Collected: 02/02/22 16:05
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.1		1.0	0.71	mg/L			02/09/22 10:43	1
Fluoride	0.085	J	0.10	0.026	mg/L			02/09/22 10:43	1
Sulfate	7.3		1.0	0.76	mg/L			02/09/22 10:43	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:47	02/12/22 08:23	1
Calcium	8.7		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:44	1
Cobalt	0.00071	J	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:44	1
Magnesium	4.1		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 14:44	1
Potassium	1.8		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 14:44	1
Sodium	9.0	B	0.50	0.18	mg/L		02/10/22 10:47	02/11/22 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	89		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	41		5.0	5.0	mg/L			02/15/22 19:02	1
Bicarbonate Alkalinity as CaCO3	41		5.0	5.0	mg/L			02/15/22 19:02	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.5.6

Date Collected: 02/02/22 15:53
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.9		1.0	0.71	mg/L			02/09/22 10:55	1
Fluoride	0.089	J	0.10	0.026	mg/L			02/09/22 10:55	1
Sulfate	8.7		1.0	0.76	mg/L			02/09/22 10:55	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:47	02/12/22 08:25	1
Calcium	9.0		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:48	1
Cobalt	0.00080	J	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:48	1
Lithium	0.0014	J	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 14:48	1
Magnesium	4.2		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 14:48	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 14:48	1
Potassium	1.8		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 14:48	1
Sodium	9.1	B	0.50	0.18	mg/L		02/10/22 10:47	02/11/22 14:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	92		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	40		5.0	5.0	mg/L			02/15/22 19:09	1
Bicarbonate Alkalinity as CaCO3	40		5.0	5.0	mg/L			02/15/22 19:09	1

Client Sample Results

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.5.5

Date Collected: 02/02/22 15:32
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.0		1.0	0.71	mg/L			02/09/22 11:08	1
Fluoride	0.086	J	0.10	0.026	mg/L			02/09/22 11:08	1
Sulfate	7.9		1.0	0.76	mg/L			02/09/22 11:08	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:47	02/12/22 08:33	1
Calcium	8.8		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:52	1
Cobalt	0.00052	J	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:52	1
Lithium	0.0015	J	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 14:52	1
Magnesium	4.2		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 14:52	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 14:52	1
Potassium	1.8		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 14:52	1
Sodium	9.2	B	0.50	0.18	mg/L		02/10/22 10:47	02/11/22 14:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	82		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	41		5.0	5.0	mg/L			02/15/22 19:16	1
Bicarbonate Alkalinity as CaCO3	41		5.0	5.0	mg/L			02/15/22 19:16	1

Client Sample ID: BC-BR

Date Collected: 02/02/22 15:05
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.0		1.0	0.71	mg/L			02/09/22 11:20	1
Fluoride	0.074	J	0.10	0.026	mg/L			02/09/22 11:20	1
Sulfate	7.9		1.0	0.76	mg/L			02/09/22 11:20	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:47	02/12/22 08:36	1
Calcium	8.9		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:55	1
Cobalt	0.00061	J	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:55	1
Lithium	0.0015	J	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 14:55	1
Magnesium	4.1		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 14:55	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 14:55	1
Potassium	1.8		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 14:55	1
Sodium	9.1	B	0.50	0.18	mg/L		02/10/22 10:47	02/11/22 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	82		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	40		5.0	5.0	mg/L			02/15/22 19:24	1
Bicarbonate Alkalinity as CaCO3	40		5.0	5.0	mg/L			02/15/22 19:24	1

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

Client Sample ID: BC-0.3

Date Collected: 02/02/22 11:44
Date Received: 02/08/22 10:30

Lab Sample ID: 180-133313-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.0		1.0	0.71	mg/L			02/09/22 11:33	1
Fluoride	0.086	J	0.10	0.026	mg/L			02/09/22 11:33	1
Sulfate	8.1		1.0	0.76	mg/L			02/09/22 11:33	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.066	J ^+	0.080	0.060	mg/L		02/10/22 10:47	02/11/22 15:06	1
Calcium	8.8		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 15:06	1
Cobalt	0.00058	J	0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 15:06	1
Lithium	0.0011	J	0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 15:06	1
Magnesium	4.1		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 15:06	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 15:06	1
Potassium	1.7		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 15:06	1
Sodium	8.7		0.50	0.18	mg/L		02/10/22 10:47	02/11/22 15:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	74		10	10	mg/L			02/08/22 16:40	1
Total Alkalinity as CaCO3 to pH 4.5	41		5.0	5.0	mg/L			02/15/22 19:31	1
Bicarbonate Alkalinity as CaCO3	41		5.0	5.0	mg/L			02/15/22 19:31	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-387630/7
Matrix: Water
Analysis Batch: 387630

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/09/22 08:20	1
Fluoride	<0.026		0.10	0.026	mg/L			02/09/22 08:20	1
Sulfate	<0.76		1.0	0.76	mg/L			02/09/22 08:20	1

Lab Sample ID: LCS 180-387630/5
Matrix: Water
Analysis Batch: 387630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.1		mg/L		100	90 - 110
Fluoride	2.50	2.55		mg/L		102	90 - 110
Sulfate	50.0	47.9		mg/L		96	90 - 110

Lab Sample ID: 180-133313-1 MS
Matrix: Water
Analysis Batch: 387630

Client Sample ID: BC-0.8A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.2		50.0	60.3		mg/L		102	90 - 110
Fluoride	0.074	J	2.50	2.68		mg/L		104	90 - 110
Sulfate	5.7		50.0	54.9		mg/L		98	90 - 110

Lab Sample ID: 180-133313-1 MSD
Matrix: Water
Analysis Batch: 387630

Client Sample ID: BC-0.8A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.2		50.0	62.1		mg/L		106	90 - 110	3	20
Fluoride	0.074	J	2.50	2.75		mg/L		107	90 - 110	3	20
Sulfate	5.7		50.0	56.0		mg/L		101	90 - 110	2	20

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-387854/1-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.50	0.13	mg/L		02/10/22 10:47	02/11/22 14:12	1
Cobalt	<0.00026		0.0025	0.00026	mg/L		02/10/22 10:47	02/11/22 14:12	1
Lithium	<0.00083		0.0050	0.00083	mg/L		02/10/22 10:47	02/11/22 14:12	1
Magnesium	<0.050		0.50	0.050	mg/L		02/10/22 10:47	02/11/22 14:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/10/22 10:47	02/11/22 14:12	1
Potassium	<0.16		0.50	0.16	mg/L		02/10/22 10:47	02/11/22 14:12	1
Sodium	0.230	J	0.50	0.18	mg/L		02/10/22 10:47	02/11/22 14:12	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-387854/1-A
Matrix: Water
Analysis Batch: 388275

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.060		0.080	0.060	mg/L		02/10/22 10:47	02/12/22 08:06	1

Lab Sample ID: LCS 180-387854/2-A
Matrix: Water
Analysis Batch: 388040

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	25.0	27.1		mg/L		109	80 - 120
Cobalt	0.500	0.506		mg/L		101	80 - 120
Lithium	0.500	0.550		mg/L		110	80 - 120
Magnesium	25.0	24.5		mg/L		98	80 - 120
Molybdenum	0.500	0.504		mg/L		101	80 - 120
Potassium	25.0	25.4		mg/L		101	80 - 120
Sodium	25.0	25.3		mg/L		101	80 - 120

Lab Sample ID: LCS 180-387854/2-A
Matrix: Water
Analysis Batch: 388275

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.21		mg/L		96	80 - 120

Lab Sample ID: 180-133313-1 MS
Matrix: Water
Analysis Batch: 388040

Client Sample ID: BC-0.8A
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	8.3		25.0	35.1		mg/L		107	75 - 125
Cobalt	0.00057	J	0.500	0.492		mg/L		98	75 - 125
Lithium	0.0011	J	0.500	0.524		mg/L		104	75 - 125
Magnesium	3.9		25.0	28.0		mg/L		96	75 - 125
Molybdenum	<0.00061		0.500	0.499		mg/L		100	75 - 125
Potassium	1.8		25.0	27.0		mg/L		101	75 - 125
Sodium	8.8	B	25.0	33.3		mg/L		98	75 - 125

Lab Sample ID: 180-133313-1 MS
Matrix: Water
Analysis Batch: 388275

Client Sample ID: BC-0.8A
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	<0.060		1.25	1.26		mg/L		101	75 - 125

Lab Sample ID: 180-133313-1 MSD
Matrix: Water
Analysis Batch: 388040

Client Sample ID: BC-0.8A
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	8.3		25.0	35.2		mg/L		107	75 - 125	0	20
Cobalt	0.00057	J	0.500	0.492		mg/L		98	75 - 125	0	20
Lithium	0.0011	J	0.500	0.516		mg/L		103	75 - 125	2	20

