



January 16, 2024

Mr. Trent Jones, P.E.
Chief, Waste Division
Mississippi Department of Environmental Quality
PO Box 2261
Jackson, MS 39225

Re: **Notification of Availability of 2023 Annual CCR Report**
Choctaw Generation Limited Partnership, L.L.L.P.
Ackerman, Mississippi (Choctaw County)
Agency Interest No. 677

Dear Mr. Jones:

In accordance with the requirements of 40 CFR 257.106(h)(1), Choctaw Generation Limited Partnership, L.L.L.P. (Choctaw Generation) is hereby notifying the Mississippi Department of Environmental Quality that the Coal Combustion Residuals (CCR) Groundwater Monitoring and Corrective Action Annual Report for calendar year 2023 has been placed in the facility's Operating Record and is available for review on the publicly accessible internet site.

Should you have any questions regarding this notification, please contact Jim Ward of Choctaw Generation at (662) 387-5758 or myself at (662) 840-5945.

Sincerely,

Brian Ketchum, PE
Principal, Senior Engineer

Cc: Jim Ward, PG, Environmental Compliance, Choctaw Generation (via email)
Rob Watson, VP, Asset Management, Choctaw Generation (via email)
Shane McCray, Compliance Manager, Choctaw Generation (via email)
Kirk Shelton, ECS (via email)
Caleb James, ECS (via email)

COAL COMBUSTION RESIDUALS (CCR) GROUNDWATER MONITORING AND CORRECTIVE ACTION ANNUAL REPORT



**CHOCTAW GENERATION LIMITED PARTNERSHIP, L.L.L.P.
2391 PENSACOLA ROAD
ACKERMAN, MS 39735
(662) 387-5758**

JANUARY 16, 2023

"FOR ALL YOUR ENVIRONMENTAL AND SAFETY CONSULTING NEEDS."

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Site Description and Regulatory Applicability	1
1.2	Annual Report Requirements.....	2
1.3	Professional Engineer Certification.....	4
2.0	OVERVIEW: DETECTION AND ASSESSMENT MONITORING	5
2.1	Detection Monitoring Program	5
2.2	Assessment Monitoring Program.....	5
3.0	GROUNDWATER MONITORING SYSTEM.....	8
3.1	Current Groundwater Monitoring System	8
3.2	Monitoring Well Installation	9
3.3	Monitoring Well Decommissioning	9
4.0	GROUNDWATER MONITORING DATA	11
4.1	Sample Requirements	11
4.2	Groundwater Elevation and Flow	12
4.3	Groundwater Sampling Results	13
5.0	ADDITIONAL INFORMATION	17
5.1	Alternative Monitoring Frequency	17
5.2	Demonstration of Invalid Statistically Significant Increase	17
5.3	Time Extension for Corrective Measures Assessment.....	18
6.0	CONCLUSION	19
6.1	Summary of Key Actions Completed	19
6.2	Key Activities for Upcoming Year.....	19

FIGURES:

Figure 1: Site Location Map

Figure 2: Facility Diagram

APPENDICES:

Appendix A: Potentiometric Surface Maps

Appendix B: Analytical Results and Chain-of-Custody Forms

Appendix C: Field Sampling Data

Appendix D: 2023 Groundwater Monitoring Summary

1.0 INTRODUCTION

1.1 SITE DESCRIPTION AND REGULATORY APPLICABILITY

Choctaw Generation Limited Partnership, L.L.L.P. (Choctaw Generation) is located near the City of Ackerman in Choctaw County, Mississippi. Choctaw Generation is in north central Mississippi on a 170-acre site. Choctaw Generation is bounded on the south by Pensacola Road and is located ½ mile west of US Highway 9. Figure 1 shows the location of the site. Choctaw Generation operates a single unit electrical generation facility designed to generate electricity for dispatch to the Tennessee Valley Authority (TVA) electrical system. The primary boiler fuel is lignite coal. As a result of combusting lignite coal, ash is created and must be disposed of or re-purposed. Choctaw Generation owns and operates an existing Ash Management Unit (AMU) for the placement and disposal of ash. The AMU (or CCR unit) is located in the northeastern portion of the property and consists of three (3) cells, as shown in Figure 2. The CCR unit encompasses approximately 64 acres of the Choctaw Generation site.

The site is currently regulated by the Mississippi Department of Environmental Quality (MDEQ) Solid Waste Regulations and Solid Waste Permit No. SW0100040462. The site is also required to comply with the Groundwater Monitoring and Corrective Action requirements of 40 CFR Part 257, Subpart D – Standards for the Disposal of Coal Combustion Residuals (CCR) in Landfills and Surface Impoundments. As an existing CCR landfill, the site was required to be in compliance with the following groundwater monitoring requirements by October 17, 2017:

- ☐ Install a groundwater monitoring system as required by §257.91;
- ☐ Develop a groundwater sampling and analysis program to include selection of the statistical procedures to be used for evaluating groundwater monitoring data as required by §257.93;
- ☐ Initiate the detection monitoring program to include obtaining a minimum of eight (8) independent samples for each background and downgradient well as required by §257.94(b); and
- ☐ Evaluate groundwater monitoring data for statistically significant increases over background levels for the constituents listed in Appendix III of Subpart D as required by §257.94.

The Choctaw Generation groundwater monitoring system was completed in accordance with the groundwater monitoring performance standards of §257.91 by June 2016. The initial Choctaw Generation CCR unit groundwater monitoring system consisted of three (3) background or upgradient wells and eight (8) downgradient wells. A Groundwater Monitoring Plan was developed in August 2016 in accordance with the groundwater sampling and analysis program requirements of §257.93. The Groundwater Monitoring Plan was updated in January 2019 to address an additional well installed at the site. The current Groundwater Monitoring Plan is available in the Choctaw Generation Operating Record and CCR Website. Sampling of the groundwater wells is conducted in accordance with the most current version of the

Groundwater Monitoring Plan. Eight (8) independent samples were collected and analyzed prior to October 17, 2017, initiating the groundwater monitoring program at the site.

Over time, wells have been replaced, added, and removed due to compromised well integrity as well as change in monitoring requirements. These changes are discussed further in Section 3.0. The current Choctaw Generation CCR unit groundwater monitoring system consists of three (3) background or upgradient wells and seven (7) downgradient wells which ensure complete coverage of the CCR unit. A facility diagram showing the monitoring well locations is included as Figure 2.

1.2 ANNUAL REPORT REQUIREMENTS

Choctaw Generation is required to prepare an annual groundwater monitoring and corrective action report (the Annual Report) no later than January 31, 2018, and annually thereafter, and place the report in the Operating Record. The Annual Report is also made available on the CCR Website within 30 days of filing the report in the Operating Record. The Annual Report must be maintained in the Operating Record and on the CCR Website for at least five (5) years.

Per §257.90(e), the Annual Report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. At a minimum, the Annual Report must contain the following information, to the extent available:

- ☐ A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;
- ☐ Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;
- ☐ In addition to all the monitoring data obtained under §§257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;
- ☐ A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and
- ☐ Other information required to be included in the annual report as specified in §§257.90 through 257.98.

- ❑ A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:
- At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95;
 - At the end of the current annual reporting period whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95;
 - If it was determined that there was a statistically significant increase over background for one or more constituents listed in Appendix III to the part pursuant to §257.94(e);
 - Identify those constituents listed in Appendix III to this part and the names of the monitoring wells associated with such an increase; and
 - Provide the date when the assessment monitoring program was initiated for the CCR unit.
 - If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in appendix IV to this part pursuant to §257.95(g) include all of the following:
 - Identify those constituents listed in Appendix IV to this part and the names of the monitoring wells associated with such an increase;
 - Provide the date when the assessment of corrective measures was initiated for the CCR unit;
 - Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit; and
 - Provide the date when the assessment of corrective measures was completed for the CCR unit.
 - Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of the remedy selection; and
 - Whether remedial activities were initiated or are ongoing pursuant to §257.98 during the current annual reporting period.

To comply with the requirements above, a map of the CCR unit and all upgradient and downgradient monitoring wells that are part of the current groundwater monitoring system are shown on Figure 2. Section 2 contains an overview and discussion of the status and any transition between monitoring programs (i.e., detection monitoring versus assessment monitoring) and the reason such monitoring program is in place. A discussion of the current monitoring well system and any monitoring wells installed or decommissioned is provided in Section 3.0. A summary of the monitoring data obtained during the annual reporting period is provided in Section 4.0. Section 5.0 presents additional information required by §§257.90 through 257.98 to be included in the Annual Report and which is not already addressed in the prior sections. Finally, Section 6.0 summarized actions completed during the reporting year and projects key activities planned for the following reporting year.

1.3 PROFESSIONAL ENGINEER CERTIFICATION

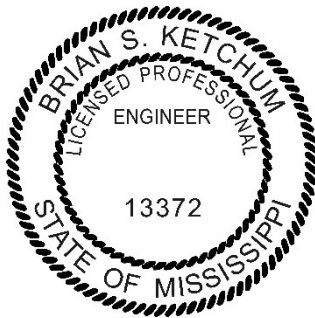
The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR Part 257, Subpart D and certifies that the Groundwater Monitoring and Corrective Action Annual Report was prepared under his/her direct supervision, in accordance with the requirements of 40 CFR 257.90 through 257.98. The undersigned Registered Professional Engineer certifies under penalty of the law that all information and statements provided in this report (including attachments), based on information and belief formed after reasonable inquiry, are true, accurate, and complete.



1/16/2024

Brian S. Ketchum, PE
Registration Number: 13372
State of Mississippi

Date Signed



(Seal)

2.0 OVERVIEW: DETECTION AND ASSESSMENT MONITORING

Choctaw Generation began the reporting year and is currently subject to the Assessment Monitoring Program requirements of §257.95, and groundwater monitoring as required by this program is discussed in Section 4.0. It was previously determined that there was a statistically significant increase over background for more than one constituent listed in Appendix III (e.g., chloride, sulfate, and TDS). A description of both the Detection Monitoring Program and Assessment Monitoring Program is provided below and includes a history of the monitoring as well any changes that occurred during the previous calendar year. It was determined in 2018 that there was a statistically significant level above the groundwater protection standard (GWPS) for lithium in monitoring wells CCR-3 and MW-9, cobalt in monitoring wells MW-9, MW-12, and MW-15, and later beryllium in MW-9. A review of the monitoring data suggested that the detection of lithium, cobalt, and beryllium above the GWPS could have been from an alternate source rather than a potential release of the CCR unit resulting in an Alternate Source Demonstration (ASD) being completed in December 2019. Therefore, the site continues in assessment monitoring.

2.1 DETECTION MONITORING PROGRAM

For existing CCR landfills, including the Choctaw Generation AMU, a minimum of eight (8) independent samples from each background and downgradient well must be collected and analyzed for the constituents listed in Appendix III and Appendix IV of 40 CFR 257, Subpart D by no later than October 17, 2017. These constituents are listed in Tables 4-1 and 4-2. After the eight (8) initial sampling events are completed to develop background data, the detection monitoring must be performed on a semiannual basis during the active life of the CCR unit and the post-closure period unless assessment monitoring is triggered.

In accordance with the requirements of the Detection Monitoring Program in §257.94(b), one (1) sample from each background (or upgradient) and downgradient well was analyzed for the seven (7) parameters in Appendix III on February 6-7, 2018. An evaluation of these results indicated statistically significant increases (SSI) above the prediction limits established during background monitoring for the following parameters in the associated wells: chloride (MW-9, MW-12, and MW-16), fluoride (MW-9 and OW-2), sulfate (CCR-3, MW-9, MW-12, MW-16, and OW-2), and TDS (CCR-3, MW-9, and MW-16). Therefore, the requirements of the Assessment Monitoring Program were triggered.

2.2 ASSESSMENT MONITORING PROGRAM

Due to SSI exceedances determined during the initial detection monitoring event on February 6-7, 2018, Choctaw Generation triggered the Assessment Monitoring Program under §257.95.

- ❑ On May 15-16, 2018, Choctaw Generation conducted the initial annual assessment monitoring event for all Appendix IV constituents. Choctaw Generation then conducted the first semiannual

assessment monitoring event on September 10-11, 2018, and the subsequent semiannual assessment monitoring event on March 19-20, 2019, for all Appendix III constituents and the ten (10) Appendix IV constituents previously detected during the annual Appendix IV monitoring event.

- ❑ On May 29-30, 2019, the annual monitoring event for all Appendix IV constituents was conducted. Based on the sampling results, twelve (12) Appendix IV constituents were detected, adding selenium and molybdenum to the Appendix IV constituents to be monitored during semiannual assessment monitoring events. The next two (2) semiannual assessment monitoring events were conducted on September 10-11, 2019, and March 25-26, 2020. These events included sampling for all Appendix III constituents and those Appendix IV constituents detected during the 2018 and 2019 annual monitoring events.
- ❑ On May 18, 2020, the annual monitoring event for all Appendix IV constituents was conducted. No new Appendix IV constituents were detected requiring no new constituents to be sampled in subsequent semiannual assessment monitoring events. The next two (2) semiannual assessment monitoring events were conducted on September 28, 2020, and March 15-16, 2021. These events included sampling for all Appendix III constituents and those Appendix IV constituents detected during previous annual monitoring events.
- ❑ On May 26, 2021, the annual monitoring event for all Appendix IV constituents was conducted. No new Appendix IV constituents were detected requiring no new constituents to be sampled in subsequent semiannual assessment monitoring events. The semiannual assessment monitoring events occurred on September 8, 2021, and March 23-24, 2022. Although the 2021 annual monitoring event is required to include Appendix IV constituents only, the laboratory analyzed the samples for boron and calcium (Appendix III) in addition to all Appendix IV constituents. Therefore, these results were included as part of the 2021 annual report.
- ❑ On May 31, 2022, the annual monitoring event for all Appendix IV constituents was conducted. No new Appendix IV constituents were detected requiring no new constituents to be monitored during subsequent semiannual monitoring events. The next two (2) semiannual assessment monitoring events were conducted on September 12-13, 2022, and March 13, 2023. These events included sampling for all Appendix III constituents and those Appendix IV constituents detected during previous annual monitoring events.
- ❑ On May 10, 2023, the annual monitoring event for all Appendix IV constituents was conducted. No new Appendix IV constituents were detected requiring no new constituents to be sampled in subsequent semiannual assessment monitoring events. The next semiannual event occurred on September 13, 2023, and the follow up semiannual event is planned for March 2024.

GWPS for all constituents detected during the initial and subsequent assessment monitoring events were established per the procedures in §257.95(h). All current Appendix IV constituents that are sampled during the semiannual assessment monitoring events are listed in Section 4.3.

The Appendix III and Appendix IV results from the sampling conducted during the reporting period, the background concentrations (or “prediction limits”) established under §257.94(b), and the GWPS established under §257.95(d)(2) are included in Appendix D of the Annual Report.

Due to a verified statistically significant increase (SSI) of Appendix IV constituents above the GWPS (lithium in monitoring wells CCR-3 and MW-9 and cobalt in monitoring wells MW-9, MW-12, and MW-15), Choctaw Generation initiated an assessment of corrective measures on January 30, 2019. The Assessment of Corrective Measures (ACM) Report was completed on June 29, 2019, after a 60-day extension.

After review of the monitoring analytical data from the 2019 period, trends in groundwater concentration led to the prospect that the detection of lithium, cobalt, beryllium (not verified), and molybdenum (not verified) at a SSL above the GWPS could have been from an alternate source rather than a potential release of the CCR unit or associated AMU basin. As discussed in Section 5.2, An ASD was then successfully completed on December 17, 2019, providing an evidential conclusion that cobalt and lithium detected at SSLs were a result of an alternate source. Due to the successful ASD, Choctaw Generation immediately ceased and discontinued corrective measure activities and continued assessment monitoring. Beryllium was then detected at a SSL above the GWPS in MW-9 during the 2020 annual assessment monitoring event and verified in the second semiannual assessment monitoring event on September 28, 2020. After research and review of analytical data, the ASD was then revised on August 20, 2020, to successfully address beryllium. Therefore, Choctaw Generation has continued in assessment monitoring.

3.0 GROUNDWATER MONITORING SYSTEM

3.1 CURRENT GROUNDWATER MONITORING SYSTEM

The owner or operator of a CCR unit must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer. The system should accurately represent the quality of background groundwater that has not been affected by leakage from a CCR unit (i.e., upgradient wells). In addition, the system should accurately represent the quality of groundwater passing the waste boundary of the CCR unit (i.e., downgradient wells). The downgradient wells should be installed at the waste boundary to ensure detection of groundwater contamination in the uppermost aquifer. The number, spacing, and depths of groundwater monitoring wells within the system were determined based upon site-specific technical information that included an assessment of items such as:

- ☐ Aquifer thickness and groundwater flow direction; and
- ☐ Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to, thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.

The groundwater monitoring system must include a minimum number of monitoring wells necessary to meet the performance standards and information specified above. The direction of groundwater flow through the CCR unit is to the northwest, which has been consistently determined through ongoing solid waste permit groundwater monitoring events. The locations for the monitoring wells were based upon the known direction of groundwater movement. The monitoring wells screen the uppermost laterally continuous aquifer below the base of ash fill. The base of ash fill is at an approximate elevation of 480 feet mean sea level (msl). The zone is screened and monitored at an approximate elevation of 470 feet msl, but varies across the site and through the unit.

The system must contain a minimum of at least one (1) upgradient and three (3) downgradient monitoring wells. The initial Choctaw Generation CCR unit groundwater monitoring system consisted of three (3) background or upgradient wells and eight (8) downgradient wells to ensure complete coverage of the CCR unit, which consists of three (3) ash disposal cells covering approximately 64 acres. Additional downgradient wells CCR5 (2018) and CCR-6, CCR-7, and CCR-8 (2019) were added to the groundwater monitoring system. The integrity of downgradient well, MW-16, was compromised and was replaced by downgradient well, MW-17 (2019). Downgradient wells, MW-15 and MW-17 were also compromised (2020) and were abandoned and removed from the groundwater monitoring system. In addition, downgradient wells CCR-6, CCR-7, and CCR-8 that are located on the mine property were removed from the current groundwater system as they are no longer needed for delineation in response to corrective measure

requirements. As a result, the current CCR unit groundwater monitoring system consists of three (3) background or upgradient wells (i.e., MW-7, MS-13, and MW-14) and seven (7) downgradient wells (i.e., MW-9, MW-12, OW-2, CCR-2, CCR-3, CCR-4, and CCR-5). A map showing the monitoring well locations is included as Figure 2, and a summary of the current monitoring wells is included as Table 3-1 below. Monitoring wells were installed according to the guidelines established in the 1994 USEPA Region IV RCRA Subtitle D Training Manual (SDTM, 1994), or other generally accepted guidelines, and are believed to meet the requirements of 40 CFR Part 257, Subpart D. For more detailed procedures related to the installation of the current groundwater monitoring system, refer to the CCR Groundwater Monitoring Plan available in the facility Operating Record and CCR Website.

Table 3-1: Groundwater Monitoring Wells

Well No.	Background or Downgradient	Elevation ⁽¹⁾ (ft)	Well Depth (ft)	Well Dia. (inches)
CCR-2	Downgradient	542.50	84.50	4
CCR-3	Downgradient	504.78	53.00	4
CCR-4	Downgradient	505.68	53.00	4
CCR-5	Downgradient	470.46	34.55	4
MW-7	Background (Upgradient)	571.76	56.92	4
MW-9	Downgradient	480.04	21.74	4
MW-12	Downgradient	474.19	19.09	4
MW-13	Background (Upgradient)	584.48	106.00	4
MW-14	Background (Upgradient)	593.84	60.97	4
OW-2	Downgradient	489.40	27.05	4

(1) Elevations were re-surveyed on November 14, 2019. Updated elevations will be used to determine groundwater elevation in subsequent monitoring events.

Sections 3.2 and 3.3 discuss changes to the groundwater monitoring system that took place during the reporting period.

3.2 MONITORING WELL INSTALLATION

There were no new wells installed in 2023.

3.3 MONITORING WELL DECOMMISSIONING

Monitoring wells must be maintained and appropriately cased in a manner that maintains the integrity of the monitoring well borehole throughout the life of the monitoring program. As noted in Section 3.1, the integrity of downgradient wells MW-15 and MW-17 were compromised during the 2020 period. The monitoring well plug and abandonment project for these wells was then conducted on August 26, 2021, in accordance with the Mississippi water well plugging guidelines, and the well abandonment/

decommissioning forms were submitted to MDEQ on August 30, 2021. No monitoring wells were decommissioned in 2023.

4.0 GROUNDWATER MONITORING DATA

4.1 SAMPLING REQUIREMENTS

The monitoring well samples collected for laboratory analysis along with the duplicate samples and field blanks were submitted to Micro-Methods Laboratories in Ocean Springs, Mississippi. Sampling was conducted in accordance with the CCR Groundwater Monitoring Plan. The samples were analyzed for constituents listed in Appendix III and/or Appendix IV of 40 CFR 257, Subpart D (depending on the type of monitoring event) as listed in Tables 4-1 and 4-2 below. Metals were analyzed as total recoverable metals from unfiltered samples.

Table 4-1: Appendix III Constituents

40 CFR 257, Subpart D, Appendix III					
Parameter	Analytical Method	Container		Preservative	Holding Time
Boron	EPA 200.7	P	500mL	NA	6 months
Calcium	EPA 200.7	P	500mL	NA	6 months
Chloride ⁽¹⁾	ASTM D512-12	P	1000mL	NA	28 days
Fluoride	SM 4500-F C	P	1000mL	NA	28 days
pH	Measured and monitored in the field.				
Sulfate	SM 4500-SO42	P	1000mL	NA	28 days
TDS	SM 2540 C	P	1000mL	NA	7 days

(1) The lab contracted for this analysis normally uses SM 4110 B 2011 method for chloride but due to their main IC instrument failing, they use method ASTM D512-12, another approved method.

(2) T = Teflon, P = Plastic, G = Glass, NA = Not Applicable

Table 4-2: Appendix IV Constituents

40 CFR 257, Subpart D, Appendix IV					
Parameter	Analytical Method	Container		Preservative	Holding Time
Antimony	EPA 200.8	P	500mL	NA	6 months
Arsenic	EPA 200.8	P	500mL	NA	6 months
Barium	EPA 200.7 or 200.8	P	500mL	NA	6 months
Beryllium	EPA 200.8	P	500mL	NA	6 months
Cadmium	EPA 200.8	P	500mL	NA	6 months
Chromium	EPA 200.8	P	500mL	NA	6 months
Cobalt	EPA 200.8	P	500mL	NA	6 months
Fluoride	SM 4500-F C	P	1000mL	NA	28 days
Lead	EPA 200.8	P	500mL	NA	6 months
Lithium	EPA 200.7	P	500mL	NA	6 months
Mercury	EPA 245.1	P	500mL	NA	28 days

40 CFR 257, Subpart D, Appendix IV					
Parameter	Analytical Method	Container		Preservative	Holding Time
Molybdenum	EPA 200.8	P	500mL	NA	6 months
Selenium	EPA 200.8	P	500mL	NA	6 months
Thallium	EPA 200.8	P	500mL	NA	6 months
Radium 226/228	EPA 903.1 / EPA 904.0	P	1000mL	NA	NA

(1) T = Teflon, P = Plastic, G = Glass, NA = Not Applicable

4.2 GROUNDWATER ELEVATION AND FLOW

Groundwater elevation is measured in each monitoring well immediately prior to purging each time groundwater is sampled. Table 4-3 provides a summary of the groundwater elevation recorded for each well during each of the monitoring events. A potentiometric surface map was developed for each monitoring event based on the measured static water levels and the top-of-case (TOC) elevations. Also, the rate of groundwater flow is determined for each event and the direction of flow is summarized in the table and provided on the potentiometric surface maps included in Appendix A. Groundwater flow velocity (v) is estimated using the hydraulic conductivity (K) of the groundwater zone, the effective porosity (η_e), and the hydraulic gradient (dh/dl). The groundwater flow velocity in feet/year is estimated using the following

$$\text{equation: } v = \frac{K}{\eta_e} \left(\frac{dh}{dl} \right).$$

Conductivity and porosity are dependent on the soil type in the saturated zone. Based on boring logs, the soils in the screened saturated zone are predominantly silt, clay, and silty-clay units. These Clayey Wilcox sediments were investigated and found to have hydraulic conductivities generally less than 1.0×10^{-6} cm/sec, and in many cases 1.0×10^{-8} cm/sec or less, as noted in the Special/Industrial Waste Permit Application prepared by Malcolm Pirnie (March 1998). As a conservative measure of groundwater flow the highest permeability measured at the site of 2.0×10^{-5} cm/sec has been used. An effective porosity of 0.44 was used based on a mix of silty clay and clay of varying plasticity found in the saturated zone. Previously, the hydraulic gradient was determined for each monitoring event using the difference in groundwater elevations at upgradient monitoring well, MW-14, and downgradient monitoring well, MW-15, which are approximately 3,025 feet apart. Since the integrity of the downgradient well, MW-15, was compromised, the hydraulic gradient is now determined for each monitoring event using an average of the difference in groundwater elevations at upgradient well, MW-14, and downgradient monitoring well, CCR-2, which are approximately 1,800 feet apart, and of the difference in groundwater elevations at upgradient well, MW-13, and downgradient monitoring well, CCR-4, which are approximately 1,860 feet apart.