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-133313-1 MSD
Matrix: Water
Analysis Batch: 388040

Client Sample ID: BC-0.8A
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Magnesium	3.9		25.0	28.3		mg/L		97	75 - 125	1	20
Molybdenum	<0.00061		0.500	0.497		mg/L		99	75 - 125	1	20
Potassium	1.8		25.0	26.8		mg/L		100	75 - 125	1	20
Sodium	8.8	B	25.0	33.7		mg/L		100	75 - 125	1	20

Lab Sample ID: 180-133313-1 MSD
Matrix: Water
Analysis Batch: 388275

Client Sample ID: BC-0.8A
Prep Type: Total Recoverable
Prep Batch: 387854

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	<0.060		1.25	1.23		mg/L		98	75 - 125	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-387591/2
Matrix: Water
Analysis Batch: 387591

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/08/22 16:40	1

Lab Sample ID: LCS 180-387591/1
Matrix: Water
Analysis Batch: 387591

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			150	134		mg/L		89	85 - 115		

Lab Sample ID: 180-133313-1 DU
Matrix: Water
Analysis Batch: 387591

Client Sample ID: BC-0.8A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	75			73.0		mg/L				3	10

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-388447/16
Matrix: Water
Analysis Batch: 388447

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			02/15/22 18:25	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			02/15/22 18:25	1

Method: SM2320 B - Alkalinity, Total (Continued)

Lab Sample ID: LCS 180-388447/15
Matrix: Water
Analysis Batch: 388447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	132	122		mg/L		93	90 - 110

Lab Sample ID: LLCS 180-388447/5
Matrix: Water
Analysis Batch: 388447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	15.9	14.5		mg/L		91	75 - 125

HPLC/IC

Analysis Batch: 387630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133313-1	BC-0.8A	Total/NA	Water	EPA 300.0 R2.1	
180-133313-2	BC-0.5.7	Total/NA	Water	EPA 300.0 R2.1	
180-133313-3	BC-0.5.6	Total/NA	Water	EPA 300.0 R2.1	
180-133313-4	BC-0.5.5	Total/NA	Water	EPA 300.0 R2.1	
180-133313-5	BC-BR	Total/NA	Water	EPA 300.0 R2.1	
180-133313-6	BC-0.3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-387630/7	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-387630/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-133313-1 MS	BC-0.8A	Total/NA	Water	EPA 300.0 R2.1	
180-133313-1 MSD	BC-0.8A	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 387854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133313-1	BC-0.8A	Total Recoverable	Water	3005A	
180-133313-2	BC-0.5.7	Total Recoverable	Water	3005A	
180-133313-3	BC-0.5.6	Total Recoverable	Water	3005A	
180-133313-4	BC-0.5.5	Total Recoverable	Water	3005A	
180-133313-5	BC-BR	Total Recoverable	Water	3005A	
180-133313-6	BC-0.3	Total Recoverable	Water	3005A	
MB 180-387854/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-387854/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-133313-1 MS	BC-0.8A	Total Recoverable	Water	3005A	
180-133313-1 MSD	BC-0.8A	Total Recoverable	Water	3005A	

Analysis Batch: 388040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133313-1	BC-0.8A	Total Recoverable	Water	EPA 6020B	387854
180-133313-2	BC-0.5.7	Total Recoverable	Water	EPA 6020B	387854
180-133313-3	BC-0.5.6	Total Recoverable	Water	EPA 6020B	387854
180-133313-4	BC-0.5.5	Total Recoverable	Water	EPA 6020B	387854
180-133313-5	BC-BR	Total Recoverable	Water	EPA 6020B	387854
180-133313-6	BC-0.3	Total Recoverable	Water	EPA 6020B	387854
MB 180-387854/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	387854
LCS 180-387854/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	387854
180-133313-1 MS	BC-0.8A	Total Recoverable	Water	EPA 6020B	387854
180-133313-1 MSD	BC-0.8A	Total Recoverable	Water	EPA 6020B	387854

Analysis Batch: 388275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133313-1	BC-0.8A	Total Recoverable	Water	EPA 6020B	387854
180-133313-2	BC-0.5.7	Total Recoverable	Water	EPA 6020B	387854
180-133313-3	BC-0.5.6	Total Recoverable	Water	EPA 6020B	387854
180-133313-4	BC-0.5.5	Total Recoverable	Water	EPA 6020B	387854
180-133313-5	BC-BR	Total Recoverable	Water	EPA 6020B	387854
MB 180-387854/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	387854
LCS 180-387854/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	387854
180-133313-1 MS	BC-0.8A	Total Recoverable	Water	EPA 6020B	387854
180-133313-1 MSD	BC-0.8A	Total Recoverable	Water	EPA 6020B	387854

QC Association Summary

Client: Southern Company
Project/Site: Arkwright Surfacewater

Job ID: 180-133313-1

General Chemistry

Analysis Batch: 387591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133313-1	BC-0.8A	Total/NA	Water	SM 2540C	
180-133313-2	BC-0.5.7	Total/NA	Water	SM 2540C	
180-133313-3	BC-0.5.6	Total/NA	Water	SM 2540C	
180-133313-4	BC-0.5.5	Total/NA	Water	SM 2540C	
180-133313-5	BC-BR	Total/NA	Water	SM 2540C	
180-133313-6	BC-0.3	Total/NA	Water	SM 2540C	
MB 180-387591/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-387591/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-133313-1 DU	BC-0.8A	Total/NA	Water	SM 2540C	

Analysis Batch: 388447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-133313-1	BC-0.8A	Total/NA	Water	SM2320 B	
180-133313-2	BC-0.5.7	Total/NA	Water	SM2320 B	
180-133313-3	BC-0.5.6	Total/NA	Water	SM2320 B	
180-133313-4	BC-0.5.5	Total/NA	Water	SM2320 B	
180-133313-5	BC-BR	Total/NA	Water	SM2320 B	
180-133313-6	BC-0.3	Total/NA	Water	SM2320 B	
MB 180-388447/16	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-388447/15	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-388447/5	Lab Control Sample	Total/NA	Water	SM2320 B	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Johnson/Swanson	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone: 678.485.5298	E-Mail: shali.brown@eurofinset.com		Page:
Company: GA Power				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): standard			
State, Zip: GA, 30308				
Phone: 404-506-7116(Tel)	PO #:			
Email: SCS Contacts	WO #:			
Project Name: CCR - Plant Arkwright Surfacewater	Project #: 18023157			
Site: Georgia	SSOW#:			

Analysis Requested

244-ATLA

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	CCR App III[1]	Major Ions[2]	CCR App IV Metals[3]	Cobalt	Molybdenum	Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
BC-0.8a	2/2/22	1831	G	W			x	x		x	x	x		CCR App III[1] - Boron, Calcium, Chloride, Fluoride, Sulfate, TDS
BC-0.5.7	2/2/22	1605	G	W			x	x		x				
BC-0.5.6	2/2/22	1553	G	W			x	x		x	x	x		Major Ions[2] - Mg, Na, K, total alkalinity, bicarbonate alkalinity
BC-0.5.5	2/2/22	1532	G	W			x	x		x	x	x		
BC-BR	2/2/22	1505	G	W			x	x		x	x	x		CCR App IV Metals[3] - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Floride, Lead, Lithium, Molybdenum, Radium 226 and 228 combined
BC-0.3	2/2/22	1144	G	W			x	x		x	x	x		

180-133313 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	02/03/22 1130	Arcadis		2/3/22 11:30	ETA
Relinquished by:	3/2/22 16:00	ETA		2-8-22	EBATH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:30	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:


SHIP DATE: 03FEB22
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509
BILL RECIPIENT
PITTSBURGH
PA 15238
ARCADIS – ARKWRIGHT
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18
FedEx Express
FRI – 04 FEB 10:30A
PRIORITY OVERNIGHT
2 of 4
MPS# 5220 7115 9819
Mstr# 5220 7115 9808
0201
15238
PA–US
PIT
NA AGCA


Eurofins
Environment Testing
TestAmerica
ORIGIN ID:LIYA
GEORGE TAYLOR
EUROFINS TESTING
6215 REGENCY PAR
SUITE 900
NORCROSS, GA 300
UNITED STATES US
DATE: 03FEB22
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509
BILL RECIPIENT
SAMPLE R
EUROFINS
301 ALPH
RIDC PAR
PITTSBURGH PA
(412) 963–7058
REF: ARCADIS – ARKWRIGHT
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
FedEx Express
4 of 4
MPS# 5220 7115 9830
Mstr# 5220 7115 9808
0263
0201
PRIORITY OVERNIGHT
15238
PA–US
PIT
NA AGCA
180-133313 Waybill

not lif

RT 98 FZ

10.