As noted in Table 4-3 and from the potentiometric surface maps (provided in Appendix A), groundwater in the vicinity of the CCR unit flows northwest. Also, as noted during the background sampling period, groundwater elevation changed very little in each monitoring well sampled during the 2023 reporting period, indicating that seasonal variability does not significantly impact groundwater at the site. Groundwater flow is relatively slow due to the low hydraulic conductivity of the soils and was calculated to be 1.5 feet per year based on the 2023 data. This is consistent with the flows calculated for previous monitoring events, as shown in Table 4-3.

4.3 GROUNDWATER SAMPLING RESULTS

The analytical results from the collected samples, the chain-of-custody, and the laboratory quality assurance and quality control (QA/QC) information are provided in Appendix B. In addition to the groundwater samples taken from each of the monitoring wells, a duplicate sample and field blank were collected and analyzed for the required constituents. Temperature, pH, conductivity, turbidity, purge volume, and elapsed purge time were monitored while purging each well. The field data collected while purging and sampling each well using the low stress purging and sampling methodology is included in Appendix C. The data includes monitored field parameters (pH, temperature, turbidity, conductivity), water levels, well depth, drawdown, purge rate, purge volume, and purge time. The EPA Laboratory Services & Applied Science Division (LSASD) Groundwater Sampling Operating Procedure that was updated April 22, 2023, states that measured groundwater temperature during purging is subject to changes related to surface ambient conditions, pumping rates and pump temperature. Therefore, its usefulness is subject to question for the purpose of determining parameter stability. As such, it has been removed from LSASD's list of parameters used for stability determination. Even though temperature is not used to determine stability, it is still advisable to record the temperature of purge water.

The summary of results for sampling conducted during the reporting year is available in Appendix D. For those constituents not detected during a given monitoring event, the value is indicated as "less than" (or <) the minimum reporting level (MRL). Results from the upgradient wells were used to establish the background groundwater quality for each constituent, which is the interwell prediction limit determined using the approved statistical procedures. Because statistically significant increases (SSI) of constituents were verified during the initial detection monitoring event in 2018, GWPS were established per the requirements of §257.95(d)(2) for Appendix IV constituents and are compared to current and future sampling results.

Semiannual assessment monitoring was conducted on March 13, 2023. During this event, all Appendix III constituents and those Appendix IV constituents previously detected were analyzed. The following Appendix IV constituents exceeded the GWPS at the well locations noted below for this monitoring event:

- Cobalt: CCR-2, CCR-3, CCR-5, MW-9, and MW-12
- Lithium: CCR-3

The annual monitoring event for all Appendix IV constituents, required by §257.95(b), was conducted May 10, 2023. The following Appendix IV constituents will be monitored during the next two semiannual assessment monitoring events:

- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Chromium
- Cobalt
- Fluoride
- Lead
- Lithium
- Molybdenum
- Selenium
- Radium 226 and 228 combined

Additionally, the results from this annual event were compared to the GWPS. The following Appendix IV constituents exceeded the GWPS at the well locations noted below for this monitoring event:

- Beryllium: MW-9
- Cobalt: CCR-3, CCR-5, MW-9, and MW-12
- Lithium: CCR-3

The next semiannual assessment monitoring event was conducted on September 13, 2023. The following Appendix IV constituents exceeded the GWPS at the well locations noted below for this monitoring event:

- Cobalt: CCR-3 and MW-9
- Lithium: CCR-3

Although antimony, arsenic, cadmium, chromium, lead, molybdenum, and selenium were not detected in the 2023 annual monitoring event, these Appendix IV constituents will still be monitored during the semiannual events since they were detected in a previous assessment monitoring event. Lithium, cobalt, and beryllium were determined to be from an alternate source rather than a potential release of the AMU basin. The ASD is discussed in Section 5.2, and Choctaw Generation has continued assessment monitoring. A summary of the results from each monitoring event (annual and semiannual) is provided in Appendix D, and the full laboratory analytical reports are provided as Appendix B.

Table 4-3: Groundwater Elevation (feet) and Flow Rate (feet/yr)

Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2	Flow Rate	Flow Direction
Background Monitoring																		
7/26-27/16	488.60	473.59	478.46					538.60	471.49	466.92	499.10	564.91	477.50	480.26		476.80	1.4	NW
8/22-23/16	488.63	473.33	478.41					538.03	471.74	466.97	498.85	563.94	477.19	480.49		476.50	1.3	NW
9/12-13/16	488.22	472.96	478.36					538.02	470.97	466.09	498.82	563.12	476.74	480.15		476.20	1.3	NW
10/17-18/16	488.05	472.69	478.61					537.93	471.17	465.56	498.48	560.56	476.19	479.24		476.00	1.3	NW
11/9-10/16	487.69	472.41	478.16					537.52	471.32	465.45	497.83	559.08	475.78	479.10		475.50	1.3	NW
11/28-29/16	487.55	472.38	478.17					536.13	471.47	465.97	497.60	560.51	476.16	479.61		475.64	1.3	NW
2/8-9/17	488.17	474.06	478.95					537.95	473.34	471.27	498.21	563.49	478.87	481.70		477.60	1.3	NW
3/29-30/17	488.36	474.82	478.81					537.74	472.44	470.17	498.58	565.88	478.83	486.60		477.40	1.4	NW
Detection Monitoring																		
2/6-7/18	489.83	475.11	478.84					537.58	473.60	471.47	499.40	562.15	478.92	481.87		477.49	1.3	NW
Assessment Monitoring																		
5/15-16/18	489.73	476.19	478.98					538.66	472.82	468.07	501.08	566.41	478.93	481.36		478.19	1.4	NW
9/10-11/18	488.34	473.95	478.28	460.73				537.84	472.98	468.60	499.16	562.19	477.16	480.72		476.59	1.3	NW
3/19-20/19 ⁽¹⁾	491.92	479.69	481.38	463.41				538.06	482.28	470.24	521.24	565.69	480.70	NS		478.80	1.3	NW
5/29-30/19 ⁽¹⁾	491.62	478.76	480.84	462.75	459.91	487.14	462.79	538.47	471.56	466.67	521.42	565.63	480.20	NS	478.65	478.98	1.3	NW
9/10-11/19 ⁽¹⁾	491.28	479.91	480.43	462.02	458.71	487.01	462.04	538.35	470.61	466.33	521.15	565.16	478.83	NS	477.73	477.57	1.3	NW
3/25-26/20 ⁽²⁾	493.83	479.8	481.27	463.93	NS	NS	NS	541.78	472.53	470.5	525.6	565.94	NS	NS	479.84	479.48	1.5	NW
5/18/20 ⁽²⁾	491.75	477.25	480.78	463.05	NS	NS	NS	538.71	471.23	468.88	526.48	565.59	NS	NS	480.64	479.36	1.5	NW
9/28/20 ⁽²⁾	493.95	478	480.41	463.57	NS	NS	NS	537.85	471.24	468.51	525.58	565.01	NS	NS	NS	478.59	1.5	NW
3/15-16/21 ⁽²⁾	494.5	479.93	480.78	463.1	NS	NS	NS	537.61	471.54	469.19	525.68	565.52	NS	NS	NS	479.05	1.5	NW
5/26/21 ⁽²⁾	494.45	479.28	479.9	462.75	NS	NS	NS	537.56	471.32	467.29	526.34	565.12	NS	NS	NS	478.94	1.5	NW
9/8/21 ⁽²⁾	494.35	479.58	480.83	464.45	NS	NS	NS	536.84	472.46	468.89	525.55	565.33	NS	NS	NS	478.9	1.5	NW
3/23-24/22 ⁽²⁾	493.62	480.36	480.95	463.71	NS	NS	NS	537.71	473.15	470.49	523.34	565.22	NS	NS	NS	479.51	1.5	NW
5/31-6/1/22 ⁽²⁾	493.24	478.74	480.15	462.73	NS	NS	NS	537.68	471.39	466.44	523.40	564.88	NS	NS	NS	478.72	1.5	NW
9/12-13/22 ⁽²⁾	492.25	477.81	480.12	463.15	NS	NS	NS	537.18	472.05	469.51	521.78	563.38	NS	NS	NS	478.43	1.5	NW
3/13/23 ⁽²⁾	492.56	480.1	480.81	463.81	NS	NS	NS	537.5	472.94	470.62	521.19	565.24	NS	NS	NS	478.82	1.5	NW

Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2	Flow Rate	Flow Direction
5/10/23 ⁽²⁾	492.14	479.26	480.55	462.98	NS	NS	NS	537.96	471.65	468.2	521.79	565.43	NS	NS	NS	478.47	1.5	NW
9/13/23 ⁽²⁾	491.13	477.39	480.02	462.52	NS	NS	NS	537.51	470.62	465.3	520.54	564.59	NS	NS	NS	477.14	1.5	NW

(1) TOC elevations were resurveyed on November 14, 2019, and groundwater elevations were revised using the correct TOC elevations.

(2) Flow rate is calculated using an average hydraulic gradient between MW-14 and CCR-2 as well as MW-13 and CCR-4.

5.0 ADDITIONAL INFORMATION

5.1 ALTERNATIVE MONITORING FREQUENCY

Based on the availability of groundwater, an alternative monitoring frequency may be proposed under both the detection monitoring program and the assessment monitoring program per §§257.94(d) and 257.95(c), respectively. In lieu of semiannual sampling, sampling may be conducted less frequently but no less than annually. Choctaw Generation must obtain a certification from a qualified professional engineer stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of §§257.94(d) or 257.95(c). Choctaw Generation must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the Annual Report. *With this Annual Report, Choctaw Generation is not making an alternative monitoring frequency demonstration.*

5.2 DEMONSTRATION OF INVALID STATISTICALLY SIGNIFICANT INCREASE

Within 90 days of finding that any of the Appendix III or IV constituents have been detected at a statistically significant level, Choctaw Generation may demonstrate that a source other than the CCR unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Such demonstration is allowed by both the detection monitoring program and assessment monitoring program per §257.94(e)(2) and §257.95(g)(3), respectively. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and must be certified to be accurate by a qualified professional engineer. If a successful demonstration is made, Choctaw Generation must continue monitoring in accordance with the detection or assessment monitoring program, as applicable. Choctaw Generation must also include the demonstration in the Annual Report, as well as the certification by a qualified professional engineer. *With this Annual Report, Choctaw Generation is not demonstrating that any additional constituents were detected at a SSL above the GWPS as a result from an alternate source.* A history of the ASD is provided below.

Sampling to evaluate the composition of the natural soil at the site was conducted on October 29, 2019, which included drilling soil borings in three (3) locations at the Choctaw Generation site. The samples were collected at a variety of depths ranging from four (4) to twenty (20) feet to capture the natural, differing geologies in the soil and material near and within the monitored aquifer. Based on review of the analytical results, the initial ASD was developed and certified on December 17, 2019, demonstrating that elevated lithium and cobalt concentrations above each GWPS were a result of natural variation in the groundwater quality as a result of the aquifer material rather than a potential release from the CCR unit. Beryllium was then detected above the GWPS in March 2020 and then verified in the following event in May of 2020. In response, the ASD was revised and certified on August 20, 2020, demonstrating that the elevated beryllium

concentration detected above the GWPS was a result of natural variation in the groundwater quality as a result of the aquifer material rather than a potential release from the CCR unit. The initial and revised ASD were submitted with each respective annual report and can be found in the Choctaw Generation Operating Record and on the CCR Website.

It should be noted, the molybdenum exceedance was never confirmed or verified upon resampling events; therefore, molybdenum is not believed to have exceeded the GWPS. As a result of the successful revised ASD, Choctaw Generation has continued in assessment monitoring.

5.3 TIME EXTENSION FOR CORRECTIVE MEASURES ASSESSMENT

An assessment of corrective measures must be completed within 90 days of finding any Appendix IV constituent has been detected at a statistically significant level exceeding the GWPS. A demonstration of the need for up to an additional 60 days to complete this assessment may be made as a result of site-specific conditions or circumstances. Certification from a qualified professional engineer attesting that this demonstration is accurate must be provided, and both the demonstration and certification must be included in the Annual Report. *With this Annual Report, Choctaw Generation is not requesting additional time to assess corrective measures, since such assessment was not required during the period covered by the report.*

6.0 CONCLUSION

6.1 SUMMARY OF KEY ACTIONS COMPLETED

During the reporting period, two semiannual assessment monitoring events were conducted, revealing continued exceedances of the GWPS for cobalt, lithium, and beryllium. These constituent exceedances are detailed in the ASD. There were no new exceedances of the GWPS; therefore, assessment monitoring was continued.

6.2 KEY ACTIVITIES FOR UPCOMING YEAR

During calendar year 2024, Choctaw Generation anticipates conducting at least two (2) semiannual monitoring events and an annual Appendix IV monitoring event in accordance with the assessment monitoring program as outlined by §257.95(g). If any constituent, other than those addressed by the revised ASD, is detected at an SSL above the GWPS, the ASD will be amended or corrective measures will be initiated to address the constituents of concern.

FIGURE 1

SITE LOCATION MAP



Legend:

Source:
USGS US Topo (April 2023)

Drawn By: CAJ	Checked By: BSK
Date: 1/12/2024	Scale: 1:24,000
Project No.:	Drawing No: N/A
Choctaw Generation Limited Partnership 2391 Pensacola Road Ackerman, Mississippi	



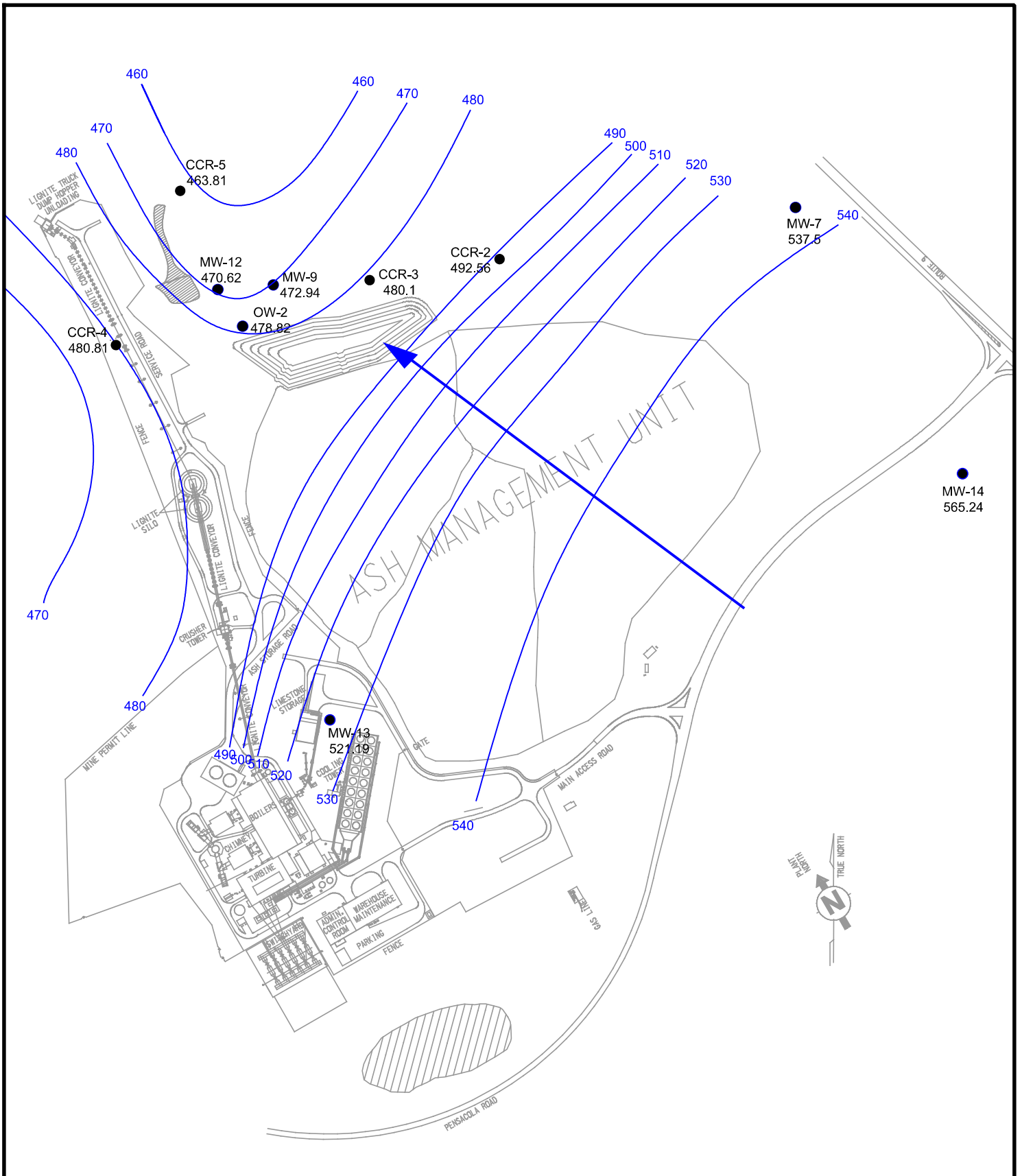
P.O. Box 356
Sherman, Mississippi 38869
(662) 840-5945

Figure 1: Site Location Map

FIGURE 2
FACILITY DIAGRAM

APPENDIX A

POTENTIOMETRIC SURFACE MAPS



Envirometal Compliance
 & Safety, Inc.
 P.O. Box 356
 Sherman, MS 38869
 (662) 840-5945

Choctaw Generation Limited Partnership, L.L.L.P.
 2391 Pensacola Road
 Ackerman, Mississippi

Potentiometric Surface Map (March 2023 GW Event)

Figure 1

Legend:

Monitoring Well Designation
and Groundwater Elevation (feet)

●
 MW-7
 537.71

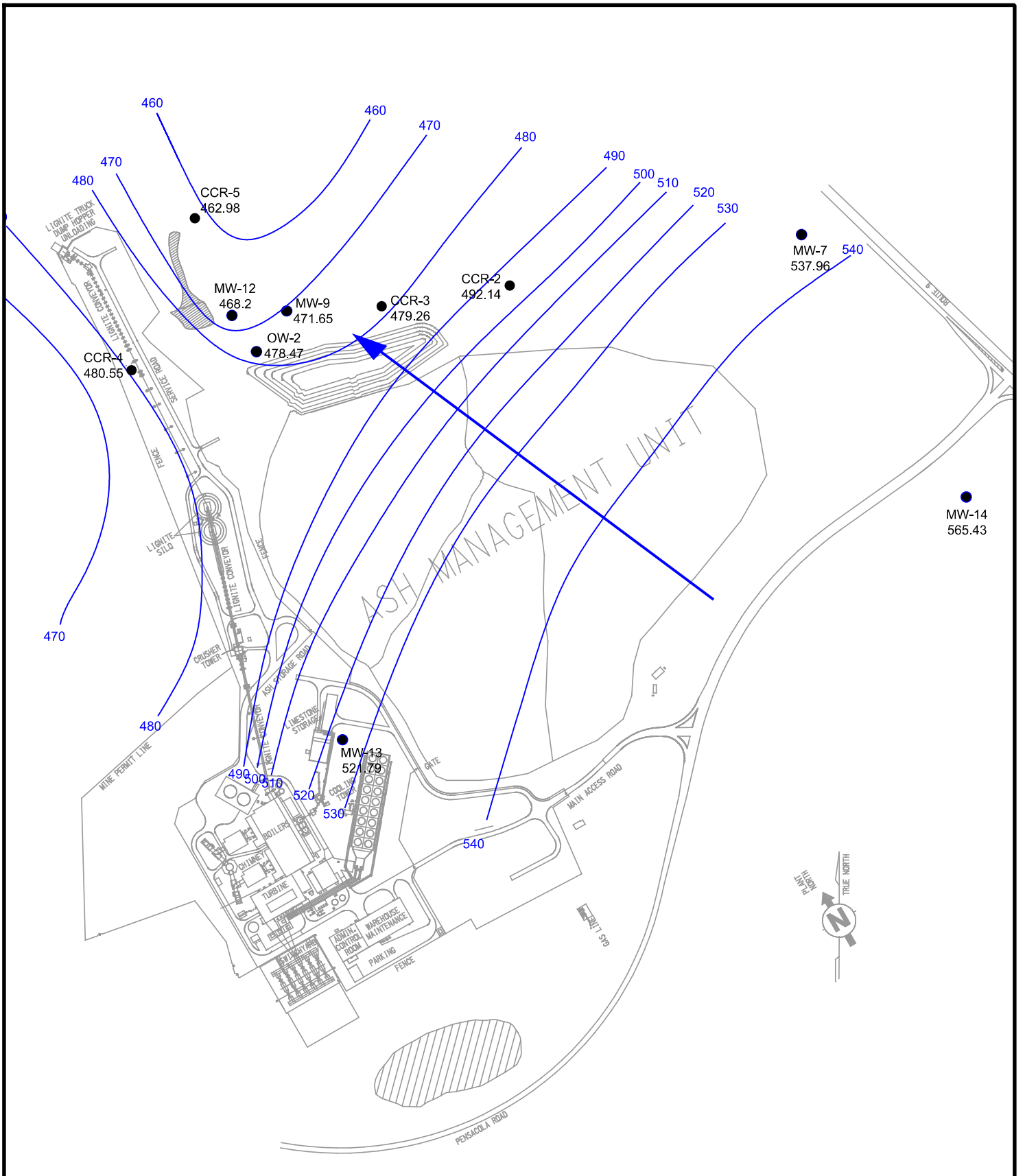
Groundwater Elevation Contours (ft)

— 500 —

Scale: NTS

Drawn By: JAD

Date: 1/11/2024



Envirometal Compliance
& Safety, Inc.
P.O. Box 356
Sherman, MS 38869
(662) 840-5945

Choctaw Generation Limited Partnership, L.L.L.P.
2391 Pensacola Road
Ackerman, Mississippi

Potentiometric Surface Map (May 2023 GW Event)

Figure 1

Legend:

Monitoring Well Designation
and Groundwater Elevation (feet)