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 03F
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: ARCADIS - ARKWRIGHT

Uncorrected temp 2.9 °C
Thermometer ID 16
CF
Initials MO
PT-WI-SR-001 effective 11/8/18

FedEx Express

3 of 4
MPS# 0263 5220 7115 9820
Mstr# 5220 7115 9808 0201

FRI - 04 FEB 10:30A
PRIORITY OVERNIGHT

NA AGCA

15238
PA-US PIT

eurofins | Environment Testing TestAmerica

159469-434 MTW EXP 09/22

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 03FEB22
ACTWGT: 55.70 LB
CAD: 859116/CAFE3509

BILL RECIPIENT

TO SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: ARCADIS - ARKWRIGHT

Uncorrected temp 2.9 °C
Thermometer ID 16
CF
Initials MO
PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 4
TRK# 0201 5220 7115 9808
MASTER

FRI - 04 FEB 10:30A
PRIORITY OVERNIGHT

NA AGCA

15238
PA-US PIT

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 180-454410.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-133313-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 2/21/2022			Preservation Codes:
City: Earth City	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Arkwright Surfacewater	Project #: 18023157			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Radium 226	9320_Ra228/PrecSep_0 Radium 228	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BC-0.3 (180-133313-6)	2/2/22	11:44 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	2-9-22 1700	[illegible]	FED EX		
2	FED EX			Siena Worthington	2-10-22 1035	ESTSR
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-133313-1

Login Number: 133313
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

B.4 Data Quality Evaluation

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 180-126160-1
SAMPLING DATES: August 23, 2021
Plant Arkwright Ash Pond No. 1 - Background Event #1

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
AP1PZ-6	AP1PZ-6	N	180-126160-1	6020B	molybdenum	0.0013	J	J	--	mg/L
AP1PZ-6	AP1PZ-6	N	180-126160-1	7470A	mercury	<0.00013	F2 F1 *+	UJ	LD	mg/L

Notes:
Metals results are total metals unless otherwise noted.

Laboratory Qualifiers:
*+ = LCS and/or LCSD is outside acceptance limits, high biased
J= Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1 = MS and/or MSD recovery exceeds control limits.
F2 = MS/MSD RPD exceeds control limits

Reason Codes:
LD = Laboratory duplicate precision.
-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:
J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.
UJ = The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.

Prepared by/Date: DWK 08/31/21
Checked by/Date: JAH 09/01/21

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Metals by SW6020B
Laboratory and Lot: TAL PIT SDG: 180-126160-1
Reviewer/Date: D. Knaub 08/31/21 **Senior Reviewer/Date:** J. Hartness 09/01/21

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (HNO_3 to pH<2)** OK, 4.2°C	
X			**Holding times met (180 days)** Coll: 08/23/21 Prep: Total metals – 08/26/21 Anal: Total metals – 08/27/21	
X			**QC Blanks Review** Method Blanks: p. 10 MB 180-369320/1-A = All ND Field Blank: FB-1 (SDG: 180-125940-1): B= 0.054 J x 10 **= 0.54 mg/L** Tl= 0.0027 J x 10 **= 0.027 mg/L** ***Flag results <10x blank "U*"*** *- No flags, B results in sample >10x FB-1 and Tl results ND* FB-2 (SDG: 180-126095-1): B= 0.061 J x 10 **= 0.61 mg/L** ***Flag results <10x blank "U*"*** *No flags, B results in sample >10x FB-2* Equipment Blank: EB-1 (SDG: 180-125940-1) = ND EB-2 (SDG: 180-126095-1) = ND	
X			**Laboratory Control Sample (LCS) recovery within limits (Metals 80-120%, Hg = 80-120%)** p. 10 LCS 180-369320/2-A = All OK	
		X	**Lab Duplicate - Field Duplicate precision goals met (20%)** No field or lab dups reported with this SDG	
		X	**Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)** None in this SDG	
		X	**Total metals vs dissolved metals within limits (Diss < 10% more than total)** *Total metals only*	
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)** 100% of results were checked	

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Mercury by SW7470A
Laboratory and Lot: TAL PIT SDG: 180-126160-1
Reviewer/Date: D. Knaub 08/31/21 **Senior Reviewer/Date:** J. Hartness 09/01/21

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (Cool to 6ºC)** OK, 4.2ºC	
X			**Holding times met (28 days)** Coll: 08/23/21 Prep: 08/26/21 Anal: 08/30/21	
X			**QC Blanks Review** Method Blanks p. 10 MB 180-369283/1-A = ND Field Blank: FB-1 (SDG: 180-125940-1) = ND FB-2 (SDG: 180-126095-1) = ND Equipment Blank: EB-1 (SDG: 180-125940-1) = ND EB-2 (SDG: 180-126095-1) = ND	
	X		**Laboratory Control Sample (LCS) recovery within lab limits (80-120%)** p. 11 LCS 180-369283/2-A = 189% ***Flag assoc. positive results J*** *No flags necessary, bias is high and assoc. result ND*	
	X		**Lab Duplicate - Field Duplicate precision goals met (20%)** No field duplicate reported with this SDG Use MS/MSD for lab duplicate	
	X		**Matrix Spike recoveries and RPDs within limits (if applicable)** p. 11 AP1PZ-6 Hg = 129, 97% RPD = 29 ***Flag assoc. result UJ:*** ***Reason Code: LD***	
		X	**Total metals vs dissolved metals within limits (Diss < 10% more than total)** *Total Hg only in this SDG*	
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)** 100% of results were checked	

Data Evaluation Narrative
Project: Plant Arkwright AP1 Background and Delineation Sampling
Wood Project Number: 6123211714.2105.**
Site: Ash Pond No. 1 – Former Plant Arkwright, Georgia
Matrix: Groundwater

Eurofins TestAmerica SDG No: 180-129189-1

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the Background and Delineation groundwater sampling event #2 for Ash Pond No. 1 at the former Plant Arkwright, located in Arkwright, Georgia in October 2021 for Southern Company Services (SCS). The samples were collected and analyzed per the protocols presented in the *Draft Former Plant Arkwright Field Sampling Plan* (FSP) (SCS, 2016) and in accordance with the monitoring requirements of §§ 257.90 through 257.95 as referenced in the Georgia Environmental Protection Division (EPD) Rules 391-3-4-.10(6)(a)-(c) and 391-3-4-.14. GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) § 257 Subpart D.

The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory's precision and accuracy limits, the method requirements, and the SCS Field Sampling Plan (FSP) (SCS, 2016). DQE data qualifications were applied, if necessary, using the procedures in United States Environmental Protection Agency (USEPA) *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020), as guidance, and professional judgment using the following qualifiers:

Qualifier	Usable Data
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. *SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.*
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.

Qualifier	Usable Data (continued)
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. *Note: SCS does not use the "U" flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).*
U*	This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Qualifier	Unusable Data
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control (QC) criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The revised data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for USEPA Methods SW6020B, SW7470A, EPA 300.0 R2.1, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Eurofins TestAmerica in Pittsburgh, Pennsylvania (TAL PIT) and analyzed for specific total and dissolved Appendix III and IV metals by Method SW6020B including mercury by Method SW7470A, anions (chloride, fluoride, and sulfate) by Method 300.0 R2.1, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact, within temperature range, and properly preserved. However, it was noted that the COCs were not properly relinquished to the TAL PIT laboratory from the Eurofins Service Center in Norcross, GA or from the courier to the Eurofins Service Center.

Action: Corrective action has been initiated by the laboratory on proper custody procedures and COC documentation.

Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
AP1GWA-1	10/26/21	II	AP1PZ-4	10/27/21	II
AP1GWA-2	10/26/21	II	AP1PZ-1	10/28/21	II
AP1PZ-8	10/27/21	II	AP1PZ-2	10/28/21	II
AP1PZ-6	10/26/21	II	AP1PZ-5	10/29/21	II
AP1PZ-7	10/26/21	II	**QC Samples:**		

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
AP1PZ-10	10/27/21	II	FB-1	10/27/21	II
AP1PZ-9	10/28/21	II	EB-1	10/26/21	II
AP1PZ-11	10/28/21	II	DUP-1	10/26/21	II
AP1PZ-3	10/29/21	II	EB-2	10/28/21	II

These samples were collected from Ash Pond No. 1 monitoring wells between October 26 and October 29, 2021. Sample *DUP-1* is a field duplicate of *AP1PZ-6*. The field and equipment blanks associated with this event include field blank FB-1 and equipment blanks EB-1 and EB-2. Wood added a date code suffix (e.g. -102821) to the sample IDs to create unique IDs in the database. It was also noted that the laboratory interpreted the sample IDs on the COC to contain the letter "l" instead of the number '"1", however the correct sample IDs were entered into the database.

Action: The laboratory was informed and reissued the laboratory report with corrected sample IDs.

The analytical results for the metals, mercury, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B)

The samples were submitted to TAL PIT for total and dissolved CCR Appendix III and IV metals by Methods SW6020B. The CCR Appendix III metals are: boron (B) and calcium (Ca). The CCR Appendix IV metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), lead (Pb), lithium (Li), mercury (Hg – discussed below), molybdenum (Mo), selenium (Se), and thallium (Tl). Each of the Level II components were within the QC limits except for method blank contamination and MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 6-month analysis holding time.

Method Blanks

One or more of the method blanks associated with the samples analyzed in this SDG contained reportable concentrations of B and Tl or Pb between the method detection limit (MDL) and the reporting limit (RL). Associated results less than ten times (10x) the blank value are considered not detected. **Reason Code: BL**

Action: The Pb results for AP1PZ-4, AP1PZ-1, and AP1PZ-2 were qualified as not detected due to blank contamination and flagged "U". No qualification was necessary for B or Tl because the associated results were greater than 10x or not detected in the associated samples.*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A batch MS/MSD analysis was performed on sample AP1PZ-4. The recoveries and RPDs were within QC limits except for the Ca recoveries, which were below the lower QC limit indicating possible low bias.

> *Action: No qualification was necessary because the parent sample result was greater than 4x the spike amount.*

Post Digestion Spike (PDS)

A PDS analysis was not available for review.

Field Duplicate Precision

One field duplicate/sample pair was submitted with this SDG and was analyzed for metals, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process on non-dedicated sampling equipment. Field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. Field blank (FB-1) and equipment blanks (EB-1, EB-2) were reported with this SDG, and metals were not detected in the equipment or field blanks.

Reporting Limits

The laboratory RLs met the SCS project RLs and were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. None of the samples in this SDG required dilution.

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value verses the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. Total and dissolved metals were reported for AP1PZ-4, and the totals metals results were greater than their associated dissolved metal.

Mercury (SW7470A)

The samples were submitted to TAL PIT for total mercury by Method SW7470A, and each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 6-month analysis holding time.

Method Blanks

The method blanks associated with the samples analyzed within this SDG did not contain reportable concentrations of mercury.

Laboratory Control Sample (LCS)

The percent recoveries for mercury were within the QC limits.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A batch MS/MSD analysis for mercury was not performed on any samples in this SDG.

Field Duplicate Precision

One field duplicate/sample pair was submitted with this SDG and was analyzed for mercury, and the RPD could not be calculated because mercury was not detected in the associated samples.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. The field blank (FB-1) and equipment blanks (EB-1 and EB-2) were collected with this SDG, and mercury was not detected.

Reporting Limits

The laboratory RLs met the SCS project RLs and were below the screening values for samples submitted for the analysis of metals by USEPA Method SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. None of the samples in this SDG required dilution.

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. However, there were none in this SDG.

Total and Dissolved Metals Comparison

Total and dissolved mercury was reported for AP1PZ-4, and mercury was not detected in either sample.

Anions (EPA 300.0 R2.1)

The samples were submitted to TAL PIT for anions (chloride, fluoride, and sulfate) by Method 300.0 R2.1. Each of the Level II components were within the QC limits except for MS/MSD recoveries, however no qualification was necessary.

Holding Times

The sample analyses were performed within the 28-day analysis holding time.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs for anions were performed on samples AP1GWA-1, and the MSD recovery for sulfate was below the lower QC limit indicating possible low bias:

Action: No qualification was necessary because the MS recovery and RPD were within QC limits.

Field Duplicate Precision

One field duplicate/sample pair was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. The field blank (FB-1) and equipment blanks (EB-1 and EB-2) were collected with this SDG, and anions were not detected.

Reporting Limits

The laboratory RLs met the SCS project RLs and were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 R2.1. Samples that required a dilution resulted in elevated RLs. The following sample dilutions were performed:

Sample	Anion	Dilution
AP1PZ-2	sulfate	5x
AP1PZ-3	sulfate	10x
AP1PZ-4	sulfate	10x
AP1PZ-5	sulfate	20x
AP1PZ-6	chloride	2.5x
	fluoride	2.5x
	sulfate	25x

Sample	Anion	Dilution
DUP-1	chloride	2.5x
	fluoride	2.5x
	sulfate	25x
AP1PZ-7	sulfate	10x
AP1PZ-8	sulfate	5x
AP1PZ-9	sulfate	5x
AP1PZ-10	sulfate	5x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

TDS (SM 2540C)

The samples were submitted to TAL PIT for TDS by Method SM 2540C, and each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 7-day analysis holding time.

Method Blanks

The method blanks did not contain reportable levels of TDS.

Laboratory Control Samples (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate/sample pair was collected with this SDG, and the RPD was within QC limits.

Laboratory Duplicate Precision

A laboratory duplicate was analyzed on project samples AP1PZ-7 and AP1PZ-9, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment blank samples and field blank samples did not contain TDS.

Reporting Limits

The laboratory RL met the SCS project RL and was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however there were none in this SDG.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. Professional judgment was not used to modify flags applied to any results reported in this SDG.

Completeness

A total of 13 wells in Ash Pond No. 1, along with the required QC samples, was sampled and analyzed during the October 2021 background event #2 according to the Scope of Work provided for the background and delineation sampling. The results for metals, mercury, anions, and TDS for each of the wells and QC samples were reported in this SDG.

Completeness of the field sampling activities were assessed in terms of the actual number and type of sample results received from the field and laboratory, as compared with the planned number and type of sample results. All samples planned were collected which meets a field completeness of 100%.

Analytical completeness of data is a measure of the number of valid project-specific data results obtained in comparison to the total number of data results projected to achieve project DQOs. Valid data are defined as data that meet the project specific DQOs. Each of the sample results in this SDG were usable which equals a completeness of 100%, which exceeds the 90 percent goal for field and laboratory data expected for this project.

References

SCS, 2016, Draft Field Sampling Plan – Former Plant Arkwright, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), August 17, 2016. Permit modification to include the Appendix III and IV sampling requirements; approval of modified permit and FSP pending.

USEPA, 2020. *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA-542-R-20-006, November 2020.

Prepared by/Date: DWK 12/08/21
Checked by/Date: JAH 12/15/21

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Metals by SW6020B
Laboratory and Lot: TAL PIT SDG: 180-129189-1
Reviewer/Date: D. Knaub 12/08/21 **Senior Reviewer/Date:** J. Hartness 12/09/21

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (HNO_3 to pH<2)** OK, 3.7, 4.1, 4.2, and 4.7°C	
X			**Holding times met (180 days)** Coll: 10/26/21 – 10/29/21 Prep: Total metals – 11/02/21, 11/05/21, 11/08/21 Diss metals – 11/08/21 Anal: Total metals – 11/03/21, 11/06/21, 11/09/21, 11/11/21 Diss metals – 11/09/21	
	X		**QC Blanks Review** Method Blanks: p. 36 MB 180-377248/1-A B= 0.0594 J x 10 **= 0.594 mg/L** Tl= 0.00028 J x 10 **= 0.0028 mg/L** 11/3 ***Flag results <10x blank "U*":*** *No flags, assoc. results > 10x or ND* p. 37 MB 180-377767/1-A = All ND p. 38 MB 180-377808/1-A Pb = 0.000188 J x 10 **= 0.00188 mg/L** 11/9 ***Flag results <10x blank "U*": AP1PZ-4, AP1PZ-1, AP1PZ-2*** p. 38 MB 180-377808/1-A B only = ND p. 39 MB 180-377832/1-A = All ND Field Blank: FB-1 = ND Equipment Blank: EB-1 = ND EB-2 = ND	
X			**Laboratory Control Sample (LCS) recovery within limits (Metals 80-120%, Hg = 80-120%)** p. 36 LCS 180-377248/2-A = all OK p. 37 LCS 180-377767/2-A = all OK p. 38 LCS 180-377808/2-A = all OK p. 40 LCS 180-377832/2-A = all OK	

☒ **Lab Duplicate - Field Duplicate precision goals met (20%)**

	Dup-1 (mg/L)	AP1PZ-6 (mg/L)	RPD	Diff	RL
As	0.0016	0.0014	13.3		
Ba	0.03	0.031	3.3		
Be	0.00023J	0.00021J		0.00002	0.0025
B	6.9	6.5	6.0		
Ca	420	420	0.0		
Co	0.4	0.4	0.0		
Li	0.0057	0.0057	0.0		
Mo	0.00081J	0.00076J		0.00005	0.015

All ok

☒ **Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**

p. 39 AP1PZ-4 Ca = 71, 66% RPD = 0 *No flag, sample > 4x spike*

☒ **Total metals vs dissolved metals within limits (Diss < 10% more than total)**