Groundwater Elevation Contours (ft)

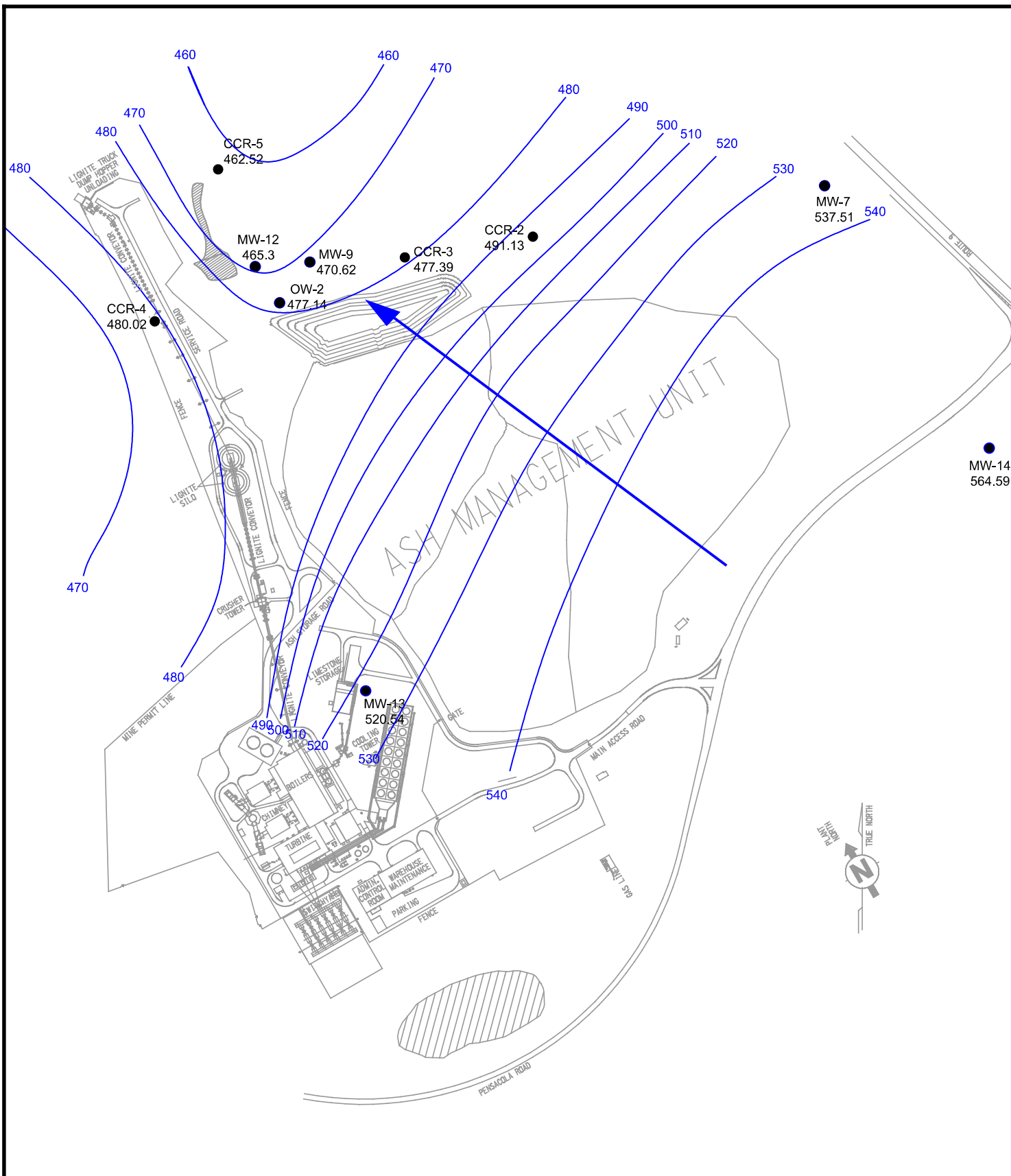
Scale: NTS

Drawn By: JAD

Date: 1/11/2024

MW-7
537.68

500



Envirometal Compliance
 & Safety, Inc.
 P.O. Box 356
 Sherman, MS 38869
 (662) 840-5945

Choctaw Generation Limited Partnership, L.L.L.P.
 2391 Pensacola Road
 Ackerman, Mississippi


Potentiometric Surface Map (September 2023 GW Event)

Figure 1

Legend:

Monitoring Well Designation
and Groundwater Elevation (feet)

Groundwater Elevation Contours (ft)


 MW-7
 537.18

 500

Scale: NTS

Drawn By: JAD

Date: 1/11/2024

APPENDIX B

ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY FORMS



Mailing Address:
PO Box 1410
Ocean Springs, MS
39566-1410

6500 Sunplex Drive
Ocean Springs, MS 39564
228.875.6420 Phone
228.875.6423 Fax

March 31, 2023

Jim Ward

Work Order # : 2303235

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman, MS 39735
RE: CGLP CCR Semi Annual

Purchase Order #: RDH17816 - Yr 2023

Enclosed are Micro-Methods Laboratory, Inc. results of analyses performed on samples received 03/15/2023 08:45. If you have any questions concerning this report, please feel free to contact the office.

Sincerely,

Mitch Spicer

Lab Director
Micro-Methods Laboratory, Inc.



DISCLAIMER

The results only relate to the items or the sample and/or samples received by the laboratory. This report shall not be reproduced except in full, without the approval of the laboratory. All NELAP certified test methods performed meet the requirements of NELAC 2009 Standards. Any variances and/or deviations specific to this analytical report are referenced in the lab report using qualifiers and detailed explanations found in the case narrative.

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date/Time Sampled	Sampled by	Date/Time Received
MW-9	2303235-01	Water	03/13/2023 10:05	Ethan Easterling	03/15/2023 08:45
OW-2	2303235-02	Water	03/13/2023 11:50	Ethan Easterling	03/15/2023 08:45
MW-13	2303235-03	Water	03/13/2023 10:06	Ethan Easterling	03/15/2023 08:45
MW-7	2303235-04	Water	03/13/2023 11:17	Ethan Easterling	03/15/2023 08:45
MW-14	2303235-05	Water	03/13/2023 14:41	Ethan Easterling	03/15/2023 08:45
Field Blank	2303235-06	Water	03/13/2023 12:05	Ethan Easterling	03/15/2023 08:45
Duplicate	2303235-07	Water	03/13/2023 00:00	Ethan Easterling	03/15/2023 08:45
MW-12	2303235-08	Water	03/13/2023 11:00	Ethan Easterling	03/15/2023 08:45
CCR-2	2303235-09	Water	03/13/2023 15:50	Ethan Easterling	03/15/2023 08:45
CCR-3	2303235-10	Water	03/13/2023 14:30	Ethan Easterling	03/15/2023 08:45
CCR-4	2303235-11	Water	03/13/2023 16:44	Ethan Easterling	03/15/2023 08:45
CCR-5	2303235-12	Water	03/13/2023 16:20	Ethan Easterling	03/15/2023 08:45

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Sample Receipt Conditions

Date/Time Received: 3/15/2023 8:45:00AM

Shipped by: Fed Ex

Received by: Sarah E. Tomek

Submitted by: Ethan Easterling

Date/Time Logged: 3/15/2023 9:20:00AM

Logged by: Sarah E. Tomek

 Cooler ID: client cooler #1

 Receipt Temperature: 0.3 °C

<i>Cooler Custody Seals Present</i>	Yes
<i>Containers Intact</i>	Yes
<i>COC/Labels Agree</i>	Yes
<i>Labels Complete</i>	Yes
<i>COC Complete</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No
<i>Field Sheet/Instructions Included</i>	No
<i>Samples Rejected/Documented in Log</i>	No
<i>Temp Taken From Temp Blank</i>	Yes
<i>Temp Taken From Sample Container</i>	No
<i>Temp Taken From Cooler</i>	No
<i>COC meets acceptance criteria</i>	Yes

<i>Received on Ice but Not Frozen</i>	Yes
<i>No Ice, Short Trip</i>	No
<i>Obvious Contamination</i>	No
<i>Rush to meet HT</i>	No
<i>Received within HT</i>	Yes
<i>Proper Containers for Analysis</i>	Yes
<i>Correct Preservation</i>	Yes
<i>Adequate Sample for Analysis</i>	Yes
<i>Sample Custody Seals Present</i>	Yes
<i>Samples Missing from COC/Cooler</i>	No

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

 Cooler ID: client cooler #2

 Receipt Temperature: 1.9 °C

<i>Cooler Custody Seals Present</i>	Yes	<i>Received on Ice but Not Frozen</i>	Yes
<i>Containers Intact</i>	Yes	<i>No Ice, Short Trip</i>	No
<i>COC/Labels Agree</i>	Yes	<i>Obvious Contamination</i>	No
<i>Labels Complete</i>	Yes	<i>Rush to meet HT</i>	No
<i>COC Complete</i>	Yes	<i>Received within HT</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No	<i>Proper Containers for Analysis</i>	Yes
<i>Field Sheet/Instructions Included</i>	No	<i>Correct Preservation</i>	Yes
<i>Samples Rejected/Documented in Log</i>	No	<i>Adequate Sample for Analysis</i>	Yes
<i>Temp Taken From Temp Blank</i>	Yes	<i>Sample Custody Seals Present</i>	Yes
<i>Temp Taken From Sample Container</i>	No	<i>Samples Missing from COC/Cooler</i>	No
<i>Temp Taken From Cooler</i>	No		
<i>COC meets acceptance criteria</i>	Yes		

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

 Cooler ID: client cooler #3

 Receipt Temperature: 2.0 °C

<i>Cooler Custody Seals Present</i>	Yes	<i>Received on Ice but Not Frozen</i>	Yes
<i>Containers Intact</i>	Yes	<i>No Ice, Short Trip</i>	No
<i>COC/Labels Agree</i>	Yes	<i>Obvious Contamination</i>	No
<i>Labels Complete</i>	Yes	<i>Rush to meet HT</i>	No
<i>COC Complete</i>	Yes	<i>Received within HT</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No	<i>Proper Containers for Analysis</i>	Yes
<i>Field Sheet/Instructions Included</i>	No	<i>Correct Preservation</i>	Yes
<i>Samples Rejected/Documented in Log</i>	No	<i>Adequate Sample for Analysis</i>	Yes
<i>Temp Taken From Temp Blank</i>	Yes	<i>Sample Custody Seals Present</i>	Yes
<i>Temp Taken From Sample Container</i>	No	<i>Samples Missing from COC/Cooler</i>	No
<i>Temp Taken From Cooler</i>	No		
<i>COC meets acceptance criteria</i>	Yes		



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

CASE NARRATIVE SUMMARY

All reported results are within Micro-Methods Laboratory, Inc. defined laboratory quality control objectives unless detailed in narrative summary or identified as qualifications. NOTE: All results listed on this report are calculated on a wet weight basis (as received by the laboratory) unless otherwise noted in the analysis qualification sections.

Summary Comments:

See attached results from Sub-Contract Laboratory

Qualifiers: *No Data Qualification*

Analyte & Samples(s) Qualified: *None*

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

MW-9
2303235-01 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	354	20.0	mg/L	4.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	0.39	0.22	"	1.0	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	96.7	20.0	"	4.0	3C15042	ASC	03/15/2023 09:31	03/15/2023 14:07	SM 4500-SO42 E 2011	
Total Dissolved Solids	887	1	"	1.0	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.080	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 09:49	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	43.3	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 12:55	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	0.00395	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.0157	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

OW-2
2303235-02 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	92.5	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO ₄	99.2	10.0	"	2.0	3C15042	ASC	03/15/2023 09:31	03/15/2023 14:07	SM 4500-SO42 E 2011	
Total Dissolved Solids	358	1	"	1.0	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.034	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:00	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	41.1	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 13:01	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

MW-13
2303235-03 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	ND	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	5.04	5.00	"	"	3C15042	ASC	03/15/2023 09:31	03/15/2023 14:07	SM 4500-SO42 E 2011	
Total Dissolved Solids	142	1	"	"	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.169	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:04	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	20.4	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 13:08	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

MW-7
2303235-04 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	ND	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	40.5	5.00	"	"	3C15042	ASC	03/15/2023 09:31	03/15/2023 14:07	SM 4500-SO42 E 2011	
Total Dissolved Solids	149	1	"	"	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.064	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:07	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	25.9	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 13:14	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

MW-14
2303235-05 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	11.6	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO ₄	17.0	5.00	"	"	3C15042	ASC	03/15/2023 09:31	03/15/2023 14:07	SM 4500-SO42 E 2011	
Total Dissolved Solids	87	1	"	"	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.012	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:11	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	0.608	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 13:20	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Field Blank
2303235-06 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	ND	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	9.93	5.00	"	"	3C15042	ASC	03/15/2023 09:31	03/15/2023 15:01	SM 4500-SO42 E 2011	
Total Dissolved Solids	30	1	"	"	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	ND	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:15	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	0.235	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 13:26	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Duplicate
2303235-07 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	11.5	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	15.2	5.00	"	"	3C15042	ASC	03/15/2023 09:31	03/15/2023 15:01	SM 4500-SO42 E 2011	
Total Dissolved Solids	84	1	"	"	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.012	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:18	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	0.607	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 13:33	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

MW-12
2303235-08 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	61.4	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO ₄	66.7	10.0	"	2.0	3C15042	ASC	03/15/2023 09:31	03/15/2023 15:01	SM 4500-SO42 E 2011	
Total Dissolved Solids	243	1	"	1.0	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.203	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:22	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	30.7	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 13:39	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.0190	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

CCR-2
2303235-09 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	ND	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	10.6	5.00	"	"	3C15042	ASC	03/15/2023 09:31	03/15/2023 15:01	SM 4500-SO42 E 2011	
Total Dissolved Solids	70	1	"	"	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.131	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:25	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	15.7	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 14:03	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.00228	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

CCR-3
2303235-10 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	ND	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	242	50.0	"	10.0	3C15042	ASC	03/15/2023 09:31	03/15/2023 15:01	SM 4500-SO42 E 2011	
Total Dissolved Solids	435	1	"	1.0	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.071	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:29	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	35.4	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	0.088	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 14:09	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	0.00114	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.0236	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

CCR-4
2303235-11 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	ND	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	27.9	5.00	"	"	3C15042	ASC	03/15/2023 09:31	03/15/2023 15:01	SM 4500-SO42 E 2011	
Total Dissolved Solids	170	1	"	"	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.146	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 10:58	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	23.7	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 14:16	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.00418	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

CCR-5
2303235-12 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	ND	5.00	mg/L	1.0	3C20052	DLW	03/20/2023 11:45	03/20/2023 14:21	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3C20058	CRG	03/20/2023 14:00	03/20/2023 16:00	SM 4500-F C 2011	
Sulfate as SO4	422	50.0	"	10.0	3C15042	ASC	03/15/2023 09:31	03/15/2023 15:01	SM 4500-SO42 E 2011	
Total Dissolved Solids	758	2	"	1.0	3C15052	DLW	03/15/2023 15:10	03/17/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.087	0.010	mg/L	1.0	3C17020	CLV	03/17/2023 09:30	03/21/2023 11:09	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	0.058	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	104	0.250	"	5.0	"	CLV	"	03/21/2023 11:20	"	
Lithium 610.362 [Axial]	ND	0.040	"	1.0	"	CLV	"	03/21/2023 11:09	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3C17022	GWG	"	03/21/2023 14:22	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.0106	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

Classical Chemistry Parameters - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3C15042 - Default Prep GenChem											
Blank (3C15042-BLK1)											
Sulfate as SO4	3/15/23 9:45	ND	5.00	mg/L							
LCS (3C15042-BS1)											
Sulfate as SO4	3/15/23 9:45	29.5	5.00	mg/L	30.0		98.4	88-108			
LCS Dup (3C15042-BSD1)											
Sulfate as SO4	3/15/23 9:45	32.1	5.00	mg/L	30.0		107	88-108	8.47	20	
Duplicate (3C15042-DUP1) Source: 2303235-03											
Sulfate as SO4	3/15/23 9:45	4.76	5.00	mg/L		5.04			5.66	20	
Duplicate (3C15042-DUP2) Source: 2303235-09											
Sulfate as SO4	3/15/23 15:01	10.5	5.00	mg/L		10.6			0.853	20	
Matrix Spike (3C15042-MS1) Source: 2303235-03											
Sulfate as SO4	3/15/23 14:07	41.1	5.00	mg/L	30.0	5.04	120	74.1-129			
Matrix Spike (3C15042-MS2) Source: 2303235-09											
Sulfate as SO4	3/15/23 15:01	43.3	5.00	mg/L	30.0	10.6	109	74.1-129			
Matrix Spike Dup (3C15042-MSD1) Source: 2303235-03											
Sulfate as SO4	3/15/23 14:07	41.3	5.00	mg/L	30.0	5.04	121	74.1-129	0.466	20	
Matrix Spike Dup (3C15042-MSD2) Source: 2303235-09											
Sulfate as SO4	3/15/23 15:01	46.3	5.00	mg/L	30.0	10.6	119	74.1-129	6.78	20	

Batch 3C15052 - Default Prep GenChem

Blank (3C15052-BLK1)

Total Dissolved Solids	3/17/23 0:00	ND	1	mg/L
------------------------	--------------	----	---	------



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

Classical Chemistry Parameters - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3C15052 - Default Prep GenChem											
LCS (3C15052-BS1)											
Total Dissolved Solids	3/17/23 0:00	85	1	mg/L	101		84.2	60.3-100			
LCS Dup (3C15052-BSD1)											
Total Dissolved Solids	3/17/23 0:00	80	1	mg/L	101		79.2	60.3-100	6.06	10	
Duplicate (3C15052-DUP1) Source: 2303235-07											
Total Dissolved Solids	3/17/23 0:00	85	1	mg/L		84			1.18	10	
Duplicate (3C15052-DUP2) Source: 2303235-11											
Total Dissolved Solids	3/17/23 0:00	174	1	mg/L		170			2.33	10	
Batch 3C20052 - Default Prep GenChem											
Blank (3C20052-BLK1)											
Chloride	3/20/23 14:21	ND	5.00	mg/L							
LCS (3C20052-BS1)											
Chloride	3/20/23 14:21	24.1	5.00	mg/L	25.0		96.4	85-115			
LCS Dup (3C20052-BSD1)											
Chloride	3/20/23 14:21	23.8	5.00	mg/L	25.0		95.2	85-115	1.25	30	
Duplicate (3C20052-DUP1) Source: 2303235-06											
Chloride	3/20/23 14:21	1.85	5.00	mg/L		1.83			1.09	20	
Duplicate (3C20052-DUP2) Source: 2303235-12											
Chloride	3/20/23 14:21	3.50	5.00	mg/L		3.41			2.60	20	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

Classical Chemistry Parameters - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3C20052 - Default Prep GenChem											
Matrix Spike (3C20052-MS1)			Source: 2303235-06								
Chloride	3/20/23 14:21	9.81	5.00	mg/L	10.0	1.83	79.8	70-130			
Matrix Spike Dup (3C20052-MSD1)			Source: 2303235-06								
Chloride	3/20/23 14:21	10.1	5.00	mg/L	10.0	1.83	82.7	70-130	2.91	20	
Batch 3C20058 - Default Prep GenChem											
Blank (3C20058-BLK1)											
Fluoride	3/20/23 16:00	ND	0.22	mg/L							
LCS (3C20058-BS1)											
Fluoride	3/20/23 16:00	1.98	0.22	mg/L	2.00		99.0	87.8-113			
LCS Dup (3C20058-BSD1)											
Fluoride	3/20/23 16:00	1.99	0.22	mg/L	2.00		99.5	87.8-113	0.504	30	
Matrix Spike (3C20058-MS1)			Source: 2303235-06								
Fluoride	3/20/23 16:00	1.00	0.22	mg/L	1.00	ND	100	70.2-127			
Matrix Spike Dup (3C20058-MSD1)			Source: 2303235-06								
Fluoride	3/20/23 16:00	1.06	0.22	mg/L	1.00	ND	106	70.2-127	5.05	30	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

Metals by EPA 200 Series Methods ICP-AES - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3C17020 - EPA 200.2 DCN 1017 Rev 10											
Blank (3C17020-BLK1)											
Barium 455.403 [Radial]	3/21/23 9:39	ND	0.010	mg/L							
Boron 249.773 [Radial]	3/21/23 9:39	ND	0.050	"							
Calcium 315.887 [Radial]	3/21/23 9:39	ND	0.050	"							
Lithium 610.362 [Axial]	3/21/23 9:39	ND	0.040	"							
LCS (3C17020-BS1)											
Barium 455.403 [Radial]	3/21/23 9:42	0.203	0.010	mg/L	0.200		102	85-115			
Boron 249.773 [Radial]	3/21/23 9:42	0.207	0.050	"	0.200		104	85-115			
Calcium 315.887 [Radial]	3/21/23 9:42	0.211	0.050	"	0.200		106	85-115			
Lithium 610.362 [Axial]	3/21/23 9:42	0.194	0.040	"	0.200		96.9	85-115			
LCS Dup (3C17020-BSD1)											
Barium 455.403 [Radial]	3/21/23 9:46	0.208	0.010	mg/L	0.200		104	85-115	2.16	20	
Boron 249.773 [Radial]	3/21/23 9:46	0.210	0.050	"	0.200		105	85-115	1.21	20	
Calcium 315.887 [Radial]	3/21/23 9:46	0.214	0.050	"	0.200		107	85-115	1.48	20	
Lithium 610.362 [Axial]	3/21/23 9:46	0.192	0.040	"	0.200		95.8	85-115	1.09	20	
Duplicate (3C17020-DUP1) Source: 2303235-01											
Calcium 315.887 [Radial]	3/21/23 9:53	43.9	0.050	mg/L		43.3			1.42	20	
Duplicate (3C17020-DUP2) Source: 2303235-11											
Calcium 315.887 [Radial]	3/21/23 11:02	24.7	0.050	mg/L		23.7			4.20	20	
Matrix Spike (3C17020-MS1) Source: 2303235-01											
Barium 455.403 [Radial]	3/21/23 9:53	0.278	0.010	mg/L	0.200	0.080	99.5	70-130			
Boron 249.773 [Radial]	3/21/23 9:53	0.205	0.050	"	0.200	ND	103	70-130			
Lithium 610.362 [Axial]	3/21/23 9:53	0.218	0.040	"	0.200	0.033	92.3	70-130			