Sample *AP1PZ-4* anal. for diss. metals

All total metals > assoc. dissolved metal

☒ **EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

100% of results were checked

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Mercury by SW7470A
Laboratory and Lot: TAL PIT SDG: 180-129189-1
Reviewer/Date: D. Knaub 12/08/21 **Senior Reviewer/Date:** J. Hartness 12/09/21

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review**	
			OK	
X			**Sample Preservation and cooler temperature met (Cool to 6°C)**	
			OK, 3.7, 4.1, 4.2, and 4.7°C	
X			**Holding times met (28 days)**	
			Coll: 10/26/21 – 10/29/21	
			Prep: 11/01/21, 11/04/21, 11/09/21 Anal: 11/01/21, 11/05/21, 11/10/21, 11/11/21	
X			**QC Blanks Review**	
			Method Blanks	
			p. 40 MB 180-377215/1-A = ND p. 40 MB 180-377670/1-A = ND	
			p. 41 MB 180-378156/1-A = ND p. 41 MB 180-378157/1-A = ND	
			Field Blank:	
			FB-1 = ND	
			Equipment Blank:	
			EB-1 = ND EB-2 = ND	
X			**Laboratory Control Sample (LCS) recovery within lab limits (80-120%)**	
			p. 40 LCS 180-377215/2-A = 110% p. 41 LCS 180-377670/2-A = 94%	
			p. 41 LCS 180-378156/2-A = 104% p. 41 LCS 180-378157/2-A = 98%	
X			**Lab Duplicate - Field Duplicate precision goals met (20%)**	
			Dup-1 = AP1PZ-6	
			both samples ND for Hg - ok	
		X	**Matrix Spike recoveries and RPDs within limits (if applicable)**	
			No MS/MSDs for Hg in this SDG	
X			**Total metals vs dissolved metals within limits (Diss < 10% more than total)**	
			Sample *AP1PZ-4* anal. for diss. Hg.	
			Both results ND	
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)**	
			100% of results were checked	

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Anions (chloride, fluoride, and sulfate) by E300.0 R2.1
Laboratory and Lot: TAL PIT SDG: 180-129189-1
Reviewer/Date: D. Knaub 12/08/21 **Senior Reviewer/Date:** J. Hartness 12/09/21

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (Cool to 6°C)** OK, 3.7, 4.1, 4.2, and 4.7°C	
X			**Holding time met (Cl, SO_4, F – 28 days)** Coll: 10/26/21 – 10/29/21 Anal: 10/29/21 and 10/31/21	
X			**QC Blanks Review** Method Blanks: p. 35 MB 180-376935/6 (10/29/21) = ND p. 35 MB 180-377100/7 (10/31/21) = ND p. 36 MB 180-377297/7 (11/02/21) = ND Field Blanks: FB-1 = ND Equipment Blanks: EB-1 = ND EB-2 = ND	
X			**Laboratory Control Sample (LCS) recovery within limits (90-110%)** p. 35 LCS 180-376935/5 = All OK p. 35 LCS 180-377100/6 = All OK p. 36 LCS 180-377297/6 = All OK	
X			**Lab Duplicate - Field Duplicate precision goals met (20%)**	

	Dup-1 (mg/L)	AP1PZ-6 (mg/L)	RPD	Diff	RL
Cl	10	10	0.0		
F	0.11 J	0.13 J		0.02	0.25
SO_4	2400	2200	8.7		

All ok

	X		**Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)** p. 35 AP1GWA-1 Cl = 102, 97% RPD = 4 F = 101, 95% RPD = 6 SO_4 = 99, 89% RPD = 4 *No flag, MS and RPD ok*

Metals by SW6020B (cont.)

YES	NO	NA	COMMENTS
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)** 100% of results were checked

Sample	**Anion**	**Dilution**
AP1PZ-7	sulfate	10x
AP1PZ-8	sulfate	5x
DUP-1	chloride	2.5x
	fluoride	2.5x
	sulfate	25x
AP1PZ-9	sulfate	5x
AP1PZ-10	sulfate	5x
AP1PZ-4	sulfate	10x
AP1PZ-5	sulfate	20x
AP1PZ-2	sulfate	5x
AP1PZ-3	sulfate	10x
AP1PZ-6	chloride	2.5x
	fluoride	2.5x
	sulfate	25x

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Total Dissolved Solids (TDS) by SM 2540C
Laboratory and Lot: TAL PIT SDG: 180-129189-1
Reviewer/Date: D. Knaub 12/08/21 **Senior Reviewer/Date:** J. Hartness 12/09/21

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (Cool to 6ºC)** OK, 3.7, 4.1, 4.2, and 4.7ºC	
X			**Holding times met (7 days)** Coll: 10/26/21 – 10/29/21 Anal: 11/01/21 – 11/03/21	
X			**QC Blanks Review** Method Blanks p. 41 MB 180-377220/2 TDS = ND p. 42 MB 180-377385/2 TDS = ND p. 42 MB 180-377503/2 TDS = ND Equipment Blanks: EB-1 TDS = ND Field Blanks: FB-1 TDS = ND FB-2 TDS = ND	
X			**Laboratory Control Sample (LCS) recovery within lab limits (80-120%)** p. 41 LCS 180-377220/1 TDS = 119% - OK p. 42 LCS 180-377385/1 TDS = 95% - OK p. 42 LCS 180-377503/1 TDS = 95% - OK	
X			**Lab Duplicate - Field Duplicate precision goals met (20%)** Dup-1 (mg/L) AP1PZ-6 (mg/L) RPD TDS 3100 3100 0.0% p. 42 Lab dup on AP1PZ-7 RPD = 2 OK p. 42 lab dup on AP1PZ-9 RPD = 8 OK	
		X	**Matrix Spike recoveries and RPDs within limits (if applicable)** *MS/MSD not applicable for TDS*	
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)** *All sample results checked vs. hardcopy.*	

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Metals by SW6020B
Laboratory and Lot: TAL PIT SDG: 180-133381-1
Reviewer/Date: D. Knaub 03/11/22 **Senior Reviewer/Date:** J. Hartness 03/18/22

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (HNO_3 to pH<2)** OK, 2.1, 2.5, 2.9, and 3.1°C	
X			**Holding times met (180 days)** Coll: 02/07/22 – 02/09/22 Prep: Total metals – 02/10/22, 02/12/22 Anal: Total metals – 02/11/22, 02/16/20	
	X		**QC Blanks Review** Method Blanks: p. 34 MB 180-387854/1-A = ND p. 35 MB 180-387855/1-A = ND p. 37 MB 180-388057/1-A = ND p. 38 MB 180-388058/1-A = ND Field Blank: FB-1 Ba = 0.0071 J x 10 **= 0.071 mg/L** ***Flag results <10x blank "U*": AP1PZ-9, DUP-1, AP1PZ-8, AP1PZ-6, AP1PZ-5, AP1PZ-4, AP1PZ-3, AP1PZ-2, AP1PZ-11, AP1PZ-10, AP1PZ-1, AP1GWA-2, AP1GWA-1*** Tl = 0.00057 J x 10 **= 0.0057 mg/L** ***Flag results <10x blank "U*": AP1PZ-7*** Equipment Blank: EB-1 = ND EB-2 B = 0.065 J x 10 **= 0.65 mg/L** ***Flag results <10x blank "U*": AP1GWA-1, AP1PZ-1, AP1PZ-10, AP1PZ-11, AP1PZ-2***	
X			**Laboratory Control Sample (LCS) recovery within limits (Metals 80-120%, Hg = 80-120%)** p. 34-35 LCS 180-387854/2-A = all OK p. 35-36 LCS 180-387855/2-A = all OK p. 37-38 LCS 180-388057/2-A = all OK p. 38 LCS 180-377832/2-A = all OK	

☒ **Lab Duplicate - Field Duplicate precision goals met (20%)**

	Dup-1 (mg/L)	AP1PZ-8 (mg/L)	RPD	Diff	RL
Ba	0.069 U*	0.067 U*	2.9		
B	2.7	2.6	3.8		
Ca	300	300	0.0		
Co	0.00058 J	0.00047 J	21.0	0.00011	0.001
Li	0.003 J	0.003 J	0.0	0	0.005
Mo	0.36 J	0.35 J	2.8	0.01	0.015

All ok

☒ **Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**

p. 36 FB-1 – All %rec and RPDs ok

p. 38-39 AP1PZ-6 B = 56, 87% RPD =5 *No flags, sample > 4x spike*

Ca = 32, 46% RPD = 1 *No flags, sample > 4x spike*

☒ **Total metals vs dissolved metals within limits (Diss < 10% more than total)**

No samples were analyzed for dissolved metals

☒ **EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

100% of results were checked

Data Evaluation Narrative
Project: Plant Arkwright AP1 Background and Delineation Sampling
Wood Project Number: 6123211714.2105.**
Site: Ash Pond No. 1 – Former Plant Arkwright, Georgia
Matrix: Groundwater

Eurofins TestAmerica SDG No: 180-133381-1

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the Background and Delineation groundwater sampling event #3 for Ash Pond No. 1 at the former Plant Arkwright, located in Arkwright, Georgia in February 2022 for Southern Company Services (SCS). The samples were collected and analyzed per the protocols presented in the *Draft Former Plant Arkwright Field Sampling Plan* (FSP) (SCS, 2016) and in accordance with the monitoring requirements of §§ 257.90 through 257.95 as referenced in the Georgia Environmental Protection Division (EPD) Rules 391-3-4-.10(6)(a)-(c) and 391-3-4-.14. GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) § 257 Subpart D.