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

Metals by EPA 200 Series Methods ICP-AES - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3C17020 - EPA 200.2 DCN 1017 Rev 10											
Matrix Spike (3C17020-MS2)			Source: 2303235-11								
Barium 455.403 [Radial]	3/21/23 11:02	0.352	0.010	mg/L	0.200	0.146	103	70-130			
Boron 249.773 [Radial]	3/21/23 11:02	0.236	0.050	"	0.200	0.030	103	70-130			
Lithium 610.362 [Axial]	3/21/23 11:02	0.221	0.040	"	0.200	0.014	103	70-130			
Matrix Spike Dup (3C17020-MSD1)			Source: 2303235-01								
Barium 455.403 [Radial]	3/21/23 9:57	0.279	0.010	mg/L	0.200	0.080	99.6	70-130	0.109	20	
Boron 249.773 [Radial]	3/21/23 9:57	0.206	0.050	"	0.200	ND	103	70-130	0.272	20	
Lithium 610.362 [Axial]	3/21/23 9:57	0.217	0.040	"	0.200	0.033	92.1	70-130	0.269	20	
Matrix Spike Dup (3C17020-MSD2)			Source: 2303235-11								
Barium 455.403 [Radial]	3/21/23 11:05	0.355	0.010	mg/L	0.200	0.146	105	70-130	0.983	20	
Boron 249.773 [Radial]	3/21/23 11:05	0.238	0.050	"	0.200	0.030	104	70-130	0.762	20	
Lithium 610.362 [Axial]	3/21/23 11:05	0.221	0.040	"	0.200	0.014	104	70-130	0.248	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3C17022 - EPA 200.2 DCN 1017 Rev 10											
Blank (3C17022-BLK1)											
Antimony [He]	3/21/23 12:00	ND	0.00200	mg/L							
Arsenic [He]	3/21/23 12:00	ND	0.00200	"							
Arsenic [NG]	3/21/23 12:00	ND	0.00200	"							
Beryllium [He]	3/21/23 12:00	ND	0.00100	"							
Cadmium [He]	3/21/23 12:00	ND	0.00100	"							
Chromium [He]	3/21/23 12:00	ND	0.00100	"							
Cobalt [He]	3/21/23 12:00	ND	0.00100	"							
Lead [He]	3/21/23 12:00	ND	0.00100	"							
Molybdenum [He]	3/21/23 12:00	ND	0.00100	"							
Selenium [NG]	3/21/23 12:00	ND	0.00500	"							
Selenium [He]	3/21/23 12:00	ND	0.00100	"							
LCS (3C17022-BS1)											
Antimony [He]	3/21/23 12:06	0.097	0.00200	mg/L	0.100		97.4	85-115			
Arsenic [He]	3/21/23 12:06	0.101	0.00200	"	0.100		101	85-115			
Arsenic [NG]	3/21/23 12:06	0.099	0.00200	"	0.100		98.5	85-115			
Beryllium [He]	3/21/23 12:06	0.098	0.00100	"	0.100		97.9	85-115			
Cadmium [He]	3/21/23 12:06	0.096	0.00100	"	0.100		96.3	85-115			
Chromium [He]	3/21/23 12:06	0.101	0.00100	"	0.100		101	85-115			
Cobalt [He]	3/21/23 12:06	0.101	0.00100	"	0.100		101	85-115			
Lead [He]	3/21/23 12:06	0.101	0.00100	"	0.100		101	85-115			
Molybdenum [He]	3/21/23 12:06	0.101	0.00100	"	0.100		101	85-115			
Selenium [NG]	3/21/23 12:06	0.102	0.00500	"	0.100		102	85-115			
Selenium [He]	3/21/23 12:06	0.102	0.00100	"	0.100		102	85-115			
LCS Dup (3C17022-BSD1)											
Antimony [He]	3/21/23 12:12	0.097	0.00200	mg/L	0.100		97.0	85-115	0.387	20	
Arsenic [He]	3/21/23 12:12	0.100	0.00200	"	0.100		100	85-115	1.20	20	
Arsenic [NG]	3/21/23 12:12	0.097	0.00200	"	0.100		97.3	85-115	1.29	20	
Beryllium [He]	3/21/23 12:12	0.099	0.00100	"	0.100		98.8	85-115	0.944	20	
Cadmium [He]	3/21/23 12:12	0.096	0.00100	"	0.100		95.8	85-115	0.530	20	
Chromium [He]	3/21/23 12:12	0.100	0.00100	"	0.100		99.7	85-115	1.12	20	
Cobalt [He]	3/21/23 12:12	0.100	0.00100	"	0.100		100	85-115	1.00	20	
Lead [He]	3/21/23 12:12	0.101	0.00100	"	0.100		101	85-115	0.131	20	
Molybdenum [He]	3/21/23 12:12	0.100	0.00100	"	0.100		100	85-115	0.588	20	
Selenium [He]	3/21/23 12:12	0.101	0.00100	"	0.100		101	85-115	1.34	20	
Selenium [NG]	3/21/23 12:12	0.101	0.00500	"	0.100		101	85-115	1.33	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3C17022 - EPA 200.2 DCN 1017 Rev 10											
Matrix Spike (3C17022-MS1)			Source: 2303265-02								
Antimony [He]	3/21/23 12:24	0.537	0.0100	mg/L	0.500	ND	107	70-130			
Arsenic [NG]	3/21/23 12:24	0.478	0.0100	"	0.500	ND	95.6	70-130			
Arsenic [He]	3/21/23 12:24	0.542	0.0100	"	0.500	ND	108	70-130			
Beryllium [He]	3/21/23 12:24	0.528	0.00500	"	0.500	ND	106	70-130			
Cadmium [He]	3/21/23 12:24	0.508	0.00500	"	0.500	ND	102	70-130			
Chromium [He]	3/21/23 12:24	0.531	0.00500	"	0.500	0.004	105	70-130			
Cobalt [He]	3/21/23 12:24	0.517	0.00500	"	0.500	0.002	103	70-130			
Lead [He]	3/21/23 12:24	0.547	0.00500	"	0.500	ND	109	70-130			
Molybdenum [He]	3/21/23 12:24	0.594	0.00500	"	0.500	0.007	117	70-130			
Selenium [NG]	3/21/23 12:24	0.472	0.0250	"	0.500	ND	94.4	70-130			
Selenium [He]	3/21/23 12:24	0.530	0.00500	"	0.500	ND	106	70-130			
Matrix Spike (3C17022-MS2)			Source: 2303283-01								
Antimony [He]	3/21/23 12:43	0.100	0.00200	mg/L	0.100	0.0005	99.6	70-130			
Arsenic [NG]	3/21/23 12:43	0.148	0.00200	"	0.100	0.043	105	70-130			
Arsenic [He]	3/21/23 12:43	0.151	0.00200	"	0.100	0.045	106	70-130			
Beryllium [He]	3/21/23 12:43	0.096	0.00100	"	0.100	ND	96.0	70-130			
Cadmium [He]	3/21/23 12:43	0.098	0.00100	"	0.100	0.005	92.7	70-130			
Chromium [He]	3/21/23 12:43	0.099	0.00100	"	0.100	0.003	95.7	70-130			
Cobalt [He]	3/21/23 12:43	0.092	0.00100	"	0.100	0.002	90.2	70-130			
Lead [He]	3/21/23 12:43	0.106	0.00100	"	0.100	0.0002	106	70-130			
Molybdenum [He]	3/21/23 12:43	0.119	0.00100	"	0.100	0.003	116	70-130			
Selenium [NG]	3/21/23 12:43	0.104	0.00500	"	0.100	0.004	100	70-130			
Selenium [He]	3/21/23 12:43	0.107	0.00100	"	0.100	0.002	105	70-130			
Matrix Spike Dup (3C17022-MSD1)			Source: 2303265-02								
Antimony [He]	3/21/23 12:30	0.506	0.0100	mg/L	0.500	ND	101	70-130	6.13	20	
Arsenic [NG]	3/21/23 12:30	0.486	0.0100	"	0.500	ND	97.2	70-130	1.74	20	
Arsenic [He]	3/21/23 12:30	0.516	0.0100	"	0.500	ND	103	70-130	4.98	20	
Beryllium [He]	3/21/23 12:30	0.487	0.00500	"	0.500	ND	97.4	70-130	8.02	20	
Cadmium [He]	3/21/23 12:30	0.479	0.00500	"	0.500	ND	95.8	70-130	5.92	20	
Chromium [He]	3/21/23 12:30	0.497	0.00500	"	0.500	0.004	98.7	70-130	6.64	20	
Cobalt [He]	3/21/23 12:30	0.483	0.00500	"	0.500	0.002	96.3	70-130	6.73	20	
Lead [He]	3/21/23 12:30	0.519	0.00500	"	0.500	ND	104	70-130	5.19	20	
Molybdenum [He]	3/21/23 12:30	0.564	0.00500	"	0.500	0.007	111	70-130	5.31	20	
Selenium [He]	3/21/23 12:30	0.500	0.00500	"	0.500	ND	100	70-130	5.83	20	
Selenium [NG]	3/21/23 12:30	0.483	0.0250	"	0.500	ND	96.5	70-130	2.18	20	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
---------	----------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	------------

Batch 3C17022 - EPA 200.2 DCN 1017 Rev 10

Matrix Spike Dup (3C17022-MSD2)

Source: 2303283-01

Antimony [He]	3/21/23 12:49	0.098	0.00200	mg/L	0.100	0.0005	97.0	70-130	2.58	20	
Arsenic [NG]	3/21/23 12:49	0.147	0.00200	"	0.100	0.043	105	70-130	0.278	20	
Arsenic [He]	3/21/23 12:49	0.147	0.00200	"	0.100	0.045	102	70-130	2.86	20	
Beryllium [He]	3/21/23 12:49	0.094	0.00100	"	0.100	ND	94.3	70-130	1.84	20	
Cadmium [He]	3/21/23 12:49	0.095	0.00100	"	0.100	0.005	89.8	70-130	2.94	20	
Chromium [He]	3/21/23 12:49	0.094	0.00100	"	0.100	0.003	91.2	70-130	4.63	20	
Cobalt [He]	3/21/23 12:49	0.089	0.00100	"	0.100	0.002	87.0	70-130	3.57	20	
Lead [He]	3/21/23 12:49	0.103	0.00100	"	0.100	0.0002	103	70-130	2.60	20	
Molybdenum [He]	3/21/23 12:49	0.117	0.00100	"	0.100	0.003	114	70-130	1.93	20	
Selenium [NG]	3/21/23 12:49	0.103	0.00500	"	0.100	0.004	99.5	70-130	0.517	20	
Selenium [He]	3/21/23 12:49	0.102	0.00100	"	0.100	0.002	100	70-130	4.73	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Certified Analyses Included in this Report

Analyte	Certification Code
ASTM D 512-12 in Water	
Chloride	C01,C02
EPA 200.7 Rev 4.4 in Water	
Aluminum 394.401 [Radial]	C01,C02
Aluminum 396.152 [Radial]	C01,C02
Antimony 206.833 [Axial]	C01,C02
Arsenic 193.759 [Axial]	C01,C02
Barium 455.403 [Radial]	C01,C02
Barium 493.409 [Radial]	C01,C02
Beryllium 313.042 [Axial]	C01,C02
Boron 249.773 [Radial]	C01,C02
Cadmium 228.802 [Axial]	C01,C02
Calcium 315.887 [Radial]	C01,C02
Chromium 283.563 [Axial]	C01,C02
Cobalt 228.616 [Axial]	C01,C02
Copper 324.754 [Axial]	C01,C02
Iron 259.940 [Axial]	C01,C02
Iron 259.940 [Radial]	C01,C02
Lead 220.353 [Axial]	C01,C02
Lithium 610.362 [Axial]	C01,C02
Magnesium 285.213 [Radial]	C01,C02
Manganese 257.610 [Axial]	C01,C02
Molybdenum 202.030 [Axial]	C01,C02
Nickel 231.604 [Axial]	C01,C02
Potassium 766.490 [Radial]	C01,C02
Phosphorus 178.284 [Axial]	C01,C02
Phosphorus 178.284 [Radial]	C01,C02
Selenium 196.090 [Axial]	C01,C02
Silver 328.068 [Axial]	C01,C02
Sodium 589.592 [Axial]	C01,C02
Sodium 589.592 [Radial]	C01,C02
Strontium 346.446 [Radial]	C01,C02
Strontium 421.552 [Radial]	C01,C02
Thallium 190.856 [Axial]	C01,C02
Vanadium 309.311 [Axial]	C01,C02
Zinc 213.856 [Axial]	C01,C02
EPA 200.8 Rev 5.4 in Water	
Aluminum [He]	C01,C02
Antimony [He]	C01,C02
Antimony [HHe]	C01,C02
Antimony [NG]	C01,C02

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Arsenic [He]	C01,C02
Arsenic [HHe]	C01,C02
Arsenic [NG]	C01,C02
Barium [He]	C01,C02
Beryllium [He]	C01,C02
Boron [NG]	C01,C02
Cadmium [He]	C01,C02
Cadmium [HHe]	C01,C02
Cadmium [NG]	C01,C02
Chromium [He]	C01,C02
Cobalt [He]	C01,C02
Copper [He]	C01,C02
Copper [NG]	C01,C02
Iron [He]	C01,C02
Lead [He]	C01,C02
Lead [NG]	C01,C02
Manganese [He]	C01,C02
Molybdenum [He]	C01,C02
Nickel [He]	C01,C02
Selenium [He]	C01,C02
Selenium [HHe]	C01,C02
Selenium [NG]	C01,C02
Silver [He]	C01,C02
Silver [NG]	C01,C02
Strontium [He]	C01,C02
Thallium [He]	C01,C02
Vanadium [He]	C01,C02
Zinc [He]	C01,C02

SM 4500-SO42 E 2011 in Water

Sulfate as SO4	C01,C02
----------------	---------

****Only compounds included in this list are associated with accredited analyses****

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 03/31/2023 14:02

Laboratory Accreditations/Certifications

Code	Description	Number	Expires
C01	LA Environmental Lab Accreditation Program	01960	06/30/2023
C02	The NELAC Institute (NELAP)	TNI01397	06/30/2023
C03	Ms Dept of Health (Drinking Water Microbiology)	MS00021	12/31/2023
C04	Ms Dept of Health (Drinking Water Chemistry)	MS00021	12/31/2023
C05	Ms DEQ Lead Firm Certification	PBF-00000028	03/31/2024
C06	MsDEQ Asbestos Inspector : C.D. Bingham	ABI-00001348	02/09/2024
C07	MsDEQ Air Monitor : C.D. Bingham	AM-011572	02/10/2024
C08	MsDEQ Asbestos Inspector: C. W. Meins	ABI-00001821	09/09/2022
C09	MsDEQ Air Monitor : C.W. Meins	AM-011189	02/10/2024
C14	MsDEQ Lead Paint Inspector : C.D. Bingham	PBI-00003690	02/07/2024
C15	MsDEQ Lead Paint Inspector : C.W. Meins	PBI-00001740	02/07/2024

Report Definitions

TNC	Too Numerous To Count
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the minimum reporting limit
NR	Not Reported
RPD	Relative Percent Difference
ICV	Initial Calibration Verfiication
CCV	Continuing Calibration Verification Standard
SSV	Secondary Source Verification Standard
LCS	Lab Control Spike - Lab matrix prepared with known concentration of analyte/s of interest analyzed by method.
MS	Matrix Spike - Sample prepared with known concentration of analyte/s of interest analyzed by method.
MSD	Matrix Spike Duplicate - Duplicate sample prepared with known concentration of analyte/s of interest analyzed by method.
MRL	Minimum Reporting Limit
%REC	Percentage Recovery of known concentration added to matrix
Batch	Group of samples prepared for analysis not to exceed 20 samples.
Matrix	Material containing analyte/s of interest
Surrogate	Analyte added to sample to determine extraction efficiency of method.



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
03/31/2023 14:02

Analyst Initials Key

<u>FullName</u>	<u>Initials</u>
Alexandria S Calloway	ASC
Charles L Vorhoff	CLV
Christa R Gray	CRG
Dortha L. Wells	DLW
Garrett Givhan	GWG
Sarah E. Tomek	SET
Teresa Meins	TKM
Tina Tomek	TPT

PO Box 1410, Ocean Springs, MS 39566-1410
(228) 875-6420 FAX (228) 875-6423
www.micromethodslab.com

Chain of Custody Record

Lab ID# M500021
LELAP ID # 01960
TNI ID # TNI01397

Print Form

M-M Lab
VOC #

2303235

Company Name: Choclaw Generation Limited Partnership LLP			Project Manager: Jim Ward		
Address: 2391 Pensacola Rd.			Purchase Order #:		
City: Ackerman	State: MS	Zip: 39735	Email Address: Jimward@southernco.com		
Phone: 662-387-5758			Sampler Name Printed: ETHEL EASTERLING		
Fax:			Sampler Name Signed: <i>[Signature]</i>		
Project Name: CGLP CCR			List Analyses Requested		
Project #: Semi-Annual			Preservative: <input type="checkbox"/> Grab (G) or Composite (C)		
Sample Identification	Sampling Date/Time	Matrix Code	# of Containers	TDS	Chloride, Fluoride, Sulfate
MMW-9	3/13/23 10:05	W	4	<input checked="" type="checkbox"/>	Antimony, Arsenic
OW-2	3/13/23 11:50	W	4	<input checked="" type="checkbox"/>	Barium, Boron
MMW-13	3/13/23 10:06	W	4	<input checked="" type="checkbox"/>	Beryllium, Cadmium
MMW-7	3/13/23 11:17	W	4	<input checked="" type="checkbox"/>	Chromium, Lead
MMW-14	3/13/23 14:44	W	4	<input checked="" type="checkbox"/>	Calcium, Cobalt
Field Blank	3/13/23 12:05	W	4	<input checked="" type="checkbox"/>	Lithium
Field Duplicate	3/13/23 11:00	W	4	<input checked="" type="checkbox"/>	Molybdenum, Selenium
MMW-12	3/13/23 11:00	W	4	<input checked="" type="checkbox"/>	Total Radium 226 & 228
CCR-2	3/13/23 15:50	W	4	<input checked="" type="checkbox"/>	
CCR-3	3/13/23 14:30	W	4	<input checked="" type="checkbox"/>	
CCR-4	3/13/23 16:44	W	4	<input checked="" type="checkbox"/>	
Received on Ice <input checked="" type="checkbox"/> N Thermometer# 8 Cooler # 7			Receipt Temp Corrected (°C)		
Date & Time	BY: ETHEL EASTERLING	Sample	Blank	Cooler	
Relinquished by	Printed Name	Signature	Company	Date	Time
Received by	ETHEL EASTERLING	<i>[Signature]</i>	ECSS	3/14/23	09:00
Relinquished by	FedEx	<i>[Signature]</i>			
Received by	FedEx	<i>[Signature]</i>	MM	3/15/23	0845
Relinquished by					
Received by					
Relinquished by					
Notes:			Turn Around Time & Reporting		
client cooler #1 0.3°C			Our normal turn around time is 10 working days		
client cooler #2 1.9°C			Normal <input type="checkbox"/> *All rush order requests must be prior approved.		
client cooler #3 2.0°C			Next Day* <input type="checkbox"/> 2nd Day* <input type="checkbox"/> Other* <input type="checkbox"/>		
			Phone <input type="checkbox"/> Mail <input type="checkbox"/> Fax <input type="checkbox"/> Email <input type="checkbox"/>		
			QC Level: Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/>		
			Field Testing		
			ID#	ID#	ID#
			Field Test	Field Test	Field Test
			Matrix:		
			W = Water		
			DW = Drinking Water		
			S = Solid		
			SO = Soil		
			SE = Sediment		
			L = Liquid		
			A = Air		
			O = Oil		
			SL = Sludge		
			Preservation:		
			1 = H2SO4		
			2 = H3PO4		
			3 = NaOH		
			4 = ZnCAH1006		
			5 = ZnCAH1006 & NaOH		
			6 = HNO3		
			7 = Na2S2O3		
			8 = HCl		
			9 = NaHSO4		

March 31, 2023

Tina Tomek
Micro-Methods Lab
6500 Sunplex Drive
Ocean Springs, MS 39564

RE: Project: 2303235
Pace Project No.: 30571927

Dear Tina Tomek:

Enclosed are the analytical results for sample(s) received by the laboratory on March 21, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,



David A. Pichette
david.pichette@pacelabs.com
(724)850-5617
Project Manager

Enclosures

cc: Accounts Payable, Micro-Methods Lab



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 2303235

Pace Project No.: 30571927

Pace Analytical Services Pennsylvania

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

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

Delaware Certification

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Florida: Cert E871149 SEKS WET

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572018-1

New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3

Utah/TNI Certification #: PA014572017-9

USDA Soil Permit #: P330-17-00091

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 2303235
Pace Project No.: 30571927

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30571927001	2303235-01	Water	03/13/23 10:05	03/21/23 09:55
30571927002	2303235-02	Water	03/13/23 11:50	03/21/23 09:55
30571927003	2303235-03	Water	03/13/23 10:06	03/21/23 09:55
30571927004	2303235-04	Water	03/13/23 11:17	03/21/23 09:55
30571927005	2303235-05	Water	03/13/23 14:41	03/21/23 09:55
30571927006	2303235-06	Water	03/13/23 12:05	03/21/23 09:55
30571927007	2303235-07	Water	03/13/23 00:00	03/21/23 09:55
30571927008	2303235-08	Water	03/13/23 11:00	03/21/23 09:55
30571927009	2303235-09	Water	03/13/23 15:50	03/21/23 09:55
30571927010	2303235-10	Water	03/13/23 14:30	03/21/23 09:55
30571927011	2303235-11	Water	03/13/23 16:44	03/21/23 09:55
30571927012	2303235-12	Water	03/13/23 16:20	03/21/23 09:55

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 2303235
Pace Project No.: 30571927

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30571927001	2303235-01	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927002	2303235-02	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927003	2303235-03	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927004	2303235-04	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927005	2303235-05	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927006	2303235-06	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927007	2303235-07	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927008	2303235-08	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927009	2303235-09	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927010	2303235-10	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927011	2303235-11	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1
30571927012	2303235-12	EPA 903.1	GDH	1
		EPA 904.0	JGH	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 2303235
Pace Project No.: 30571927

Lab ID	Sample ID	Method	Analysts	Analytes Reported
PASI-PA = Pace Analytical Services - Greensburg				

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2303235
Pace Project No.: 30571927

Sample: 2303235-01		Lab ID: 30571927001	Collected: 03/13/23 10:05	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/29/23 15:54	13982-63-3	
	EPA 903.1	1.92 ± 0.910 (0.899) C:NA T:94%					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/29/23 13:48	15262-20-1	
	EPA 904.0	1.90 ± 0.652 (0.888) C:69% T:76%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/31/23 12:45	7440-14-4	
	Total Radium Calculation	3.82 ± 1.56 (1.79)					

Sample: 2303235-02		Lab ID: 30571927002	Collected: 03/13/23 11:50	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.265 ± 0.574 (1.06) C:NA T:90%		pCi/L	03/29/23 16:08	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.00248 ± 0.267 (0.631) C:81% T:82%		pCi/L	03/29/23 13:48	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.267 ± 0.841 (1.69)		pCi/L	03/31/23 12:45	7440-14-4	

Sample: 2303235-03		Lab ID: 30571927003	Collected: 03/13/23 10:06	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	03/29/23 16:08	13982-63-3	
	EPA 903.1	0.771 ± 0.656 (0.922) C:NA T:94%					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	03/29/23 13:48	15262-20-1	
	EPA 904.0	0.741 ± 0.361 (0.600) C:77% T:90%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	03/31/23 12:45	7440-14-4	
	Total Radium Calculation	1.51 ± 1.02 (1.52)					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2303235
Pace Project No.: 30571927

Sample: 2303235-04		Lab ID: 30571927004	Collected: 03/13/23 11:17	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.0825 ± 0.485 (0.991) C:NA T:93%		pCi/L	03/29/23 16:08	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.0398 ± 0.283 (0.654) C:80% T:86%		pCi/L	03/29/23 13:49	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.122 ± 0.768 (1.65)		pCi/L	03/31/23 12:45	7440-14-4	

Sample: 2303235-05		Lab ID: 30571927005	Collected: 03/13/23 14:41	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	-0.0767 ± 0.499 (1.08) C:NA T:95%		pCi/L	03/29/23 16:08	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.855 ± 0.460 (0.843) C:82% T:83%		pCi/L	03/29/23 13:49	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.855 ± 0.959 (1.92)		pCi/L	03/31/23 12:45	7440-14-4	

Sample: 2303235-06		Lab ID: 30571927006	Collected: 03/13/23 12:05	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.0892 ± 0.463 (0.960) C:NA T:93%		pCi/L	03/29/23 16:08	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.418 ± 0.371 (0.754) C:77% T:88%		pCi/L	03/29/23 13:49	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.507 ± 0.834 (1.71)		pCi/L	03/31/23 12:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2303235
Pace Project No.: 30571927