The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory's precision and accuracy limits, the method requirements, and the SCS Field Sampling Plan (FSP) (SCS, 2016). DQE data qualifications were applied, if necessary, using the procedures in United States Environmental Protection Agency (USEPA) *National Functional Guidelines for Inorganic Superfund Methods Data Review* (USEPA, 2020), as guidance, and professional judgment using the following qualifiers:

Qualifier	Usable Data
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. *SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.*
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.

Qualifier	Usable Data (continued)
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. *Note: SCS does not use the "U" flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).*
U*	This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Qualifier	Unusable Data
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control (QC) criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The revised data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for USEPA Methods SW6020B, SW7470A, EPA 300.0 R2.1, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Eurofins TestAmerica in Pittsburgh, Pennsylvania (TAL PIT) and analyzed for specific total and dissolved Appendix III and IV metals by Method SW6020B including mercury by Method SW7470A, anions (chloride, fluoride, and sulfate) by Method 300.0 R2.1, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact, within temperature range, and properly preserved. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
AP1GWA-1	02/07/22	II	AP1PZ-8	02/08/22	II
AP1GWA-2	02/07/22	II	AP1PZ-9	02/08/22	II
AP1PZ-1	02/08/22	II	AP1PZ-10	02/09/22	II
AP1PZ-2	02/07/22	II	AP1PZ-11	02/08/22	II
AP1PZ-3	02/08/22	II	**QC Samples:**		
AP1PZ-4	02/08/22	II	FB-1	02/07/22	II
AP1PZ-5	02/08/22	II	EB-1	02/08/22	II
AP1PZ-6	02/08/22	II	DUP-1	02/08/22	II
AP1PZ-7	02/07/22	II	EB-2	02/08/22	II

These samples were collected from Ash Pond No. 1 monitoring wells between February 7 and February 9, 2022. Sample *DUP-1* is a field duplicate of *AP1PZ-8*. The field and equipment blanks associated with this event include field blank FB-1 and equipment blanks EB-1 and EB-2. Wood added a date code suffix (e.g. -020822) to the sample IDs to create unique IDs in the database.

The analytical results for the metals, mercury, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B)

The samples were submitted to TAL PIT for total and dissolved CCR Appendix III and IV metals by Methods SW6020B. The CCR Appendix III metals are: boron (B) and calcium (Ca). The CCR Appendix IV metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), lead (Pb), lithium (Li), mercury (Hg – discussed below), molybdenum (Mo), selenium (Se), and thallium (Tl). Each of the Level II components were within the QC limits except for field and equipment blank contamination and MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 6-month analysis holding time.

Method Blanks

The method blanks associated with the samples analyzed within this SDG did not contain reportable concentrations of metals.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses were performed on samples FB-1 and AP1PZ-6. The recoveries and RPDs were within QC limits except for the boron and calcium in sample AP1PZ-6 , which were below the lower QC limit indicating possible low bias.

> *Action: No qualification was necessary because the parent sample result was greater than 4x the spike amount.*

Post Digestion Spike (PDS)

A PDS analysis was not available for review.

Field Duplicate Precision

One field duplicate/sample pair was submitted with this SDG and was analyzed for metals, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process on non-dedicated sampling equipment. Field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The field blank sample (FB-1) contained reportable concentrations of barium and thallium between the method detection limit (MDL) and the reporting limit (RL). Equipment blank EB-1 did not contain a reportable concentration of metals, however equipment blank EB-2 contained boron between the MDL and the RL.

> *Action: The Ba results for AP1PZ-1, AP1PZ-2, AP1PZ-3, AP1PZ-4, AP1PZ-5, AP1PZ-6, AP1PZ-8, DUP-1, AP1PZ-2, AP1PZ-9, AP1PZ-10, AP1PZ-11, AP1GWA-1, and AP1GWA-2, the Tl result for AP1PZ-7, and the B results for AP1GWA-1, AP1PZ-1, AP1PZ-2, AP1PZ-10, and AP1PZ-11, were qualified as not detected due to blank contamination and flagged "U*".*

Reporting Limits

The laboratory RLs met the SCS project RLs and were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. None of the samples in this SDG required dilution.

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value verses the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No samples were collected for dissolved metals.

Mercury (SW7470A)

The samples were submitted to TAL PIT for total mercury by Method SW7470A, and each of the Level II components were within the QC limits except for LCS recoveries; however, no qualification was necessary.

Holding Times

The sample analyses were performed within the 6-month analysis holding time.

Method Blanks

The method blanks associated with the samples analyzed within this SDG did not contain reportable concentrations of mercury.

Laboratory Control Sample (LCS)

The percent recoveries for mercury were within the QC limits with one exception. The recovery of mercury in the LCS was above the upper QC limit in one analytical batch, indicating possible high bias of the associated positive results.

> *Action: No qualification was necessary because mercury was not detected in any associated samples.*

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A batch MS/MSD analysis for mercury was not performed on any samples in this SDG.

Field Duplicate Precision

One field duplicate/sample pair was submitted with this SDG and was analyzed for mercury, and the RPD could not be calculated because mercury was not detected in the associated samples.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. The field blank (FB-1) and equipment blanks (EB-1 and EB-2) were collected with this SDG, and mercury was not detected.

Reporting Limits

The laboratory RLs met the SCS project RLs and were below the screening values for samples submitted for the analysis of metals by USEPA Method SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. None of the samples in this SDG required dilution.

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. However, there were none in this SDG.

Total and Dissolved Metals Comparison

Total and dissolved mercury was not reported for any samples in this SDG.

Anions (EPA 300.0 R2.1)

The samples were submitted to TAL PIT for anions (chloride, fluoride, and sulfate) by Method 300.0 R2.1. Each of the Level II components were within the QC limits except for MS/MSD recoveries, however no qualification was necessary.

Holding Times

The sample analyses were performed within the 28-day analysis holding time.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs for anions were performed on samples AP1PZ-2, and the recoveries for sulfate were below the lower QC limit indicating possible low bias:

Action: The sulfate result for sample AP1PZ-2 was qualified as estimated and flagged "J".

Field Duplicate Precision

One field duplicate/sample pair was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. The field blank (FB-1) and equipment blanks (EB-1 and EB-2) were collected with this SDG, and anions were not detected.

Reporting Limits

The laboratory RLs met the SCS project RLs and were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 R2.1. Samples that required a dilution resulted in elevated RLs. The following sample dilutions were performed:

Sample	**Anion**	**Dilution**
AP1PZ-2	sulfate	5x
AP1PZ-3	sulfate	10x
AP1PZ-4	sulfate	10x
AP1PZ-5	chloride	2.5x
	fluoride	2.5x
	sulfate	25x
AP1PZ-6	chloride	2.5x
	fluoride	2.5x
	sulfate	2.5x
AP1PZ-7	sulfate	10x
AP1PZ-8	sulfate	10x
DUP-1	sulfate	10x
AP1PZ-9	sulfate	5x
AP1PZ-10	sulfate	5x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

TDS (SM 2540C)

The samples were submitted to TAL PIT for TDS by Method SM 2540C, and each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 7-day analysis holding time.

Method Blanks

The method blanks did not contain reportable levels of TDS.

Laboratory Control Samples (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate/sample pair was collected with this SDG, and the RPD was within QC limits.

Laboratory Duplicate Precision

A laboratory duplicate was analyzed on project samples AP1PZ-7 and AP1PZ-9, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment blank samples and field blank samples did not contain TDS.

Reporting Limits

The laboratory RL met the SCS project RL and was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however there were none in this SDG.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. Professional judgment was not used to modify flags applied to any results reported in this SDG.

Completeness

A total of 13 wells in Ash Pond No. 1, along with the required QC samples, was sampled and analyzed during the February 2022 background event #3 according to the Scope of Work provided for the background and delineation sampling. The results for metals, mercury, anions, and TDS for each of the wells and QC samples were reported in this SDG.

Completeness of the field sampling activities were assessed in terms of the actual number and type of sample results received from the field and laboratory, as compared with the planned number and type of sample results. All samples planned were collected which meets a field completeness of 100%.