Sample: 2303235-07		Lab ID: 30571927007	Collected: 03/13/23 00:00	Received: 03/21/23 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.383 ± 0.500 (0.824) C:NA T:97%	pCi/L	03/29/23 16:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.524 ± 0.451 (0.917) C:72% T:86%	pCi/L	03/29/23 13:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.907 ± 0.951 (1.74)	pCi/L	03/31/23 12:45	7440-14-4	

Sample: 2303235-08		Lab ID: 30571927008	Collected: 03/13/23 11:00	Received: 03/21/23 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.764 ± 0.692 (1.02) C:NA T:90%	pCi/L	03/29/23 16:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.901 ± 0.509 (0.950) C:77% T:83%	pCi/L	03/29/23 13:50	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.67 ± 1.20 (1.97)	pCi/L	03/31/23 12:45	7440-14-4	

Sample: 2303235-09		Lab ID: 30571927009	Collected: 03/13/23 15:50	Received: 03/21/23 09:55	Matrix: Water	
PWS:		Site ID:	Sample Type:			
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.405 ± 0.529 (0.873) C:NA T:98%	pCi/L	03/29/23 16:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.730 ± 0.416 (0.759) C:75% T:84%	pCi/L	03/29/23 13:50	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.14 ± 0.945 (1.63)	pCi/L	03/31/23 12:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2303235
Pace Project No.: 30571927

Sample: 2303235-10		Lab ID: 30571927010	Collected: 03/13/23 14:30	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.596 ± 0.447 (0.231) C:NA T:92%		pCi/L	03/29/23 16:21	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.546 ± 0.327 (0.590) C:77% T:92%		pCi/L	03/29/23 13:50	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	1.14 ± 0.774 (0.821)		pCi/L	03/31/23 12:45	7440-14-4	

Sample: 2303235-11		Lab ID: 30571927011	Collected: 03/13/23 16:44	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.648 ± 0.606 (0.859) C:NA T:93%		pCi/L	03/29/23 16:21	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.624 ± 0.339 (0.600) C:84% T:90%		pCi/L	03/29/23 13:50	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	1.27 ± 0.945 (1.46)		pCi/L	03/31/23 12:45	7440-14-4	

Sample: 2303235-12		Lab ID: 30571927012	Collected: 03/13/23 16:20	Received: 03/21/23 09:55	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.905 ± 0.662 (0.740) C:NA T:89%		pCi/L	03/29/23 16:21	13982-63-3	
	Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	1.02 ± 0.454 (0.744) C:76% T:85%		pCi/L	03/29/23 13:50	15262-20-1	
	Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.93 ± 1.12 (1.48)		pCi/L	03/31/23 12:45	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2303235

Pace Project No.: 30571927

QC Batch:	576005	Analysis Method:	EPA 904.0
QC Batch Method:	EPA 904.0	Analysis Description:	904.0 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30571927001, 30571927002, 30571927003, 30571927004, 30571927005, 30571927006, 30571927007, 30571927008, 30571927009, 30571927010, 30571927011, 30571927012		

METHOD BLANK: 2797073 Matrix: Water

Associated Lab Samples: 30571927001, 30571927002, 30571927003, 30571927004, 30571927005, 30571927006, 30571927007, 30571927008, 30571927009, 30571927010, 30571927011, 30571927012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.168 ± 0.277 (0.601) C:78% T:89%	pCi/L	03/29/23 13:47	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2303235

Pace Project No.: 30571927

QC Batch:	576004	Analysis Method:	EPA 903.1
QC Batch Method:	EPA 903.1	Analysis Description:	903.1 Radium-226
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30571927001, 30571927002, 30571927003, 30571927004, 30571927005, 30571927006, 30571927007, 30571927008, 30571927009, 30571927010, 30571927011, 30571927012		

METHOD BLANK: 2797071 Matrix: Water

Associated Lab Samples: 30571927001, 30571927002, 30571927003, 30571927004, 30571927005, 30571927006, 30571927007, 30571927008, 30571927009, 30571927010, 30571927011, 30571927012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.000 ± 0.358 (0.775) C:NA T:94%	pCi/L	03/29/23 15:54	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 2303235
Pace Project No.: 30571927

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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



MICRO-METHODS

LABORATORY, INC.

SUBCONTRACT ORDER

Sending Laboratory:

Micro-Methods Laboratory, Inc.
6500 Sunplex Drive
Ocean Springs, MS 39564
Phone: 228.875.6420
Fax: 228.875.6423

Project Manager: Teresa Meins

Subcontracted Laboratory:

Pace Analytical-7
1638 Roseytown Rd. Suites 2, 3, 4
Greensburg, PA 15601
Phone: (724) 850-5600
Fax: -

WO#: 30571927



30571927

Work Order: 2303235

Analysis	Due	Expires	Comments
----------	-----	---------	----------

Sample ID: 2303235-01 *Water* **Sampled: 03/13/2023 10:05** **Sample Name: MW-9** 001

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 10:05

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-02 *Water* **Sampled: 03/13/2023 11:50** **Sample Name: OW-2** 002

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 11:50

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-03 *Water* **Sampled: 03/13/2023 10:06** **Sample Name: MW-13** 003

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 10:06

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-04 *Water* **Sampled: 03/13/2023 11:17** **Sample Name: MW-7** 004

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 11:17

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-05 *Water* **Sampled: 03/13/2023 14:41** **Sample Name: MW-14** 005

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 14:41

Smah Jomeh 3/16/23 1630
Released By Date

UPS
Released By Date

Released By Date

Released By Date

Released By Date

UPS 3/16/23 1630
Received By Date

3/21/23 9:55
Received By Date

Received By Date

Received By Date

Received By Date



MICRO-METHODS

LABORATORY, INC.

SUBCONTRACT

ORDER

(Continued)

Work Order: 2303235 (Continued)

Analysis	Due	Expires	Comments
----------	-----	---------	----------

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-06 *Water* **Sampled: 03/13/2023 12:05** **Sample Name: Field Blank**

006

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 12:05

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-07 *Water* **Sampled: 03/13/2023 00:00** **Sample Name: Duplicate**

007

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 00:00

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-08 *Water* **Sampled: 03/13/2023 11:00** **Sample Name: MW-12**

008

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 11:00

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-09 *Water* **Sampled: 03/13/2023 15:50** **Sample Name: CCR-2**

009

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 15:50

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-10 *Water* **Sampled: 03/13/2023 14:30** **Sample Name: CCR-3**

010

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 14:30

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-11 *Water* **Sampled: 03/13/2023 16:44** **Sample Name: CCR-4**

011

Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 16:44

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2303235-12 *Water* **Sampled: 03/13/2023 16:20** **Sample Name: CCR-5**

012

Released By Smah Jomeh Date 3/16/23 1630

Received By UPS Date 3/16/23 1630

Released By UPS Date

Received By [Signature] Date 3/21/23 955

Released By Date

Received By Date

Released By Date

Received By Date

Released By Date

Received By Date

WO#: 30571927

PM: DAP Due Date: 04/11/23
CLIENT: MICROMETHOD



MICRO-METHODS

LABORATORY, INC.

SUBCONTRACT ORDER (Continued)

Work Order: 2303235 (Continued)

Analysis	Due	Expires	Comments
Sample ID: 2303235-12 Water Sampled: 03/13/2023 16:20 Sample Name: CCR-5			
Radium, Total 226 & 228 by EPA 903.1 & 90 03/23/2023 04/10/2023 16:20			
Containers Supplied:			
1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)			

WO# : 30571927

PM: DAP Due Date: 04/11/23
CLIENT: MICROMETHOD

Smah Jomah 3/16/23 1630
Released By Date

UPS
Released By Date

Released By Date

Released By Date

Released By Date


UPS 3/16/23 1630
Received By Date

John Hite 3/21/23 955
Received By Date

Received By Date

Received By Date

Received By Date



DC# Title: ENV-FRM-GBUR-0000 v04_Sample Condition Upon Receipt
Pittsburgh

Effective Date: 02/03/2023

W0#: 30571927

PM: DAP Due Date: 04/11/23

CLIENT: MICROMETHOD

Client Name: Micro-Methods

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

Tracking Number: 1Z 353 063 03 6950 9366

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals Intact: ☐ Yes ☐ No

Thermometer Used: — Type of Ice: Wet Blue None

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C
Temp should be above freezing to 6°C

Examined By	<u>Ja</u>
Labeled By	<u>Ja</u>
Temped By	<u>na</u>

Comments:

	Yes	No	NA	pH paper Lot# <u>1053121</u>	D.P.D. Residual Chlorine Lot #
Chain of Custody Present	<input checked="" type="checkbox"/>			1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/>			2.	
-Were client corrections present on COC		<input checked="" type="checkbox"/>			
Chain of Custody Relinquished	<input checked="" type="checkbox"/>			3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		4.	
Sample Labels match COC:	<input checked="" type="checkbox"/>			5.	
-Includes date/time/ID					
Matrix:			<u>WT</u>		
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>			6.	
Short Hold Time Analysis (<72hr remaining):		<input checked="" type="checkbox"/>		7.	
Rush Turn Around Time Requested:		<input checked="" type="checkbox"/>		8.	
Sufficient Volume:	<input checked="" type="checkbox"/>			9.	
Correct Containers Used:	<input checked="" type="checkbox"/>			10.	
-Pace Containers Used		<input checked="" type="checkbox"/>			
Containers Intact:	<input checked="" type="checkbox"/>			11.	
Orthophosphate field filtered:			<input checked="" type="checkbox"/>	12.	
Hex Cr Aqueous samples field filtered:			<input checked="" type="checkbox"/>	13.	
Organic Samples checked for dechlorination			<input checked="" type="checkbox"/>	14.	
Filtered volume received for dissolved tests:			<input checked="" type="checkbox"/>	15.	
All containers checked for preservation:	<input checked="" type="checkbox"/>			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix					<u>Added 2.5 mL HNO3 to 012</u>
All containers meet method preservation requirements:		<input checked="" type="checkbox"/>		Initial when completed <u>Ja</u>	Date/Time of Preservation <u>3-22-23 9:41</u>
				Lot# of added Preservative <u>217007</u>	
8260C/D: Headspace in VOA Vials (> 6mm)			<input checked="" type="checkbox"/>	17.	
624.1: Headspace in VOA Vials (0mm)			<input checked="" type="checkbox"/>	18.	
Trip Blank Present:			<input checked="" type="checkbox"/>	Trip blank custody seal present? YES or NO	
Rad Samples Screened <0.5 mrem/hr.	<input checked="" type="checkbox"/>			Initial when completed <u>Ja</u>	Date: <u>3-22-23</u> Survey Meter SN: <u>1503</u>
Comments:					

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client Micromethods

Site 2303235

Page 1 of 1

Profile Number 14460

Notes 3 pages

Sample Line Item	Amber Glass					Plastic								Vials						Other							
	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U
001	WT						2																				
002							2																				
003							2																				
004							2																				
005							2																				
006							2																				
007							2																				
008							2																				
009							2																				
010							2																				
011							2																				
012	WT						2																				

NO# : 30571927

PM: DAP Due Date: 04/11/23

CLIENT : MICROMETHOD

WO#: 30571927

PM: DAP Due Date: 04/11/23
CLIENT: MICROMETHOD

Container Codes

Glass	
GJN	1 Gallon Jug with HNO3
AG5U	100mL amber glass unpreserved
AG5T	100mL amber glass Na Thiosulfate
GJN	1 Gallon Jug
AG1S	1L amber glass H2SO4
AG1H	1L amber glass HCl
AG1T	1L amber glass NA Thiosulfate
AG1U	1L clear glass unpreserved
G3S	250mL amber glass H2SO4
BP3U	250mL amber glass unpreserved
GN	General

Plastic/Misc.	
GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved
EZL	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag
WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe



Mailing Address:
PO Box 1410
Ocean Springs, MS
39566-1410

6500 Sunplex Drive
Ocean Springs, MS 39564
228.875.6420 Phone
228.875.6423 Fax

June 13, 2023

Jim Ward

Work Order # : 2305232

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman, MS 39735
RE: CGLP CCR Annual

Purchase Order #: RDH17816 - Yr 2023

Enclosed are Micro-Methods Laboratory, Inc. results of analyses performed on samples received 05/11/2023 08:38. If you have any questions concerning this report, please feel free to contact the office.

Sincerely,

Mitch Spicer

Lab Director
Micro-Methods Laboratory, Inc.



DISCLAIMER

The results only relate to the items or the sample and/or samples received by the laboratory. This report shall not be reproduced except in full, without the approval of the laboratory. All NELAP certified test methods performed meet the requirements of NELAC 2009 Standards. Any variances and/or deviations specific to this analytical report are referenced in the lab report using qualifiers and detailed explanations found in the case narrative.



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date/Time Sampled	Sampled by	Date/Time Received
MW-7	2305232-01	Water	05/10/2023 11:58	Ethan Easterling	05/11/2023 08:38
MW-9	2305232-02	Water	05/10/2023 15:30	Ethan Easterling	05/11/2023 08:38
MW-12	2305232-03	Water	05/10/2023 14:05	Ethan Easterling	05/11/2023 08:38
MW-13	2305232-04	Water	05/10/2023 13:45	Ethan Easterling	05/11/2023 08:38
MW-14	2305232-05	Water	05/10/2023 10:30	Ethan Easterling	05/11/2023 08:38
Field Blank	2305232-06	Water	05/10/2023 10:38	Ethan Easterling	05/11/2023 08:38
Duplicate	2305232-07	Water	05/10/2023 00:00	Ethan Easterling	05/11/2023 08:38
OW-2	2305232-08	Water	05/10/2023 14:40	Ethan Easterling	05/11/2023 08:38
CCR-2	2305232-09	Water	05/10/2023 11:25	Ethan Easterling	05/11/2023 08:38
CCR-3	2305232-10	Water	05/10/2023 12:20	Ethan Easterling	05/11/2023 08:38
CCR-4	2305232-11	Water	05/10/2023 15:24	Ethan Easterling	05/11/2023 08:38
CCR-5	2305232-12	Water	05/10/2023 14:40	Ethan Easterling	05/11/2023 08:38

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

Sample Receipt Conditions

Date/Time Received: 5/11/2023 8:38:00AM

Shipped by: Fed Ex

Received by: Sarah E. Tomek

Submitted by: Caleb James

Date/Time Logged: 5/11/2023 10:37:00AM

Logged by: Sarah E. Tomek

 Cooler ID: client cooler #1

 Receipt Temperature: 2.8 °C

<i>Cooler Custody Seals Present</i>	Yes
<i>Containers Intact</i>	Yes
<i>COC/Labels Agree</i>	Yes
<i>Labels Complete</i>	Yes
<i>COC Complete</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No
<i>Field Sheet/Instructions Included</i>	No
<i>Samples Rejected/Documented in Log</i>	No
<i>Temp Taken From Temp Blank</i>	Yes
<i>Temp Taken From Sample Container</i>	No
<i>Temp Taken From Cooler</i>	No
<i>COC meets acceptance criteria</i>	Yes

<i>Received on Ice but Not Frozen</i>	Yes
<i>No Ice, Short Trip</i>	No
<i>Obvious Contamination</i>	No
<i>Rush to meet HT</i>	No
<i>Received within HT</i>	Yes
<i>Proper Containers for Analysis</i>	Yes
<i>Correct Preservation</i>	Yes
<i>Adequate Sample for Analysis</i>	Yes
<i>Sample Custody Seals Present</i>	Yes
<i>Samples Missing from COC/Cooler</i>	No

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

 Cooler ID: client cooler #2

 Receipt Temperature: 1.7 °C

<i>Cooler Custody Seals Present</i>	Yes
<i>Containers Intact</i>	Yes
<i>COC/Labels Agree</i>	Yes
<i>Labels Complete</i>	Yes
<i>COC Complete</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No
<i>Field Sheet/Instructions Included</i>	No
<i>Samples Rejected/Documented in Log</i>	No
<i>Temp Taken From Temp Blank</i>	Yes
<i>Temp Taken From Sample Container</i>	No
<i>Temp Taken From Cooler</i>	No
<i>COC meets acceptance criteria</i>	Yes

<i>Received on Ice but Not Frozen</i>	Yes
<i>No Ice, Short Trip</i>	No
<i>Obvious Contamination</i>	No
<i>Rush to meet HT</i>	No
<i>Received within HT</i>	Yes
<i>Proper Containers for Analysis</i>	Yes
<i>Correct Preservation</i>	Yes
<i>Adequate Sample for Analysis</i>	Yes
<i>Sample Custody Seals Present</i>	Yes
<i>Samples Missing from COC/Cooler</i>	No

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

 Cooler ID: client cooler #3

 Receipt Temperature: 1.9 °C

<i>Cooler Custody Seals Present</i>	Yes	<i>Received on Ice but Not Frozen</i>	Yes
<i>Containers Intact</i>	Yes	<i>No Ice, Short Trip</i>	No
<i>COC/Labels Agree</i>	Yes	<i>Obvious Contamination</i>	No
<i>Labels Complete</i>	Yes	<i>Rush to meet HT</i>	No
<i>COC Complete</i>	Yes	<i>Received within HT</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No	<i>Proper Containers for Analysis</i>	Yes
<i>Field Sheet/Instructions Included</i>	No	<i>Correct Preservation</i>	Yes
<i>Samples Rejected/Documented in Log</i>	No	<i>Adequate Sample for Analysis</i>	Yes
<i>Temp Taken From Temp Blank</i>	Yes	<i>Sample Custody Seals Present</i>	Yes
<i>Temp Taken From Sample Container</i>	No	<i>Samples Missing from COC/Cooler</i>	No
<i>Temp Taken From Cooler</i>	No		
<i>COC meets acceptance criteria</i>	Yes		



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

CASE NARRATIVE SUMMARY

All reported results are within Micro-Methods Laboratory, Inc. defined laboratory quality control objectives unless detailed in narrative summary or identified as qualifications. NOTE: All results listed on this report are calculated on a wet weight basis (as received by the laboratory) unless otherwise noted in the analysis qualification sections.

Summary Comments:

See attached results from Sub-Contract Laboratory

Qualifiers: *No Data Qualification*

Analyte & Samples(s) Qualified: *None*

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

MW-7
2305232-01 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	0.25	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	------	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.053	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 12:41	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 14:19	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 12:04	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

MW-9
2305232-02 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
Classical Chemistry Parameters										
Fluoride	0.41	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
Metals by EPA 200 Series Methods ICP-AES										
Barium 455.403 [Radial]	0.082	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 12:52	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	0.041	0.040	"	"	"	CLV	"	"	"	
Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]										
Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 14:25	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	0.00413	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.0158	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	
Mercury by EPA 200 Series Methods CVAAS										
Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 12:59	EPA 245.1 Rev 3.0	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

MW-12
2305232-03 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.171	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 12:55	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 14:32	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.0190	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:02	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

MW-13
2305232-04 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.140	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 12:59	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 14:38	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:10	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

MW-14
2305232-05 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.010	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 13:02	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 14:44	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:13	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

Field Blank
2305232-06 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	ND	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 13:06	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 14:50	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:17	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

Duplicate
2305232-07 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.011	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 13:10	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 14:56	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:20	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

OW-2
2305232-08 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.035	0.010	mg/L	1.0	3E16046	CLV	05/15/2023 10:00	05/16/2023 13:13	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 15:20	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:51	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

CCR-2
2305232-09 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.098	0.010	mg/L	1.0	3E16044	CLV	05/15/2023 10:00	05/16/2023 11:41	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 15:27	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.00203	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:55	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

CCR-3
2305232-10 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
Classical Chemistry Parameters										
Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
Metals by EPA 200 Series Methods ICP-AES										
Barium 455.403 [Radial]	0.058	0.010	mg/L	1.0	3E16044	CLV	05/15/2023 10:00	05/16/2023 11:45	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	0.086	0.040	"	"	"	CLV	"	"	"	
Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]										
Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 15:33	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	0.00122	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.0213	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	
Mercury by EPA 200 Series Methods CVAAS										
Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 13:59	EPA 245.1 Rev 3.0	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

CCR-4
2305232-11 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.122	0.010	mg/L	1.0	3E16044	CLV	05/15/2023 10:00	05/16/2023 11:49	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 15:39	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.00269	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 12:23	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

CCR-5
2305232-12 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Fluoride	ND	0.22	mg/L	1.0	3E12006	CRG	05/11/2023 14:50	05/15/2023 09:12	SM 4500-F C 2011	
----------	----	------	------	-----	---------	-----	---------------------	---------------------	---------------------	--

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.054	0.010	mg/L	1.0	3E16044	CLV	05/15/2023 10:00	05/16/2023 11:52	EPA 200.7 Rev 4.4	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3E15048	GWG	05/15/2023 12:00	05/17/2023 15:45	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.00962	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	
Thallium [He]	ND	0.00500	"	"	"	GWG	"	"	"	

Mercury by EPA 200 Series Methods CVAAS

Mercury	ND	0.00200	mg/L	1.0	3E16050	CLV	05/15/2023 10:00	05/16/2023 14:03	EPA 245.1 Rev 3.0	
---------	----	---------	------	-----	---------	-----	---------------------	---------------------	----------------------	--



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

Classical Chemistry Parameters - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3E12006 - Default Prep GenChem											
Blank (3E12006-BLK1)											
Fluoride	5/15/23 9:12	ND	0.22	mg/L							
LCS (3E12006-BS1)											
Fluoride	5/15/23 9:12	1.91	0.22	mg/L	2.00		95.5	87.8-113			
LCS Dup (3E12006-BSD1)											
Fluoride	5/15/23 9:12	2.00	0.22	mg/L	2.00		100	87.8-113	4.60	30	
Duplicate (3E12006-DUP1) Source: 2305232-11											
Fluoride	5/15/23 9:12	ND	0.22	mg/L		ND				20	
Matrix Spike (3E12006-MS1) Source: 2305232-03											
Fluoride	5/15/23 9:12	1.88	0.22	mg/L	2.00	ND	94.0	70.2-127			
Matrix Spike Dup (3E12006-MSD1) Source: 2305232-03											
Fluoride	5/15/23 9:12	2.00	0.22	mg/L	2.00	ND	100	70.2-127	6.19	30	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

Metals by EPA 200 Series Methods ICP-AES - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3E16044 - EPA 200.2 DCN 1017 Rev 10											
Blank (3E16044-BLK1)											
Barium 455.403 [Radial]	5/16/23 10:13	ND	0.010	mg/L							
Lithium 610.362 [Axial]	5/16/23 10:13	ND	0.040	"							
LCS (3E16044-BS1)											
Barium 455.403 [Radial]	5/16/23 10:16	0.210	0.010	mg/L	0.200		105	85-115			
Lithium 610.362 [Axial]	5/16/23 10:16	0.202	0.040	"	0.200		101	85-115			
LCS Dup (3E16044-BSD1)											
Barium 455.403 [Radial]	5/16/23 10:20	0.205	0.010	mg/L	0.200		103	85-115	2.17	20	
Lithium 610.362 [Axial]	5/16/23 10:20	0.197	0.040	"	0.200		98.4	85-115	2.68	20	
Matrix Spike (3E16044-MS1) Source: 2305207-02											
Barium 455.403 [Radial]	5/16/23 10:38	0.201	0.010	mg/L	0.200	ND	101	70-130			
Lithium 610.362 [Axial]	5/16/23 10:38	0.204	0.040	"	0.200	ND	102	70-130			
Matrix Spike Dup (3E16044-MSD1) Source: 2305207-02											
Barium 455.403 [Radial]	5/16/23 10:42	0.204	0.010	mg/L	0.200	ND	102	70-130	1.29	20	
Lithium 610.362 [Axial]	5/16/23 10:42	0.208	0.040	"	0.200	ND	104	70-130	1.83	20	
Batch 3E16046 - EPA 200.2 DCN 1017 Rev 10											
Blank (3E16046-BLK1)											
Barium 455.403 [Radial]	5/16/23 10:13	ND	0.010	mg/L							
Lithium 610.362 [Axial]	5/16/23 10:13	ND	0.040	"							
LCS (3E16046-BS1)											
Barium 455.403 [Radial]	5/16/23 10:16	0.210	0.010	mg/L	0.200		105	85-115			
Lithium 610.362 [Axial]	5/16/23 10:16	0.202	0.040	"	0.200		101	85-115			



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

Metals by EPA 200 Series Methods ICP-AES - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3E16046 - EPA 200.2 DCN 1017 Rev 10											
LCS Dup (3E16046-BSD1)											
Barium 455.403 [Radial]	5/16/23 10:20	0.205	0.010	mg/L	0.200		103	85-115	2.17	20	
Lithium 610.362 [Axial]	5/16/23 10:20	0.197	0.040	"	0.200		98.4	85-115	2.68	20	
Matrix Spike (3E16046-MS1) Source: 2305232-01											
Barium 455.403 [Radial]	5/16/23 12:45	0.265	0.010	mg/L	0.200	0.053	106	70-130			
Lithium 610.362 [Axial]	5/16/23 12:45	0.229	0.040	"	0.200	0.014	107	70-130			
Matrix Spike Dup (3E16046-MSD1) Source: 2305232-01											
Barium 455.403 [Radial]	5/16/23 12:48	0.262	0.010	mg/L	0.200	0.053	105	70-130	1.12	20	
Lithium 610.362 [Axial]	5/16/23 12:48	0.224	0.040	"	0.200	0.014	105	70-130	1.99	20	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3E15048 - EPA 200.2 DCN 1017 Rev 10											
Blank (3E15048-BLK1)											
Antimony [He]	5/17/23 13:25	ND	0.00200	mg/L							
Arsenic [NG]	5/17/23 13:25	ND	0.00200	"							
Beryllium [He]	5/17/23 13:25	ND	0.00100	"							
Cadmium [He]	5/17/23 13:25	ND	0.00100	"							
Chromium [He]	5/17/23 13:25	ND	0.00100	"							
Cobalt [He]	5/17/23 13:25	ND	0.00100	"							
Lead [He]	5/17/23 13:25	ND	0.00100	"							
Molybdenum [He]	5/17/23 13:25	ND	0.00100	"							
Selenium [NG]	5/17/23 13:25	ND	0.00500	"							
Thallium [He]	5/17/23 13:25	ND	0.00500	"							
LCS (3E15048-BS1)											
Antimony [He]	5/17/23 13:31	0.092	0.00200	mg/L	0.100		92.2	85-115			
Arsenic [NG]	5/17/23 13:31	0.097	0.00200	"	0.100		96.9	85-115			
Beryllium [He]	5/17/23 13:31	0.094	0.00100	"	0.100		94.3	85-115			
Cadmium [He]	5/17/23 13:31	0.098	0.00100	"	0.100		97.9	85-115			
Chromium [He]	5/17/23 13:31	0.099	0.00100	"	0.100		99.2	85-115			
Cobalt [He]	5/17/23 13:31	0.092	0.00100	"	0.100		91.7	85-115			
Lead [He]	5/17/23 13:31	0.099	0.00100	"	0.100		99.2	85-115			
Molybdenum [He]	5/17/23 13:31	0.098	0.00100	"	0.100		97.8	85-115			
Selenium [NG]	5/17/23 13:31	0.101	0.00500	"	0.100		101	85-115			
Thallium [He]	5/17/23 13:31	0.099	0.00500	"	0.100		98.9	85-115			
LCS Dup (3E15048-BSD1)											
Antimony [He]	5/17/23 13:37	0.098	0.00200	mg/L	0.100		97.9	85-115	6.03	20	
Arsenic [NG]	5/17/23 13:37	0.099	0.00200	"	0.100		99.1	85-115	2.18	20	
Beryllium [He]	5/17/23 13:37	0.098	0.00100	"	0.100		98.2	85-115	4.09	20	
Cadmium [He]	5/17/23 13:37	0.103	0.00100	"	0.100		103	85-115	5.48	20	
Chromium [He]	5/17/23 13:37	0.104	0.00100	"	0.100		104	85-115	5.00	20	
Cobalt [He]	5/17/23 13:37	0.096	0.00100	"	0.100		96.1	85-115	4.66	20	
Lead [He]	5/17/23 13:37	0.104	0.00100	"	0.100		104	85-115	4.80	20	
Molybdenum [He]	5/17/23 13:37	0.102	0.00100	"	0.100		102	85-115	4.45	20	
Selenium [NG]	5/17/23 13:37	0.104	0.00500	"	0.100		104	85-115	3.42	20	
Thallium [He]	5/17/23 13:37	0.104	0.00500	"	0.100		104	85-115	5.17	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3E15048 - EPA 200.2 DCN 1017 Rev 10											
Matrix Spike (3E15048-MS1)				Source: 2305241-01							
Antimony [He]	5/17/23 13:49	0.097	0.00200	mg/L	0.100	ND	97.0	70-130			
Arsenic [NG]	5/17/23 13:49	0.095	0.00200	"	0.100	ND	94.9	70-130			
Beryllium [He]	5/17/23 13:49	0.100	0.00100	"	0.100	ND	99.7	70-130			
Cadmium [He]	5/17/23 13:49	0.101	0.00100	"	0.100	ND	101	70-130			
Chromium [He]	5/17/23 13:49	0.099	0.00100	"	0.100	ND	99.5	70-130			
Cobalt [He]	5/17/23 13:49	0.091	0.00100	"	0.100	ND	90.7	70-130			
Lead [He]	5/17/23 13:49	0.103	0.00100	"	0.100	ND	103	70-130			
Molybdenum [He]	5/17/23 13:49	0.106	0.00100	"	0.100	0.0006	105	70-130			
Selenium [NG]	5/17/23 13:49	0.097	0.00500	"	0.100	ND	96.9	70-130			
Thallium [He]	5/17/23 13:49	0.102	0.00500	"	0.100	ND	102	70-130			
Matrix Spike (3E15048-MS2)				Source: 2305182-03							
Antimony [He]	5/17/23 14:07	0.099	0.00200	mg/L	0.100	0.0003	99.0	70-130			
Arsenic [NG]	5/17/23 14:07	0.096	0.00200	"	0.100	ND	95.9	70-130			
Beryllium [He]	5/17/23 14:07	0.106	0.00100	"	0.100	ND	106	70-130			
Cadmium [He]	5/17/23 14:07	0.101	0.00100	"	0.100	ND	101	70-130			
Chromium [He]	5/17/23 14:07	0.102	0.00100	"	0.100	ND	102	70-130			
Cobalt [He]	5/17/23 14:07	0.093	0.00100	"	0.100	0.0002	93.0	70-130			
Lead [He]	5/17/23 14:07	0.103	0.00100	"	0.100	ND	103	70-130			
Molybdenum [He]	5/17/23 14:07	0.105	0.00100	"	0.100	ND	105	70-130			
Selenium [NG]	5/17/23 14:07	0.098	0.00500	"	0.100	ND	97.5	70-130			
Thallium [He]	5/17/23 14:07	0.103	0.00500	"	0.100	ND	103	70-130			
Matrix Spike Dup (3E15048-MSD1)				Source: 2305241-01							
Antimony [He]	5/17/23 13:55	0.095	0.00200	mg/L	0.100	ND	95.2	70-130	1.91	20	
Arsenic [NG]	5/17/23 13:55	0.094	0.00200	"	0.100	ND	93.6	70-130	1.38	20	
Beryllium [He]	5/17/23 13:55	0.098	0.00100	"	0.100	ND	97.8	70-130	1.86	20	
Cadmium [He]	5/17/23 13:55	0.099	0.00100	"	0.100	ND	98.7	70-130	2.43	20	
Chromium [He]	5/17/23 13:55	0.097	0.00100	"	0.100	ND	97.2	70-130	2.27	20	
Cobalt [He]	5/17/23 13:55	0.088	0.00100	"	0.100	ND	88.4	70-130	2.62	20	
Lead [He]	5/17/23 13:55	0.100	0.00100	"	0.100	ND	100	70-130	2.64	20	
Molybdenum [He]	5/17/23 13:55	0.102	0.00100	"	0.100	0.0006	102	70-130	3.10	20	
Selenium [NG]	5/17/23 13:55	0.094	0.00500	"	0.100	ND	94.2	70-130	2.75	20	
Thallium [He]	5/17/23 13:55	0.099	0.00500	"	0.100	ND	99.2	70-130	2.44	20	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
---------	----------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	------------

Batch 3E15048 - EPA 200.2 DCN 1017 Rev 10

Matrix Spike Dup (3E15048-MSD2)

Source: 2305182-03

Antimony [He]	5/17/23 14:13	0.097	0.00200	mg/L	0.100	0.0003	96.6	70-130	2.49	20	
Arsenic [NG]	5/17/23 14:13	0.096	0.00200	"	0.100	ND	96.1	70-130	0.206	20	
Beryllium [He]	5/17/23 14:13	0.104	0.00100	"	0.100	ND	104	70-130	1.94	20	
Cadmium [He]	5/17/23 14:13	0.098	0.00100	"	0.100	ND	98.2	70-130	2.46	20	
Chromium [He]	5/17/23 14:13	0.101	0.00100	"	0.100	ND	101	70-130	0.971	20	
Cobalt [He]	5/17/23 14:13	0.092	0.00100	"	0.100	0.0002	92.0	70-130	1.16	20	
Lead [He]	5/17/23 14:13	0.101	0.00100	"	0.100	ND	101	70-130	2.02	20	
Molybdenum [He]	5/17/23 14:13	0.103	0.00100	"	0.100	ND	103	70-130	1.79	20	
Selenium [NG]	5/17/23 14:13	0.098	0.00500	"	0.100	ND	97.6	70-130	0.0998	20	
Thallium [He]	5/17/23 14:13	0.101	0.00500	"	0.100	ND	101	70-130	2.07	20	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

Mercury by EPA 200 Series Methods CVAAS - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3E16050 - EPA 245.1 DCN 1017 Rev 10											
Blank (3E16050-BLK1)											
Mercury	5/16/23 10:52	ND	0.00200	mg/L							
LCS (3E16050-BS1)											
Mercury	5/16/23 10:56	0.005	0.00200	mg/L	0.00500		98.0	85-115			
LCS Dup (3E16050-BSD1)											
Mercury	5/16/23 10:59	0.005	0.00200	mg/L	0.00500		96.0	85-115	2.06	20	
Matrix Spike (3E16050-MS1) Source: 2305232-11											
Mercury	5/16/23 12:08	0.005	0.00200	mg/L	0.00500	ND	98.0	70-130			
Matrix Spike (3E16050-MS2) Source: 2305232-01											
Mercury	5/16/23 12:34	0.005	0.00200	mg/L	0.00500	ND	98.0	70-130			
Matrix Spike Dup (3E16050-MSD1) Source: 2305232-11											
Mercury	5/16/23 12:16	0.005	0.00200	mg/L	0.00500	ND	90.0	70-130	8.51	20	
Matrix Spike Dup (3E16050-MSD2) Source: 2305232-01											
Mercury	5/16/23 12:39	0.005	0.00200	mg/L	0.00500	ND	102	70-130	4.00	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

Certified Analyses Included in this Report

Analyte	Certification Code
<i>EPA 200.7 Rev 4.4 in Water</i>	
Aluminum 394.401 [Radial]	C01,C02
Aluminum 396.152 [Radial]	C01,C02
Antimony 206.833 [Axial]	C01,C02
Arsenic 193.759 [Axial]	C01,C02
Barium 455.403 [Radial]	C01,C02
Barium 493.409 [Radial]	C01,C02
Beryllium 313.042 [Axial]	C01,C02
Boron 249.773 [Radial]	C01,C02
Cadmium 228.802 [Axial]	C01,C02
Calcium 315.887 [Radial]	C01,C02
Chromium 283.563 [Axial]	C01,C02
Cobalt 228.616 [Axial]	C01,C02
Copper 324.754 [Axial]	C01,C02
Iron 259.940 [Axial]	C01,C02
Iron 259.940 [Radial]	C01,C02
Lead 220.353 [Axial]	C01,C02
Lithium 610.362 [Axial]	C01,C02
Magnesium 285.213 [Radial]	C01,C02
Manganese 257.610 [Axial]	C01,C02
Molybdenum 202.030 [Axial]	C01,C02
Nickel 231.604 [Axial]	C01,C02
Potassium 766.490 [Radial]	C01,C02
Phosphorus 178.284 [Axial]	C01,C02
Phosphorus 178.284 [Radial]	C01,C02
Selenium 196.090 [Axial]	C01,C02
Silver 328.068 [Axial]	C01,C02
Sodium 589.592 [Axial]	C01,C02
Sodium 589.592 [Radial]	C01,C02
Strontium 346.446 [Radial]	C01,C02
Strontium 421.552 [Radial]	C01,C02
Thallium 190.856 [Axial]	C01,C02
Vanadium 309.311 [Axial]	C01,C02
Zinc 213.856 [Axial]	C01,C02
<i>EPA 200.8 Rev 5.4 in Water</i>	
Aluminum [He]	C01,C02
Antimony [He]	C01,C02
Antimony [HHe]	C01,C02
Antimony [NG]	C01,C02
Arsenic [He]	C01,C02
Arsenic [HHe]	C01,C02
Arsenic [NG]	C01,C02

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

Barium [He]	C01,C02
Beryllium [He]	C01,C02
Boron [NG]	C01,C02
Cadmium [He]	C01,C02
Cadmium [HHe]	C01,C02
Cadmium [NG]	C01,C02
Chromium [He]	C01,C02
Cobalt [He]	C01,C02
Copper [He]	C01,C02
Copper [NG]	C01,C02
Iron [He]	C01,C02
Lead [He]	C01,C02
Lead [NG]	C01,C02
Manganese [He]	C01,C02
Molybdenum [He]	C01,C02
Nickel [He]	C01,C02
Selenium [He]	C01,C02
Selenium [HHe]	C01,C02
Selenium [NG]	C01,C02
Silver [He]	C01,C02
Silver [NG]	C01,C02
Strontium [He]	C01,C02
Thallium [He]	C01,C02
Vanadium [He]	C01,C02
Zinc [He]	C01,C02

EPA 245.1 Rev 3.0 in Water

Mercury	C01,C02
---------	---------

****Only compounds included in this list are associated with accredited analyses****

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 06/13/2023 08:18

Laboratory Accreditations/Certifications

Code	Description	Number	Expires
C01	LA Environmental Lab Accreditation Program	01960	06/30/2023
C02	The NELAC Institute (NELAP)	TNI01397	06/30/2023
C03	Ms Dept of Health (Drinking Water Microbiology)	MS00021	12/31/2023
C04	Ms Dept of Health (Drinking Water Chemistry)	MS00021	12/31/2023
C05	Ms DEQ Lead Firm Certification	PBF-00000028	03/31/2024
C06	MsDEQ Asbestos Inspector : C.D. Bingham	ABI-00001348	02/09/2024
C07	MsDEQ Air Monitor : C.D. Bingham	AM-011572	02/10/2024
C08	MsDEQ Asbestos Inspector: C. W. Meins	ABI-00001821	09/09/2022
C09	MsDEQ Air Monitor : C.W. Meins	AM-011189	02/10/2024
C14	MsDEQ Lead Paint Inspector : C.D. Bingham	PBI-00003690	02/07/2024
C15	MsDEQ Lead Paint Inspector : C.W. Meins	PBI-00001740	02/07/2024

Report Definitions

TNC	Too Numerous To Count
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the minimum reporting limit
NR	Not Reported
RPD	Relative Percent Difference
ICV	Initial Calibration Verification
CCV	Continuing Calibration Verification Standard
SSV	Secondary Source Verification Standard
LCS	Lab Control Spike - Lab matrix prepared with known concentration of analyte/s of interest analyzed by method.
MS	Matrix Spike - Sample prepared with known concentration of analyte/s of interest analyzed by method.
MSD	Matrix Spike Duplicate - Duplicate sample prepared with known concentration of analyte/s of interest analyzed by method.
MRL	Minimum Reporting Limit
%REC	Percentage Recovery of known concentration added to matrix
Batch	Group of samples prepared for analysis not to exceed 20 samples.
Matrix	Material containing analyte/s of interest
Surrogate	Analyte added to sample to determine extraction efficiency of method.



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
06/13/2023 08:18

Analyst Initials Key

<u>FullName</u>	<u>Initials</u>
Charles L Vorhoff	CLV
Christa R Gray	CRG
Garrett Givhan	GWG
Sarah E. Tomek	SET
Teresa Meins	TKM
Tina Tomek	TPT

PO Box 1410, Ocean Springs, MS 39566-1410
(228) 875-6420 FAX (228) 875-6423
www.micromethodslab.com

Chain of Custody Record

Lab ID# MS00021
LELAP ID # 01960
TNI ID # TNI01397

Print Form

M-M Lab
WO #
2305232

Company Name: Choctaw Generation Limited Partnership LLP				Project Manager: Jim Ward			
Address: 2391 Pensacola Rd.				Purchase Order #:			
City: Ackerman		State: MS		Zip: 39735		Email Address: imward@southernco.com	
Phone: 662-387-5758				Sampler Name Printed: Caleb James			
Fax:				Sampler Name Signed: <i>[Signature]</i>			
Project Name: CGLP CCR				List Analyses Requested			
Project #: Annual				Preservative:			
Sample Identification		Sampling Date/Time	Matrix Code	# of Containers	Grab (G) or Composite (C)	Fluoride	Antimony, Arsenic, Barium, Beryllium, Cadmium, Cobalt, Chromium, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Total Radium 226 & 228
MW-7		5/10/23 11:58	W	4	G	X	X
MW-9		5/10/23 15:30	W	4	G	X	X
MW-12		5/10/23 14:01	W	4	G	X	X
MW-13		5/10/23 13:45	W	4	G	X	X
MW-14		5/10/23 10:30	W	4	G	X	X
Field Blank		5/10/23 10:38	W	4	G	X	X
Field Duplicate		5/10/23	W	4	G	X	X
OW-2		5/10/23 14:46	W	4	G	X	X
CCR-2		5/10/23 11:25	W	4	G	X	X
CCR-3		5/10/23 12:20	W	4	G	X	X
CCR-4		5/10/23 15:24	W	4	G	X	X
Received on Ice? <input checked="" type="checkbox"/> N Thermometer # 8 Cooler # 3 Receipt Temp Corrected (°C) 3							
Date & Time	By: James	Signature	Sample	Blank	Cooler		
Relinquished by	Caleb James	<i>[Signature]</i>	EC5	5/10/23	17:45		
Received by	EC5						
Relinquished by	EC5						
Received by	EC5						
Relinquished by	EC5						
Received by	EC5						

Turn Around Time & Reporting

Our normal turn around time is 10 working days

☒ Normal ☐ Next Day* ☐ 2nd Day* ☐ Other*

*All rush order requests must be prior approved.

Phone ☐ Mail ☐ Fax ☐ Email ☐

QC Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Field Testing

ID#	ID#	ID#	ID#	ID#
Field Test	Field Test	Field Test	Field Test	Field Test

Matrix:

W = Water
DW = Drinking Water
S = Solid
SO = Soil
SE = Sediment
L = Liquid
A = Air
O = Oil
SL = Sludge

Preservation:

1 = H2SO4
2 = H3PO4
3 = NaOH
4 = ZnCAH1006
5 = ZnCAH1006 & NaOH
6 = HNO3
7 = Na2S2O3
8 = HCl
9 = NaHSO4

Notes:

All Temps are Corrected Values

Please send 4-day coolers back to EC5, Inc.

Client cooler #1 2.8°C
Client cooler #2 1.7°C
Client cooler #3 1.9°C



Lab ID# MS00021
LELAP ID # 01960
TNI ID # TNI01397

M-M Lab
WO #

2305232

Print Form

Project Manager: **Jim Ward**

Purchase Order #:

Email Address: **imward@southernco.com**

Sampler Name Printed: Apple - pears Enthal Estabrook

Sampler Name: Signed: [Signature]

List Analyses Requested

Annual

Sampling Date/Time	Matrix Code
-----------------------	----------------

4

6	
---	--

Fluoride
Antimony, Arsenic
Barium, Beryllium
Cadmium, Cobalt
Chromium, Lead
Lithium, Mercury
Molybdenum, Selenium
Thallium
Total Radium 226 & 228

Turn Around Time & Reporting

Our normal turn around time is 10 working days

☒ Normal

 ___ Next Day*

 ___ 2nd Day*

 ___ Other* _____

 * All rush order requests must be prior approved.

 ___ Phone _____

 ___ Mail _____

 ___ Fax _____

 ___ Email _____

QC Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

QC Level: Level 1	Level 2	Level 3
-------------------	---------	---------

Field Testing

Field Test	Field Test	Field Test	Field Test
ID#	ID#	ID#	ID#

Matrix:

DW = Drinking

water
s - solid

SO = Soil

L = Liquid

$$\text{H}_2\text{O} = \text{O}$$

SL = Sludge

SL = Sludge

Preservation:

1 = H2504

 $2 = \text{H}_3\text{PO}_4$ 3=NaOH
4=7nCAH1006

5=ZnC4H10O6 &

NaOH

 $6 = \text{HNO}_3$

7=Na2S2O3
8-HCl

9-Nat

 $9 = \text{NaHSO}_4$

Notes:

Please send it-day coaters back
to ECS, Inc.