Analytical completeness of data is a measure of the number of valid project-specific data results obtained in comparison to the total number of data results projected to achieve project DQOs. Valid data are defined as data that meet the project specific DQOs. Each of the sample results in this SDG were usable which equals a completeness of 100%, which exceeds the 90 percent goal for field and laboratory data expected for this project.

References

SCS, 2016, Draft Field Sampling Plan – Former Plant Arkwright, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), August 17, 2016. Permit modification to include the Appendix III and IV sampling requirements; approval of modified permit and FSP pending.

USEPA, 2020. *National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA-542-R-20-006, November 2020.

Prepared by/Date: DWK 03/16/22
Checked by/Date: JAH 03/18/22

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 180-133381-1
SAMPLING DATES: February 7 - 9, 2022
Plant Arkwright Ash Pond No. 1 - Background Event #3

Field Sample ID	Location ID	Fraction	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
AP1GWA-1	AP1GWA-1	total	N	180-133381-1	6020B	barium	0.053		U*	BF	mg/L
AP1GWA-1	AP1GWA-1	total	N	180-133381-1	6020B	beryllium	0.0023	J	J	--	mg/L
AP1GWA-1	AP1GWA-1	total	N	180-133381-1	6020B	boron	0.13		U*	BE	mg/L
AP1GWA-1	AP1GWA-1	total	N	180-133381-1	6020B	cadmium	0.00046	J	J	--	mg/L
AP1GWA-1	AP1GWA-1	total	N	180-133381-1	6020B	selenium	0.0025	J	J	--	mg/L
AP1GWA-2	AP1GWA-2	total	N	180-133381-1	300.0	fluoride	0.075	J	J	--	mg/L
AP1GWA-2	AP1GWA-2	total	N	180-133381-1	6020B	barium	0.035		U*	BF	mg/L
AP1GWA-2	AP1GWA-2	total	N	180-133381-1	6020B	lithium	0.0017	J	J	--	mg/L
AP1PZ-1	AP1PZ-1	total	N	180-133381-1	300.0	fluoride	0.079	J	J	--	mg/L
AP1PZ-1	AP1PZ-1	total	N	180-133381-1	6020B	barium	0.053		U*	BF	mg/L
AP1PZ-1	AP1PZ-1	total	N	180-133381-1	6020B	boron	0.33		U*	BE	mg/L
AP1PZ-1	AP1PZ-1	total	N	180-133381-1	6020B	cobalt	0.00054	J	J	--	mg/L
AP1PZ-1	AP1PZ-1	total	N	180-133381-1	6020B	lithium	0.0043	J	J	--	mg/L
AP1PZ-1	AP1PZ-1	total	N	180-133381-1	6020B	molybdenum	0.001	J	J	--	mg/L
AP1PZ-1	AP1PZ-1	total	N	180-133381-1	6020B	selenium	0.00096	J	J	--	mg/L
AP1PZ-10	AP1PZ-10	total	N	180-133381-1	6020B	barium	0.036		U*	BF	mg/L
AP1PZ-10	AP1PZ-10	total	N	180-133381-1	6020B	boron	0.33		U*	BE	mg/L
AP1PZ-10	AP1PZ-10	total	N	180-133381-1	6020B	cobalt	0.0021	J	J	--	mg/L
AP1PZ-10	AP1PZ-10	total	N	180-133381-1	6020B	molybdenum	0.0037	J	J	--	mg/L
AP1PZ-11	AP1PZ-11	total	N	180-133381-1	300.0	fluoride	0.094	J	J	--	mg/L
AP1PZ-11	AP1PZ-11	total	N	180-133381-1	6020B	barium	0.021		U*	BF	mg/L
AP1PZ-11	AP1PZ-11	total	N	180-133381-1	6020B	boron	0.24		U*	BE	mg/L
AP1PZ-11	AP1PZ-11	total	N	180-133381-1	6020B	lithium	0.002	J	J	--	mg/L
AP1PZ-11	AP1PZ-11	total	N	180-133381-1	6020B	molybdenum	0.00069	J	J	--	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	300.0	fluoride	0.09	J	J	--	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	300.0	sulfate	630	F1	J	M-	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	6020B	arsenic	0.00031	J	J	--	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	6020B	barium	0.024		U*	BF	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	6020B	beryllium	0.0003	J	J	--	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	6020B	boron	0.44		U*	BE	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	6020B	cadmium	0.00062	J	J	--	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	6020B	lead	0.00025	J	J	--	mg/L
AP1PZ-2	AP1PZ-2	total	N	180-133381-1	6020B	selenium	0.0008	J	J	--	mg/L
AP1PZ-3	AP1PZ-3	total	N	180-133381-1	300.0	fluoride	0.059	J	J	--	mg/L
AP1PZ-3	AP1PZ-3	total	N	180-133381-1	6020B	barium	0.026		U*	BF	mg/L
AP1PZ-3	AP1PZ-3	total	N	180-133381-1	6020B	cadmium	0.0012	J	J	--	mg/L
AP1PZ-3	AP1PZ-3	total	N	180-133381-1	6020B	molybdenum	0.00065	J	J	--	mg/L
AP1PZ-4	AP1PZ-4	total	N	180-133381-1	6020B	barium	0.05600		U*	BF	mg/L
AP1PZ-4	AP1PZ-4	total	N	180-133381-1	6020B	cobalt	0.0012	J	J	--	mg/L
AP1PZ-4	AP1PZ-4	total	N	180-133381-1	6020B	molybdenum	0.0023	J	J	--	mg/L
AP1PZ-5	AP1PZ-5	total	N	180-133381-1	6020B	barium	0.069		U*	BF	mg/L
AP1PZ-6	AP1PZ-6	total	N	180-133381-1	300.0	fluoride	0.089	J	J	--	mg/L
AP1PZ-6	AP1PZ-6	total	N	180-133381-1	6020B	antimony	0.00051	J	J	--	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 180-133381-1
SAMPLING DATES: February 7 - 9, 2022
Plant Arkwright Ash Pond No. 1 - Background Event #3

Field Sample ID	Location ID	Fraction	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
AP1PZ-6	AP1PZ-6	total	N	180-133381-1	6020B	arsenic	0.00081	J	J	--	mg/L
AP1PZ-6	AP1PZ-6	total	N	180-133381-1	6020B	barium	0.023		U*	BF	mg/L
AP1PZ-6	AP1PZ-6	total	N	180-133381-1	6020B	beryllium	0.00036	J	J	--	mg/L
AP1PZ-7	AP1PZ-7	total	N	180-133381-1	6020B	arsenic	0.00037	J	J	--	mg/L
AP1PZ-7	AP1PZ-7	total	N	180-133381-1	6020B	cadmium	0.00043	J	J	--	mg/L
AP1PZ-7	AP1PZ-7	total	N	180-133381-1	6020B	cobalt	0.0013	J	J	--	mg/L
AP1PZ-7	AP1PZ-7	total	N	180-133381-1	6020B	lithium	0.0031	J	J	--	mg/L
AP1PZ-7	AP1PZ-7	total	N	180-133381-1	6020B	molybdenum	0.0025	J	J	--	mg/L
AP1PZ-7	AP1PZ-7	total	N	180-133381-1	6020B	thallium	0.00052	J	U*	BF	mg/L
AP1PZ-8	AP1PZ-8	total	N	180-133381-1	6020B	barium	0.067		U*	BF	mg/L
AP1PZ-8	AP1PZ-8	total	N	180-133381-1	6020B	cobalt	0.00047	J	J	--	mg/L
AP1PZ-8	AP1PZ-8	total	N	180-133381-1	6020B	lithium	0.003	J	J	--	mg/L
AP1PZ-9	AP1PZ-9	total	N	180-133381-1	6020B	barium	0.03		U*	BF	mg/L
AP1PZ-9	AP1PZ-9	total	N	180-133381-1	6020B	beryllium	0.00036	J	J	--	mg/L
AP1PZ-9	AP1PZ-9	total	N	180-133381-1	6020B	cadmium	0.00091	J	J	--	mg/L
DUP-1	AP1PZ-8	total	FD	180-133381-1	6020B	barium	0.069		U*	BF	mg/L
DUP-1	AP1PZ-8	total	FD	180-133381-1	6020B	cobalt	0.00058	J	J	--	mg/L
DUP-1	AP1PZ-8	total	FD	180-133381-1	6020B	lithium	0.0030	J	J	--	mg/L
EB-2	EB-2	total	EB	180-133381-1	6020B	boron	0.065	J	J	--	mg/L
FB-1	FB-1	total	FB	180-133381-1	6020B	barium	0.0071	J	J	--	mg/L
FB-1	FB-1	total	FB	180-133381-1	6020B	thallium	0.0006	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
F1 = MS and/or MSD recovery exceeds control limits.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".
BF = Field blank contamination. The result should be considered "not-detected".
M- = MS and MSD recoveries outside acceptance limits. The result may be biased low.
-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.
U* = This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 03/16/22
Checked by/Date: JAH 03/18/22