Page 31 of 48

Physical Address: 6500 Sunplex Drive, Ocean Springs MS 39564

Page 2 of 2

DCN F316 Rev.6
MicroMethods Laboratory
Issued/Revised 6/15/22

June 12, 2023

Tina Tomek
Micro-Methods Lab
6500 Sunplex Drive
Ocean Springs, MS 39564

RE: Project: 2305232
Pace Project No.: 30589504

Dear Tina Tomek:

Enclosed are the analytical results for sample(s) received by the laboratory on May 18, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,



Justin P. Horn
justin.horn@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Accounts Payable, Micro-Methods Lab



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 2305232

Pace Project No.: 30589504

Pace Analytical Services Pennsylvania

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

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

Delaware Certification

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Florida: Cert E871149 SEKS WET

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572018-1

New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3

Utah/TNI Certification #: PA014572017-9

USDA Soil Permit #: P330-17-00091

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 2305232
Pace Project No.: 30589504

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30589504001	2305232-01	Water	05/10/23 11:58	05/18/23 09:50
30589504002	2305232-02	Water	05/10/23 15:30	05/18/23 09:50
30589504003	2305232-03	Water	05/10/23 14:05	05/18/23 09:50
30589504004	2305232-04	Water	05/10/23 13:45	05/18/23 09:50
30589504005	2305232-05	Water	05/10/23 10:30	05/18/23 09:50
30589504006	2305232-06	Water	05/10/23 10:38	05/18/23 09:50
30589504007	2305232-07	Water	05/10/23 00:00	05/18/23 09:50
30589504008	2305232-08	Water	05/10/23 14:40	05/18/23 09:50
30589504009	2305232-09	Water	05/10/23 11:25	05/18/23 09:50
30589504010	2305232-10	Water	05/10/23 12:20	05/18/23 09:50
30589504011	2305232-11	Water	05/10/23 15:24	05/18/23 09:50
30589504012	2305232-12	Water	05/10/23 14:40	05/18/23 09:50

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 2305232
Pace Project No.: 30589504

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30589504001	2305232-01	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504002	2305232-02	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504003	2305232-03	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504004	2305232-04	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504005	2305232-05	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504006	2305232-06	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504007	2305232-07	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504008	2305232-08	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504009	2305232-09	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504010	2305232-10	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504011	2305232-11	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30589504012	2305232-12	EPA 903.1	JLJ	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 2305232
Pace Project No.: 30589504

Lab ID	Sample ID	Method	Analysts	Analytes Reported
PASI-PA = Pace Analytical Services - Greensburg				

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2305232
Pace Project No.: 30589504

Sample: 2305232-01		Lab ID: 30589504001	Collected: 05/10/23 11:58	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	06/12/23 15:22	13982-63-3	
	EPA 903.1	0.229 ± 0.350 (0.563) C:NA T:95%					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	06/06/23 11:39	15262-20-1	
	EPA 904.0	0.352 ± 0.353 (0.728) C:80% T:85%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	06/12/23 17:14	7440-14-4	
	Total Radium Calculation	0.581 ± 0.703 (1.29)					

Sample: 2305232-02		Lab ID: 30589504002	Collected: 05/10/23 15:30	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.719 ± 0.603 (0.863) C:NA T:90%		pCi/L	06/12/23 15:22	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	1.84 ± 0.574 (0.760) C:90% T:81%		pCi/L	06/06/23 11:39	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	2.56 ± 1.18 (1.62)		pCi/L	06/12/23 17:14	7440-14-4	

Sample: 2305232-03		Lab ID: 30589504003	Collected: 05/10/23 14:05	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.628 ± 0.498 (0.648) C:NA T:95%		pCi/L	06/12/23 15:22	13982-63-3	
	Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.494 ± 0.414 (0.840) C:87% T:85%		pCi/L	06/06/23 11:39	15262-20-1	
	Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.12 ± 0.912 (1.49)		pCi/L	06/12/23 17:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2305232
Pace Project No.: 30589504

Sample: 2305232-04		Lab ID: 30589504004	Collected: 05/10/23 13:45	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.750 ± 0.695 (1.06) C:NA T:101%		pCi/L	06/12/23 15:22	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.539 ± 0.365 (0.704) C:81% T:93%		pCi/L	06/06/23 11:39	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	1.29 ± 1.06 (1.76)		pCi/L	06/12/23 17:14	7440-14-4	

Sample: 2305232-05		Lab ID: 30589504005	Collected: 05/10/23 10:30	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.159 ± 0.494 (0.957) C:NA T:95%		pCi/L	06/12/23 15:22	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.757 ± 0.413 (0.750) C:84% T:85%		pCi/L	06/06/23 11:39	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.916 ± 0.907 (1.71)		pCi/L	06/12/23 17:14	7440-14-4	

Sample: 2305232-06		Lab ID: 30589504006	Collected: 05/10/23 10:38	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	06/12/23 15:22	13982-63-3	
	EPA 903.1	0.370 ± 0.754 (1.34) C:NA T:90%					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	06/06/23 11:39	15262-20-1	
	EPA 904.0	0.675 ± 0.385 (0.706) C:83% T:89%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	06/12/23 17:14	7440-14-4	
	Total Radium Calculation	1.05 ± 1.14 (2.05)					

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2305232
Pace Project No.: 30589504

Sample: 2305232-07		Lab ID: 30589504007	Collected: 05/10/23 00:00	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.506 ± 0.588 (0.948) C:NA T:91%		pCi/L	06/12/23 15:40	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.690 ± 0.422 (0.795) C:81% T:88%		pCi/L	06/06/23 11:39	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	1.20 ± 1.01 (1.74)		pCi/L	06/12/23 17:14	7440-14-4	

Sample: 2305232-08		Lab ID: 30589504008	Collected: 05/10/23 14:40	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.468 ± 0.614 (1.02) C:NA T:87%		pCi/L	06/12/23 15:40	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.537 ± 0.408 (0.808) C:79% T:86%		pCi/L	06/06/23 11:39	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	1.01 ± 1.02 (1.83)		pCi/L	06/12/23 17:14	7440-14-4	

Sample: 2305232-09		Lab ID: 30589504009	Collected: 05/10/23 11:25	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.904 ± 0.669 (0.905) C:NA T:96%		pCi/L	06/12/23 15:40	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.699 ± 0.417 (0.788) C:82% T:90%		pCi/L	06/06/23 11:32	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	1.60 ± 1.09 (1.69)		pCi/L	06/12/23 17:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2305232
Pace Project No.: 30589504

Sample: 2305232-10		Lab ID: 30589504010	Collected: 05/10/23 12:20	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Radium-226	Pace Analytical Services - Greensburg			pCi/L	06/12/23 15:40	13982-63-3	
	EPA 903.1	0.0686 ± 0.404 (0.824) C:NA T:91%					
Radium-228	Pace Analytical Services - Greensburg			pCi/L	06/06/23 11:32	15262-20-1	
	EPA 904.0	1.08 ± 0.492 (0.841) C:79% T:85%					
Total Radium	Pace Analytical Services - Greensburg			pCi/L	06/12/23 17:14	7440-14-4	
	Total Radium Calculation	1.15 ± 0.896 (1.67)					

Sample: 2305232-11		Lab ID: 30589504011	Collected: 05/10/23 15:24	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.144 ± 0.529 (1.02) C:NA T:96%		pCi/L	06/12/23 15:40	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.804 ± 0.460 (0.853) C:79% T:82%		pCi/L	06/06/23 11:32	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.948 ± 0.989 (1.87)		pCi/L	06/12/23 17:14	7440-14-4	

Sample: 2305232-12		Lab ID: 30589504012	Collected: 05/10/23 14:40	Received: 05/18/23 09:50	Matrix: Water		
PWS:		Site ID:	Sample Type:				
Parameters	Method	Act ± Unc (MDC) Carr Trac		Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg							
Radium-226	EPA 903.1	0.378 ± 0.613 (1.07) C:NA T:92%		pCi/L	06/12/23 15:40	13982-63-3	
Pace Analytical Services - Greensburg							
Radium-228	EPA 904.0	0.320 ± 0.327 (0.678) C:87% T:91%		pCi/L	06/06/23 14:45	15262-20-1	
Pace Analytical Services - Greensburg							
Total Radium	Total Radium Calculation	0.698 ± 0.940 (1.75)		pCi/L	06/12/23 17:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2305232

Pace Project No.: 30589504

QC Batch:	590573	Analysis Method:	EPA 904.0
QC Batch Method:	EPA 904.0	Analysis Description:	904.0 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30589504001, 30589504002, 30589504003, 30589504004, 30589504005, 30589504006, 30589504007, 30589504008, 30589504009, 30589504010, 30589504011, 30589504012		

METHOD BLANK: 2870025 Matrix: Water

Associated Lab Samples: 30589504001, 30589504002, 30589504003, 30589504004, 30589504005, 30589504006, 30589504007, 30589504008, 30589504009, 30589504010, 30589504011, 30589504012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.421 ± 0.364 (0.734) C:77% T:87%	pCi/L	06/06/23 11:39	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: 2305232
Pace Project No.: 30589504

QC Batch:	590572	Analysis Method:	EPA 903.1
QC Batch Method:	EPA 903.1	Analysis Description:	903.1 Radium-226
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30589504001, 30589504002, 30589504003, 30589504004, 30589504005, 30589504006, 30589504007, 30589504008, 30589504009, 30589504010, 30589504011, 30589504012		

METHOD BLANK:	2870024	Matrix:	Water
Associated Lab Samples:	30589504001, 30589504002, 30589504003, 30589504004, 30589504005, 30589504006, 30589504007, 30589504008, 30589504009, 30589504010, 30589504011, 30589504012		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.114 ± 0.273 (0.527) C:NA T:96%	pCi/L	06/12/23 15:22	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 2305232
Pace Project No.: 30589504

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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



MICRO-METHODS

LABORATORY, INC.

SUBCONTRACT ORDER

Sending Laboratory:

Micro-Methods Laboratory, Inc.
6500 Sunplex Drive
Ocean Springs, MS 39564
Phone: 228.875.6420
Fax: 228.875.6423

Project Manager: Teresa Meins

Subcontracted Laboratory:

Pace Analytical-7
1638 Roseytown Rd. Suites 2, 3, 4
Greensburg, PA 15601
Phone: (724) 850-5600
Fax: -

Work Order: 2305232

Analysis	Due	Expires	Comments
----------	-----	---------	----------

Sample ID: 2305232-01 *Water* **Sampled: 05/10/2023 11:58** **Sample Name: MW-7**

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 11:58

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-02 *Water* **Sampled: 05/10/2023 15:30** **Sample Name: MW-9**

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 15:30

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-03 *Water* **Sampled: 05/10/2023 14:05** **Sample Name: MW-12**

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 14:05

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-04 *Water* **Sampled: 05/10/2023 13:45** **Sample Name: MW-13**

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 13:45

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-05 *Water* **Sampled: 05/10/2023 10:30** **Sample Name: MW-14**

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 10:30

Smah Jomeh *5/15/23 1630*
Released By Date

UPS
Released By Date

Released By Date

Released By Date

Released By Date

UPS *5/15/23 1630*
Received By Date

[Signature] *5/18/23 958*
Received By Date

Received By Date

Received By Date

Received By Date

WO# : 30589504



30589504



**SUBCONTRACT
ORDER**
(Continued)

Work Order: 2305232 (Continued)

Analysis	Due	Expires	Comments
----------	-----	---------	----------

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-06 Water Sampled: 05/10/2023 10:38 Sample Name: Field Blank

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 10:38

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-07 Water Sampled: 05/10/2023 00:00 Sample Name: Duplicate

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 00:00

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-08 Water Sampled: 05/10/2023 14:40 Sample Name: OW-2

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 14:40

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-09 Water Sampled: 05/10/2023 11:25 Sample Name: CCR-2

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 11:25

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-10 Water Sampled: 05/10/2023 12:20 Sample Name: CCR-3

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 12:20

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-11 Water Sampled: 05/10/2023 15:24 Sample Name: CCR-4

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 15:24

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2305232-12 Water Sampled: 05/10/2023 14:40 Sample Name: CCR-5

Released By Imah Jomeh Date 5/15/23 1630

Released By VPS Date _____

Released By _____ Date _____

Released By _____ Date _____

Released By _____ Date _____

Received By VPS Date 5/15/23 1630

Received By [Signature] Date 5/18/23 958

Received By _____ Date _____

Received By _____ Date _____

Received By _____ Date _____

WO# : 30589504

PM: JPH Due Date: 06/09/23
CLIENT: MICROMETHOD



MICRO-METHODS

LABORATORY, INC.

SUBCONTRACT ORDER (Continued)

Work Order: 2305232 (Continued)

Analysis	Due	Expires	Comments
----------	-----	---------	----------

Sample ID: 2305232-12 Water Sampled: 05/10/2023 14:40 Sample Name: CCR-5

Radium, Total 226 & 228 by EPA 903.1 & 90 05/19/2023 06/07/2023 14:40

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

WO#: 30589504

PM: JPH

Due Date: 06/09/23

CLIENT: MICROMETHOD

Smah Jomah 5/15/23 1630
Released By Date

VPS
Released By Date

Released By Date

Released By Date

Released By Date

VPS 5/15/23 1630
Received By Date

[Signature] 5/18/23 950
Received By Date

Received By Date

Received By Date

Received By Date

Client

Site

2305232

Page 1 of 1

Profile Number

4460

Notes

Sample Line Item	Amber Glass					Plastic								Vials					Other									
	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WG9U	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

W10# : 30589504

PM: JPH
Due Date: 06/09/23
CLIENT: MICROMETHOD

WO#: 30589504

PM: JPH Due Date: 06/09/23

CLIENT: MICROMETHOD

Container Codes

Glass		
GJN	1 Gallon Jug with HNO3	DG9S
AG5U	100mL amber glass unpreserved	VG9U
AG5T	100mL amber glass Na Thiosulfate	VG9T
GJN	1 Gallon Jug	VG9H
AG1S	1L amber glass H2SO4	JGFU
AG1H	1L amber glass HCl	WGFU
AG1T	1L amber glass NA Thiosulfate	BG2U
AG1U	1L clear glass unpreserved	AG2U
IS	250mL amber glass H2SO4	WGKU
IS	250mL amber glass unpreserved	GN

Plastic/Misc.		
GCUB	1 gallon cubitainer	EZ1
12GN	1/2 gallon cubitainer	VOAK
SP5T	120mL coliform Na Thiosulfate	I
BP1N	1L plastic HNO3	ZPLC
BP1U	1L plastic unpreserved	Sploc Bag
BP3S	250mL plastic H2SO4	WT
BP3N	250mL plastic HNO3	SL
BP3U	250mL plastic unpreserved	OL
BP3C	250mL plastic NAOH	WP
BP2S	500mL plastic H2SO4	
BP2U	500mL plastic unpreserved	



Mailing Address:
PO Box 1410
Ocean Springs, MS
39566-1410

6500 Sunplex Drive
Ocean Springs, MS 39564
228.875.6420 Phone
228.875.6423 Fax

October 09, 2023

Jim Ward

Work Order # : 2309244

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman, MS 39735
RE: CGLP CCR Semi Annual

Purchase Order #: RDH17816 - Yr 2023

Enclosed are Micro-Methods Laboratory, Inc. results of analyses performed on samples received 09/14/2023 08:55. If you have any questions concerning this report, please feel free to contact the office.

Sincerely,

Mitch Spicer

Lab Director
Micro-Methods Laboratory, Inc.



DISCLAIMER

The results only relate to the items or the sample and/or samples received by the laboratory. This report shall not be reproduced except in full, without the approval of the laboratory. All NELAP certified test methods performed meet the requirements of NELAC 2009 Standards. Any variances and/or deviations specific to this analytical report are referenced in the lab report using qualifiers and detailed explanations found in the case narrative.

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim WardReported:
10/09/2023 13:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date/Time Sampled	Sampled by	Date/Time Received
MW-9	2309244-01	Water	09/13/2023 12:05	Caleb James	09/14/2023 08:55
OW-2	2309244-02	Water	09/13/2023 14:52	Caleb James	09/14/2023 08:55
MW-13	2309244-03	Water	09/13/2023 16:07	Caleb James	09/14/2023 08:55
MW-7	2309244-04	Water	09/13/2023 11:57	Caleb James	09/14/2023 08:55
MW-14	2309244-05	Water	09/13/2023 10:30	Caleb James	09/14/2023 08:55
Field Blank	2309244-06	Water	09/13/2023 10:35	Caleb James	09/14/2023 08:55
Duplicate	2309244-07	Water	09/13/2023 00:00	Caleb James	09/14/2023 08:55
MW-12	2309244-08	Water	09/13/2023 13:35	Caleb James	09/14/2023 08:55
CCR-2	2309244-09	Water	09/13/2023 15:45	Caleb James	09/14/2023 08:55
CCR-3	2309244-10	Water	09/13/2023 11:10	Caleb James	09/14/2023 08:55
CCR-4	2309244-11	Water	09/13/2023 15:50	Caleb James	09/14/2023 08:55
CCR-5	2309244-12	Water	09/13/2023 14:56	Caleb James	09/14/2023 08:55

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim WardReported:
10/09/2023 13:31**Sample Receipt Conditions**

Date/Time Received: 9/14/2023 8:55:00AM

Shipped by: Fed Ex

Received by: Teresa Meins

Submitted by: Ethan Easterling

Date/Time Logged: 9/14/2023 9:09:00AM

Logged by: Teresa Meins

Cooler ID: client cooler #1Receipt Temperature: 1.9 °C

Cooler Custody Seals Present	Yes
Containers Intact	Yes
COC/Labels Agree	Yes
Labels Complete	Yes
COC Complete	Yes
Volatile Vial Headspace >6mm	No
Field Sheet/Instructions Included	No
Samples Rejected/Documented in Log	No
Temp Taken From Temp Blank	Yes
Temp Taken From Sample Container	No
Temp Taken From Cooler	No
COC meets acceptance criteria	Yes

Received on Ice but Not Frozen	Yes
No Ice, Short Trip	No
Obvious Contamination	No
Rush to meet HT	No
Received within HT	Yes
Proper Containers for Analysis	Yes
Correct Preservation	Yes
Adequate Sample for Analysis	Yes
Sample Custody Seals Present	Yes
Samples Missing from COC/Cooler	No

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

 Cooler ID: client cooler #2

 Receipt Temperature: 0.4 °C

<i>Cooler Custody Seals Present</i>	Yes	<i>Received on Ice but Not Frozen</i>	Yes
<i>Containers Intact</i>	Yes	<i>No Ice, Short Trip</i>	No
<i>COC/Labels Agree</i>	Yes	<i>Obvious Contamination</i>	No
<i>Labels Complete</i>	Yes	<i>Rush to meet HT</i>	No
<i>COC Complete</i>	Yes	<i>Received within HT</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No	<i>Proper Containers for Analysis</i>	Yes
<i>Field Sheet/Instructions Included</i>	No	<i>Correct Preservation</i>	Yes
<i>Samples Rejected/Documented in Log</i>	No	<i>Adequate Sample for Analysis</i>	Yes
<i>Temp Taken From Temp Blank</i>	Yes	<i>Sample Custody Seals Present</i>	Yes
<i>Temp Taken From Sample Container</i>	No	<i>Samples Missing from COC/Cooler</i>	No
<i>Temp Taken From Cooler</i>	No		
<i>COC meets acceptance criteria</i>	Yes		

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

 Cooler ID: client cooler #3

 Receipt Temperature: 1.4 °C

<i>Cooler Custody Seals Present</i>	Yes	<i>Received on Ice but Not Frozen</i>	Yes
<i>Containers Intact</i>	Yes	<i>No Ice, Short Trip</i>	No
<i>COC/Labels Agree</i>	Yes	<i>Obvious Contamination</i>	No
<i>Labels Complete</i>	Yes	<i>Rush to meet HT</i>	No
<i>COC Complete</i>	Yes	<i>Received within HT</i>	Yes
<i>Volatile Vial Headspace >6mm</i>	No	<i>Proper Containers for Analysis</i>	Yes
<i>Field Sheet/Instructions Included</i>	No	<i>Correct Preservation</i>	Yes
<i>Samples Rejected/Documented in Log</i>	No	<i>Adequate Sample for Analysis</i>	Yes
<i>Temp Taken From Temp Blank</i>	Yes	<i>Sample Custody Seals Present</i>	Yes
<i>Temp Taken From Sample Container</i>	No	<i>Samples Missing from COC/Cooler</i>	No
<i>Temp Taken From Cooler</i>	No		
<i>COC meets acceptance criteria</i>	Yes		



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
10/09/2023 13:31

CASE NARRATIVE SUMMARY

All reported results are within Micro-Methods Laboratory, Inc. defined laboratory quality control objectives unless detailed in narrative summary or identified as qualifications. NOTE: All results listed on this report are calculated on a wet weight basis (as received by the laboratory) unless otherwise noted in the analysis qualification sections.

Summary Comments:

COC Page 2 no sampler signature. TKM

Relinquished by and Received by date corrected as per client. T. Tomek

See attached results from Sub-Contract Laboratory

Qualifiers: *No Data Qualification*

Analyte & Samples(s) Qualified: *None*

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

MW-9
2309244-01 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	337	8.00	mg/L	4.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	0.23	0.22	"	1.0	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO4	101	20.0	"	4.0	3120032	DLW	09/20/2023 11:30	09/20/2023 15:22	SM 4500-SO42 E 2011	
Total Dissolved Solids	556	1	"	1.0	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.045	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 14:27	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	20.6	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 13:26	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	0.00235	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	0.00806	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

OW-2
2309244-02 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	156	4.00	mg/L	2.0	3I18024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	0.22	0.22	"	1.0	3I20035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO4	89.1	20.0	"	4.0	3I20032	DLW	09/20/2023 11:30	09/20/2023 15:22	SM 4500-SO42 E 2011	
Total Dissolved Solids	449	1	"	1.0	3I19051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.029	0.010	mg/L	1.0	3I19038	CLV	09/19/2023 10:00	09/20/2023 14:38	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	40.9	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3I18034	GWG	09/18/2023 13:00	09/19/2023 13:32	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

MW-13
2309244-03 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	7.28	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO ₄	6.10	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	151	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.149	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 14:42	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	16.9	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 13:39	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

MW-7
2309244-04 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	7.68	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO ₄	44.7	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	163	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.065	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 14:45	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	24.7	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 13:45	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

MW-14
2309244-05 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	25.6	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO ₄	7.65	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	80	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.012	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 14:49	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	0.590	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 14:24	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 11:47	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 14:24	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Field Blank
2309244-06 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	0.85	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO4	ND	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	6	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	ND	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 14:53	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 14:30	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 11:51	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 14:30	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Duplicate
2309244-07 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	26.2	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO4	7.65	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	81	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.011	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 14:56	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	0.563	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 14:36	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 11:55	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 14:36	"	
Cobalt [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

MW-12
2309244-08 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	43.7	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO ₄	29.7	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	174	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.173	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 15:00	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	25.2	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 14:42	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 12:00	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 14:42	"	
Cobalt [He]	0.00491	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

CCR-2
2309244-09 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	5.08	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO ₄	10.1	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO ₄ E 2011	
Total Dissolved Solids	89	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.110	0.010	mg/L	1.0	3119038	CLV	09/19/2023 10:00	09/20/2023 13:50	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	13.5	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 14:49	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 12:04	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 14:49	"	
Cobalt [He]	0.00130	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

CCR-3
2309244-10 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	8.48	2.00	mg/L	1.0	3I18024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	0.27	0.22	"	"	3I20035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO4	71.5	10.0	"	2.0	3I18038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	213	1	"	1.0	3I19051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.046	0.010	mg/L	1.0	3I19038	CLV	09/19/2023 10:00	09/20/2023 13:53	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	17.5	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	0.058	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3I18034	GWG	09/18/2023 13:00	09/19/2023 14:55	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 12:08	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 14:55	"	
Cobalt [He]	0.00999	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

CCR-4
2309244-11 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	10.7	2.00	mg/L	1.0	3118024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3120035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO ₄	18.3	5.00	"	"	3118038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	174	1	"	"	3119051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.157	0.010	mg/L	1.0	3119037	CLV	09/19/2023 10:00	09/20/2023 13:21	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	ND	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	23.9	0.050	"	"	"	CLV	"	"	"	
Lithium 610.362 [Axial]	ND	0.040	"	"	"	CLV	"	"	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3118034	GWG	09/18/2023 13:00	09/19/2023 15:01	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 12:13	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 15:01	"	
Cobalt [He]	0.00248	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

CCR-5
2309244-12 (Water)

Analyte	Result	MRL	Units	Dil	Batch	Analyst	Date Time Prepared	Date Time Analyzed	Method	Qualifiers
---------	--------	-----	-------	-----	-------	---------	--------------------------	--------------------------	--------	------------

Classical Chemistry Parameters

Chloride	7.32	2.00	mg/L	1.0	3I18024	DLW	09/18/2023 08:20	09/18/2023 12:05	ASTM D 512-12	
Fluoride	ND	0.22	"	"	3I20035	CRG	09/20/2023 12:06	09/20/2023 14:17	SM 4500-F C 2011	
Sulfate as SO4	96.4	20.0	"	4.0	3I18038	DLW	09/18/2023 14:00	09/18/2023 14:45	SM 4500-SO42 E 2011	
Total Dissolved Solids	386	1	"	1.0	3I19051	DLW	09/18/2023 13:15	09/20/2023 00:00	SM 2540 C-2015	