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Metals by SW6020B
Laboratory and Lot: TAL PIT SDG: 180-133381-1
Reviewer/Date: D. Knaub 03/11/22 **Senior Reviewer/Date:** J. Hartness 03/18/22

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (HNO_3 to pH<2)** OK, 2.1, 2.5, 2.9, and 3.1°C	
X			**Holding times met (180 days)** Coll: 02/07/22 – 02/09/22 Prep: Total metals – 02/10/22, 02/12/22 Anal: Total metals – 02/11/22, 02/16/20	
	X		**QC Blanks Review** Method Blanks: p. 34 MB 180-387854/1-A = ND p. 35 MB 180-387855/1-A = ND p. 37 MB 180-388057/1-A = ND p. 38 MB 180-388058/1-A = ND Field Blank: FB-1 Ba = 0.0071 J x 10 **= 0.071 mg/L** ***Flag results <10x blank "U*": AP1PZ-9, DUP-1, AP1PZ-8, AP1PZ-6, AP1PZ-5, AP1PZ-4, AP1PZ-3, AP1PZ-2, AP1PZ-11, AP1PZ-10, AP1PZ-1, AP1GWA-2, AP1GWA-1*** Tl = 0.00057 J x 10 **= 0.0057 mg/L** ***Flag results <10x blank "U*": AP1PZ-7*** Equipment Blank: EB-1 = ND EB-2 B = 0.065 J x 10 **= 0.65 mg/L** ***Flag results <10x blank "U*": AP1GWA-1, AP1PZ-1, AP1PZ-10, AP1PZ-11, AP1PZ-2***	
X			**Laboratory Control Sample (LCS) recovery within limits (Metals 80-120%, Hg = 80-120%)** p. 34-35 LCS 180-387854/2-A = all OK p. 35-36 LCS 180-387855/2-A = all OK p. 37-38 LCS 180-388057/2-A = all OK p. 38 LCS 180-377832/2-A = all OK	

☒ **Lab Duplicate - Field Duplicate precision goals met (20%)**

	Dup-1 (mg/L)	AP1PZ-8 (mg/L)	RPD	Diff	RL
Ba	0.069 U*	0.067 U*	2.9		
B	2.7	2.6	3.8		
Ca	300	300	0.0		
Co	0.00058 J	0.00047 J	21.0	0.00011	0.001
Li	0.003 J	0.003 J	0.0	0	0.005
Mo	0.36 J	0.35 J	2.8	0.01	0.015

All ok

☒ **Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**

p. 36 FB-1 – All %rec and RPDs ok

p. 38-39 AP1PZ-6 B = 56, 87% RPD =5 *No flags, sample > 4x spike*

Ca = 32, 46% RPD = 1 *No flags, sample > 4x spike*

☒ **Total metals vs dissolved metals within limits (Diss < 10% more than total)**

No samples were analyzed for dissolved metals

☒ **EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

100% of results were checked

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Mercury by SW7470A
Laboratory and Lot: TAL PIT SDG: 180-133381-1
Reviewer/Date: D. Knaub 03/16/22 **Senior Reviewer/Date:** J. Hartness 03/18/22

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (Cool to 6°C)** OK, 2.1, 2.5, 2.9, and 3.1°C	
X			**Holding times met (28 days)** Coll: 02/07/22 – 02/09/22 Prep: 02/14/22, 02/15/22, 02/16/22 Anal: 02/15/22, 02/22/22	
X			**QC Blanks Review** Method Blanks p. 39 MB 180-388111/1-A = ND p. 40 MB 180-388224/1-A = ND p. 40 MB 180-388428/1-A = ND Field Blank: FB-1 = ND Equipment Blank: EB-1 = ND EB-2 = ND	
X			**Laboratory Control Sample (LCS) recovery within lab limits (80-120%)** p. 39 LCS 180-388111/2-A = 104% p. 40 LCS 180-388224/2-A = 104% p. 40 LCS 180-388428/2-A = 165% ***Flag assoc. positive results "J":*** *No flags, assoc. results ND* *The lab also noted high CCV and low-level check standard recoveries, however no flags necessary.*	
X			**Lab Duplicate - Field Duplicate precision goals met (20%)** Dup-1 = AP1PZ-8 *both samples ND for Hg - ok*	
		X	**Matrix Spike recoveries and RPDs within limits (if applicable)** No MS/MSDs for Hg in this SDG	
X			**Total metals vs dissolved metals within limits (Diss < 10% more than total)** No samples anal. for diss. Hg.	
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)** 100% of results were checked	

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Anions (chloride, fluoride, and sulfate) by E300.0 R2.1
Laboratory and Lot: TAL PIT SDG: 180-133381-1
Reviewer/Date: D. Knaub 03/16/22 **Senior Reviewer/Date:** J. Hartness 03/18/22

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (Cool to 6ºC)** OK, 2.1, 2.5, 2.9, and 3.1ºC	
X			**Holding time met (Cl, SO_4, F – 28 days)** Coll: 02/07/22 – 02/09/22 Anal: 02/12/22, 02/14/22, and 02/15/22	
X			**QC Blanks Review** Method Blanks: p. 33 MB 180-388041/6 (02/12/22) = ND p. 33 MB 180-388140/7 (02/14/22) = ND p. 34 MB 180-388264/7 (02/15/22) = ND Field Blanks: FB-1 = ND Equipment Blanks: EB-1 = ND EB-2 = ND	
X			**Laboratory Control Sample (LCS) recovery within limits (90-110%)** p. 33 LCS 180-388041/5 = All OK p. 33 LCS 180-388140/6 = All OK p. 34 LCS 180-388264/5 = All OK	
X			**Lab Duplicate - Field Duplicate precision goals met (20%)**	

	Dup-1 (mg/L)	AP1PZ-8 (mg/L)	RPD	Diff	RL
Cl	3.2	3.1	3.2		
F	0.25	0.25	0.0		
SO_4	680	680	0.0		

All ok

	X		**Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)** p. 33 AP1PZ-2 Cl = 102, 105% RPD = 3 F = 100,103 % RPD = SO_4 = 77, 86% RPD = 3 ***Flag assoc. result "J"***

Metals by SW6020B (cont.)

YES	NO	NA	COMMENTS
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)** 100% of results were checked

Sample	**Anion**	**Dilution**
AP1PZ-2	sulfate	5x
AP1PZ-3	sulfate	10x
AP1PZ-4	sulfate	10x
AP1PZ-5	chloride	2.5x
	fluoride	2.5x
	sulfate	25x
AP1PZ-6	chloride	2.5x
	fluoride	2.5x
	sulfate	2.5x
AP1PZ-7	sulfate	10x
AP1PZ-8	sulfate	10x
DUP-1	sulfate	10x
AP1PZ-9	sulfate	5x
AP1PZ-10	sulfate	5x

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Arkwright Background and Delineation
Project No: 6123211714.2105.****
Method: Total Dissolved Solids (TDS) by SM 2540C
Laboratory and Lot: TAL PIT SDG: 180-133381-1
Reviewer/Date: D. Knaub 03/16/22 **Senior Reviewer/Date:** J. Hartness 03/18/22

YES	NO	NA		COMMENTS
X			**Case Narrative and COC Completeness Review** OK	
X			**Sample Preservation and cooler temperature met (Cool to 6ºC)** OK, 2.1, 2.5, 2.9, and 3.1ºC	
X			**Holding times met (7 days)** Coll: 02/07/22 – 02/09/22 Anal: 02/10/22, 02/11/22, 02/15/22	
X			**QC Blanks Review** Method Blanks p. 40 MB 180-387749/2 TDS = ND p. 40 MB 180-387904/2 TDS = ND p. 41 MB 180-387971/2 TDS = ND p. 41 MB 180-388388/2 TDS = ND Equipment Blanks: EB-1 TDS = ND Field Blanks: FB-1 TDS = ND FB-2 TDS = ND	
X			**Laboratory Control Sample (LCS) recovery within lab limits (80-120%)** p. 40 LCS 180-387747/1 TDS = 93% - OK p. 41 LCS 180-387904/1 TDS = 87% - OK p. 41 LCS 180-387971/1 TDS = 85% - OK p. 41 LCS 180-388388/1 TDS = 88% - OK	
X			**Lab Duplicate - Field Duplicate precision goals met (20%)** Dup-1 (mg/L) / AP1PZ-8 (mg/L) / RPD TDS 1300 / 1400 / 7.4%	
		X	**Matrix Spike recoveries and RPDs within limits (if applicable)** *MS/MSD not applicable for TDS*	
X			**EDD Data Verification vs. Hardcopy (10% samples for each SDG)** *All sample results checked vs. hardcopy.*	