Metals by EPA 200 Series Methods ICP-AES

Barium 455.403 [Radial]	0.083	0.010	mg/L	1.0	3I19037	CLV	09/19/2023 10:00	09/20/2023 13:24	EPA 200.7 Rev 4.4	
Boron 249.773 [Radial]	0.067	0.050	"	"	"	CLV	"	"	"	
Calcium 315.887 [Radial]	47.9	0.250	"	5.0	"	CLV	"	09/20/2023 13:57	"	
Lithium 610.362 [Axial]	ND	0.040	"	1.0	"	CLV	"	09/20/2023 13:24	"	

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode]

Antimony [He]	ND	0.00200	mg/L	1.0	3I18034	GWG	09/18/2023 13:00	09/19/2023 15:07	EPA 200.8 Rev 5.4	
Arsenic [NG]	ND	0.00200	"	"	"	GWG	"	"	"	
Beryllium [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Cadmium [He]	ND	0.00100	"	"	"	GWG	"	09/20/2023 12:17	"	
Chromium [He]	ND	0.00100	"	"	"	GWG	"	09/19/2023 15:07	"	
Cobalt [He]	0.00261	0.00100	"	"	"	GWG	"	"	"	
Lead [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Molybdenum [He]	ND	0.00100	"	"	"	GWG	"	"	"	
Selenium [NG]	ND	0.00500	"	"	"	GWG	"	"	"	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
10/09/2023 13:31

Classical Chemistry Parameters - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3I18024 - Default Prep GenChem											
Blank (3I18024-BLK1)											
Chloride	9/18/23 11:45	ND	2.00	mg/L							
LCS (3I18024-BS1)											
Chloride	9/18/23 11:45	25.2	2.00	mg/L	25.0		101	85-115			
LCS Dup (3I18024-BSD1)											
Chloride	9/18/23 11:45	24.5	2.00	mg/L	25.0		98.0	85-115	2.82	30	
Duplicate (3I18024-DUP1) Source: 2309087-03											
Chloride	9/18/23 11:45	5.11	2.00	mg/L		5.14			0.585	20	
Matrix Spike (3I18024-MS1) Source: 2309087-03											
Chloride	9/18/23 11:45	25.7	2.00	mg/L	20.0	5.14	103	70-130			
Matrix Spike Dup (3I18024-MSD1) Source: 2309087-03											
Chloride	9/18/23 11:45	25.2	2.00	mg/L	20.0	5.14	100	70-130	1.96	20	
Batch 3I18038 - Default Prep GenChem											
Blank (3I18038-BLK1)											
Sulfate as SO4	9/18/23 14:45	ND	5.00	mg/L							
LCS (3I18038-BS1)											
Sulfate as SO4	9/18/23 14:45	31.1	5.00	mg/L	30.0		104	88-108			
LCS Dup (3I18038-BSD1)											
Sulfate as SO4	9/18/23 14:45	30.9	5.00	mg/L	30.0		103	88-108	0.810	20	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
10/09/2023 13:31

Classical Chemistry Parameters - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
---------	----------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	------------

Batch 3I18038 - Default Prep GenChem

Duplicate (3I18038-DUP1)

Source: 2309175-01

Sulfate as SO4	9/18/23 14:45	18.0	5.00	mg/L		18.9			4.98	20	
----------------	---------------	------	------	------	--	------	--	--	------	----	--

Matrix Spike (3I18038-MS1)

Source: 2309175-01

Sulfate as SO4	9/18/23 14:45	48.2	5.00	mg/L	30.0	18.9	97.4	74.1-129			
----------------	---------------	------	------	------	------	------	------	----------	--	--	--

Matrix Spike Dup (3I18038-MSD1)

Source: 2309175-01

Sulfate as SO4	9/18/23 14:45	44.9	5.00	mg/L	30.0	18.9	86.4	74.1-129	7.11	20	
----------------	---------------	------	------	------	------	------	------	----------	------	----	--

Batch 3I19051 - Default Prep GenChem

Blank (3I19051-BLK1)

Total Dissolved Solids	9/20/23 0:00	ND	1	mg/L							
------------------------	--------------	----	---	------	--	--	--	--	--	--	--

LCS (3I19051-BS1)

Total Dissolved Solids	9/20/23 0:00	79	1	mg/L	99.8		79.2	60.3-100			
------------------------	--------------	----	---	------	------	--	------	----------	--	--	--

LCS Dup (3I19051-BSD1)

Total Dissolved Solids	9/20/23 0:00	80	1	mg/L	99.8		80.2	60.3-100	1.26	10	
------------------------	--------------	----	---	------	------	--	------	----------	------	----	--

Duplicate (3I19051-DUP1)

Source: 2309244-05

Total Dissolved Solids	9/20/23 0:00	83	1	mg/L		80			3.68	10	
------------------------	--------------	----	---	------	--	----	--	--	------	----	--

Duplicate (3I19051-DUP2)

Source: 2309244-11

Total Dissolved Solids	9/20/23 0:00	177	1	mg/L		174			1.71	10	
------------------------	--------------	-----	---	------	--	-----	--	--	------	----	--

Batch 3I20032 - Default Prep GenChem

Blank (3I20032-BLK1)

Sulfate as SO4	9/20/23 13:44	ND	5.00	mg/L							
----------------	---------------	----	------	------	--	--	--	--	--	--	--



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
10/09/2023 13:31

Classical Chemistry Parameters - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3I20032 - Default Prep GenChem											
LCS (3I20032-BS1)											
Sulfate as SO ₄	9/20/23 13:44	30.6	5.00	mg/L	30.0		102	88-108			
LCS Dup (3I20032-BSD1)											
Sulfate as SO ₄	9/20/23 13:44	31.6	5.00	mg/L	30.0		105	88-108	3.18	20	
Duplicate (3I20032-DUP1) Source: 2309310-01											
Sulfate as SO ₄	9/20/23 13:44	16400	2500	mg/L		16600			0.781	20	
Batch 3I20035 - Default Prep GenChem											
Blank (3I20035-BLK1)											
Fluoride	9/20/23 14:17	ND	0.22	mg/L							
LCS (3I20035-BS1)											
Fluoride	9/20/23 14:17	1.91	0.22	mg/L	2.00		95.5	87.8-113			
LCS Dup (3I20035-BSD1)											
Fluoride	9/20/23 14:17	1.96	0.22	mg/L	2.00		98.0	87.8-113	2.58	30	
Matrix Spike (3I20035-MS1) Source: 2309244-02											
Fluoride	9/20/23 14:17	1.99	0.22	mg/L	2.00	0.22	88.8	70.2-127			
Matrix Spike Dup (3I20035-MSD1) Source: 2309244-02											
Fluoride	9/20/23 14:17	2.03	0.22	mg/L	2.00	0.22	90.8	70.2-127	1.99	30	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
10/09/2023 13:31

Metals by EPA 200 Series Methods ICP-AES - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3I19037 - EPA 200.2 DCN 1017 Rev 10											
Blank (3I19037-BLK1)											
Barium 455.403 [Radial]	9/20/23 14:21	ND	0.010	mg/L							
Boron 249.773 [Radial]	9/20/23 14:21	ND	0.050	"							
Calcium 315.887 [Radial]	9/20/23 14:21	ND	0.050	"							
Lithium 610.362 [Axial]	9/20/23 14:21	ND	0.040	"							
LCS (3I19037-BS1)											
Barium 455.403 [Radial]	9/20/23 14:13	0.183	0.010	mg/L	0.200		91.3	85-115			
Boron 249.773 [Radial]	9/20/23 14:13	0.179	0.050	"	0.200		89.6	85-115			
Calcium 315.887 [Radial]	9/20/23 14:13	0.195	0.050	"	0.200		97.5	85-115			
Lithium 610.362 [Axial]	9/20/23 14:13	0.186	0.040	"	0.200		92.8	85-115			
LCS Dup (3I19037-BSD1)											
Barium 455.403 [Radial]	9/20/23 14:16	0.186	0.010	mg/L	0.200		92.9	85-115	1.78	20	
Boron 249.773 [Radial]	9/20/23 14:16	0.182	0.050	"	0.200		90.8	85-115	1.42	20	
Calcium 315.887 [Radial]	9/20/23 14:16	0.200	0.050	"	0.200		100	85-115	2.64	20	
Lithium 610.362 [Axial]	9/20/23 14:16	0.188	0.040	"	0.200		94.1	85-115	1.37	20	
Duplicate (3I19037-DUP1) Source: 2309175-01											
Calcium 315.887 [Radial]	9/20/23 13:06	5.10	0.050	mg/L		4.74			7.24	20	
Matrix Spike (3I19037-MS1) Source: 2309175-01											
Barium 455.403 [Radial]	9/20/23 13:06	0.296	0.010	mg/L	0.200	0.091	102	70-130			
Boron 249.773 [Radial]	9/20/23 13:06	0.225	0.050	"	0.200	0.024	101	70-130			
Lithium 610.362 [Axial]	9/20/23 13:06	0.231	0.040	"	0.200	0.013	109	70-130			
Matrix Spike Dup (3I19037-MSD1) Source: 2309175-01											
Barium 455.403 [Radial]	9/20/23 13:10	0.306	0.010	mg/L	0.200	0.091	107	70-130	3.26	20	
Boron 249.773 [Radial]	9/20/23 13:10	0.232	0.050	"	0.200	0.024	104	70-130	3.12	20	
Lithium 610.362 [Axial]	9/20/23 13:10	0.239	0.040	"	0.200	0.013	113	70-130	3.54	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Metals by EPA 200 Series Methods ICP-AES - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3I19038 - EPA 200.2 DCN 1017 Rev 10											
Blank (3I19038-BLK1)											
Barium 455.403 [Radial]	9/20/23 14:21	ND	0.010	mg/L							
Boron 249.773 [Radial]	9/20/23 14:21	ND	0.050	"							
Calcium 315.887 [Radial]	9/20/23 14:21	ND	0.050	"							
Lithium 610.362 [Axial]	9/20/23 14:21	ND	0.040	"							
LCS (3I19038-BS1)											
Barium 455.403 [Radial]	9/20/23 14:13	0.183	0.010	mg/L	0.200		91.3	85-115			
Boron 249.773 [Radial]	9/20/23 14:13	0.179	0.050	"	0.200		89.6	85-115			
Calcium 315.887 [Radial]	9/20/23 14:13	0.195	0.050	"	0.200		97.5	85-115			
Lithium 610.362 [Axial]	9/20/23 14:13	0.186	0.040	"	0.200		92.8	85-115			
LCS Dup (3I19038-BSD1)											
Barium 455.403 [Radial]	9/20/23 14:16	0.186	0.010	mg/L	0.200		92.9	85-115	1.78	20	
Boron 249.773 [Radial]	9/20/23 14:16	0.182	0.050	"	0.200		90.8	85-115	1.42	20	
Calcium 315.887 [Radial]	9/20/23 14:16	0.200	0.050	"	0.200		100	85-115	2.64	20	
Lithium 610.362 [Axial]	9/20/23 14:16	0.188	0.040	"	0.200		94.1	85-115	1.37	20	
Duplicate (3I19038-DUP1) Source: 2309244-01											
Calcium 315.887 [Radial]	9/20/23 14:31	21.1	0.050	mg/L		20.6			2.36	20	
Matrix Spike (3I19038-MS1) Source: 2309244-01											
Barium 455.403 [Radial]	9/20/23 14:31	0.239	0.010	mg/L	0.200	0.045	97.0	70-130			
Boron 249.773 [Radial]	9/20/23 14:31	0.213	0.050	"	0.200	0.018	97.3	70-130			
Lithium 610.362 [Axial]	9/20/23 14:31	0.227	0.040	"	0.200	0.034	96.5	70-130			
Matrix Spike Dup (3I19038-MSD1) Source: 2309244-01											
Barium 455.403 [Radial]	9/20/23 14:35	0.232	0.010	mg/L	0.200	0.045	93.5	70-130	3.02	20	
Boron 249.773 [Radial]	9/20/23 14:35	0.206	0.050	"	0.200	0.018	93.7	70-130	3.46	20	
Lithium 610.362 [Axial]	9/20/23 14:35	0.229	0.040	"	0.200	0.034	97.4	70-130	0.840	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
---------	----------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	------------

Batch 3I18034 - EPA 200.2 DCN 1017 Rev 10

Blank (3I18034-BLK1)

Antimony [He]	9/19/23 12:01	ND	0.00200	mg/L							
Arsenic [NG]	9/19/23 12:01	ND	0.00200	"							
Beryllium [He]	9/19/23 12:01	ND	0.00100	"							
Cadmium [He]	9/19/23 12:01	ND	0.00100	"							
Chromium [He]	9/19/23 12:01	ND	0.00100	"							
Cobalt [He]	9/19/23 12:01	ND	0.00100	"							
Lead [He]	9/19/23 12:01	ND	0.00100	"							
Molybdenum [He]	9/19/23 12:01	ND	0.00100	"							
Selenium [NG]	9/19/23 12:01	ND	0.00500	"							

LCS (3I18034-BS1)

Antimony [He]	9/19/23 12:07	0.104	0.00200	mg/L	0.100		104	85-115			
Arsenic [NG]	9/19/23 12:07	0.101	0.00200	"	0.100		101	85-115			
Beryllium [He]	9/19/23 12:07	0.099	0.00100	"	0.100		99.1	85-115			
Cadmium [He]	9/19/23 12:07	0.104	0.00100	"	0.100		104	85-115			
Chromium [He]	9/19/23 12:07	0.103	0.00100	"	0.100		103	85-115			
Cobalt [He]	9/19/23 12:07	0.102	0.00100	"	0.100		102	85-115			
Lead [He]	9/19/23 12:07	0.100	0.00100	"	0.100		100	85-115			
Molybdenum [He]	9/19/23 12:07	0.100	0.00100	"	0.100		100	85-115			
Selenium [NG]	9/19/23 12:07	0.099	0.00500	"	0.100		99.4	85-115			

LCS Dup (3I18034-BSD1)

Antimony [He]	9/19/23 12:13	0.106	0.00200	mg/L	0.100		106	85-115	1.88	20	
Arsenic [NG]	9/19/23 12:13	0.101	0.00200	"	0.100		101	85-115	0.612	20	
Beryllium [He]	9/19/23 12:13	0.100	0.00100	"	0.100		99.6	85-115	0.448	20	
Cadmium [He]	9/19/23 12:13	0.098	0.00100	"	0.100		98.4	85-115	5.32	20	
Chromium [He]	9/19/23 12:13	0.102	0.00100	"	0.100		102	85-115	0.608	20	
Cobalt [He]	9/19/23 12:13	0.102	0.00100	"	0.100		102	85-115	0.245	20	
Lead [He]	9/19/23 12:13	0.101	0.00100	"	0.100		101	85-115	0.379	20	
Molybdenum [He]	9/19/23 12:13	0.100	0.00100	"	0.100		100	85-115	0.169	20	
Selenium [NG]	9/19/23 12:13	0.100	0.00500	"	0.100		100	85-115	1.02	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
---------	----------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	------------

Batch 3118034 - EPA 200.2 DCN 1017 Rev 10

Matrix Spike (3118034-MS1)

Source: 2309229-02

Antimony [He]	9/19/23 12:26	0.124	0.00200	mg/L	0.100	0.016	108	70-130			
Arsenic [NG]	9/19/23 12:26	0.127	0.00200	"	0.100	0.026	101	70-130			
Beryllium [He]	9/19/23 12:26	0.097	0.00100	"	0.100	ND	97.3	70-130			
Cadmium [He]	9/19/23 12:26	0.088	0.00100	"	0.100	0.003	85.1	70-130			
Chromium [He]	9/19/23 12:26	0.103	0.00100	"	0.100	0.004	98.3	70-130			
Cobalt [He]	9/19/23 12:26	0.096	0.00100	"	0.100	0.001	94.9	70-130			
Lead [He]	9/19/23 12:26	0.103	0.00100	"	0.100	0.0002	103	70-130			
Molybdenum [He]	9/19/23 12:26	0.580	0.00100	"	0.100	0.509	70.5	70-130			
Selenium [NG]	9/19/23 12:26	0.091	0.00500	"	0.100	ND	91.2	70-130			

Matrix Spike (3118034-MS2)

Source: 2309250-01

Antimony [He]	9/19/23 12:44	0.108	0.00200	mg/L	0.100	ND	108	70-130			
Arsenic [NG]	9/19/23 12:44	0.098	0.00200	"	0.100	ND	98.0	70-130			
Beryllium [He]	9/19/23 12:44	0.100	0.00100	"	0.100	ND	100	70-130			
Cadmium [He]	9/19/23 12:44	0.089	0.00100	"	0.100	0.0001	88.4	70-130			
Chromium [He]	9/19/23 12:44	0.099	0.00100	"	0.100	ND	98.8	70-130			
Cobalt [He]	9/19/23 12:44	0.097	0.00100	"	0.100	ND	97.0	70-130			
Lead [He]	9/19/23 12:44	0.102	0.00100	"	0.100	ND	102	70-130			
Molybdenum [He]	9/19/23 12:44	0.107	0.00100	"	0.100	0.0009	106	70-130			
Selenium [NG]	9/19/23 12:44	0.092	0.00500	"	0.100	ND	92.4	70-130			

Matrix Spike Dup (3118034-MSD1)

Source: 2309229-02

Antimony [He]	9/19/23 12:32	0.123	0.00200	mg/L	0.100	0.016	107	70-130	0.832	20	
Arsenic [NG]	9/19/23 12:32	0.126	0.00200	"	0.100	0.026	101	70-130	0.107	20	
Beryllium [He]	9/19/23 12:32	0.100	0.00100	"	0.100	ND	99.7	70-130	2.48	20	
Cadmium [He]	9/19/23 12:32	0.088	0.00100	"	0.100	0.003	85.1	70-130	0.0750	20	
Chromium [He]	9/19/23 12:32	0.102	0.00100	"	0.100	0.004	97.6	70-130	0.664	20	
Cobalt [He]	9/19/23 12:32	0.095	0.00100	"	0.100	0.001	94.2	70-130	0.748	20	
Lead [He]	9/19/23 12:32	0.103	0.00100	"	0.100	0.0002	103	70-130	0.240	20	
Molybdenum [He]	9/19/23 12:32	0.588	0.00100	"	0.100	0.509	78.4	70-130	1.35	20	
Selenium [NG]	9/19/23 12:32	0.091	0.00500	"	0.100	ND	91.1	70-130	0.0554	20	



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
10/09/2023 13:31

Metals by EPA 200 Series Methods ICP-MS [Analysis Mode] - Quality Control

Analyte	Analyzed	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
---------	----------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	------------

Batch 3I18034 - EPA 200.2 DCN 1017 Rev 10

Matrix Spike Dup (3I18034-MSD2)

Source: 2309250-01

Antimony [He]	9/19/23 12:51	0.107	0.00200	mg/L	0.100	ND	107	70-130	0.859	20	
Arsenic [NG]	9/19/23 12:51	0.101	0.00200	"	0.100	ND	101	70-130	3.01	20	
Beryllium [He]	9/19/23 12:51	0.101	0.00100	"	0.100	ND	101	70-130	0.911	20	
Cadmium [He]	9/19/23 12:51	0.088	0.00100	"	0.100	0.0001	88.2	70-130	0.138	20	
Chromium [He]	9/19/23 12:51	0.099	0.00100	"	0.100	ND	99.3	70-130	0.494	20	
Cobalt [He]	9/19/23 12:51	0.098	0.00100	"	0.100	ND	98.1	70-130	1.08	20	
Lead [He]	9/19/23 12:51	0.102	0.00100	"	0.100	ND	102	70-130	0.470	20	
Molybdenum [He]	9/19/23 12:51	0.107	0.00100	"	0.100	0.0009	106	70-130	0.0242	20	
Selenium [NG]	9/19/23 12:51	0.094	0.00500	"	0.100	ND	94.5	70-130	2.20	20	

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Certified Analyses Included in this Report

Analyte	Certification Code
<i>ASTM D 512-12 in Water</i>	
Chloride	C01,C02
<i>EPA 200.7 Rev 4.4 in Water</i>	
Aluminum 394.401 [Radial]	C01,C02
Aluminum 396.152 [Radial]	C01,C02
Antimony 206.833 [Axial]	C01,C02
Arsenic 193.759 [Axial]	C01,C02
Barium 455.403 [Radial]	C01,C02
Barium 493.409 [Radial]	C01,C02
Beryllium 313.042 [Axial]	C01,C02
Boron 249.773 [Radial]	C01,C02
Cadmium 228.802 [Axial]	C01,C02
Calcium 315.887 [Radial]	C01,C02
Chromium 283.563 [Axial]	C01,C02
Cobalt 228.616 [Axial]	C01,C02
Copper 324.754 [Axial]	C01,C02
Iron 259.940 [Axial]	C01,C02
Iron 259.940 [Radial]	C01,C02
Lead 220.353 [Axial]	C01,C02
Lithium 610.362 [Axial]	C01,C02
Magnesium 285.213 [Radial]	C01,C02
Manganese 257.610 [Axial]	C01,C02
Molybdenum 202.030 [Axial]	C01,C02
Nickel 231.604 [Axial]	C01,C02
Potassium 766.490 [Radial]	C01,C02
Phosphorus 178.284 [Axial]	C01,C02
Phosphorus 178.284 [Radial]	C01,C02
Selenium 196.090 [Axial]	C01,C02
Silver 328.068 [Axial]	C01,C02
Sodium 589.592 [Axial]	C01,C02
Sodium 589.592 [Radial]	C01,C02
Strontium 346.446 [Radial]	C01,C02
Strontium 421.552 [Radial]	C01,C02
Thallium 190.856 [Axial]	C01,C02
Vanadium 309.311 [Axial]	C01,C02
Zinc 213.856 [Axial]	C01,C02
<i>EPA 200.8 Rev 5.4 in Water</i>	
Aluminum [He]	C01,C02
Antimony [He]	C01,C02
Antimony [HHe]	C01,C02
Antimony [NG]	C01,C02

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Arsenic [He]	C01,C02
Arsenic [HHe]	C01,C02
Arsenic [NG]	C01,C02
Barium [He]	C01,C02
Beryllium [He]	C01,C02
Boron [NG]	C01,C02
Cadmium [He]	C01,C02
Cadmium [HHe]	C01,C02
Cadmium [NG]	C01,C02
Chromium [He]	C01,C02
Cobalt [He]	C01,C02
Copper [He]	C01,C02
Copper [NG]	C01,C02
Iron [He]	C01,C02
Lead [He]	C01,C02
Lead [NG]	C01,C02
Manganese [He]	C01,C02
Molybdenum [He]	C01,C02
Nickel [He]	C01,C02
Selenium [He]	C01,C02
Selenium [HHe]	C01,C02
Selenium [NG]	C01,C02
Silver [He]	C01,C02
Silver [NG]	C01,C02
Strontium [He]	C01,C02
Thallium [He]	C01,C02
Vanadium [He]	C01,C02
Zinc [He]	C01,C02

SM 2540 C-2015 in Water

Total Dissolved Solids	C01,C02
------------------------	---------

SM 4500-SO42 E 2011 in Water

Sulfate as SO4	C01,C02
----------------	---------

****Only compounds included in this list are associated with accredited analyses****

Choctaw Generation LP
 2391 Pensacola Rd.
 Ackerman MS, 39735

 Project: CGLP CCR Semi Annual
 Project Number: [none]
 Project Manager: Jim Ward

 Reported:
 10/09/2023 13:31

Laboratory Accreditations/Certifications

Code	Description	Number	Expires
C01	LA Environmental Lab Accreditation Program	01960	06/30/2024
C02	The NELAC Institute (NELAP)	TNI01397	06/30/2024
C03	Ms Dept of Health (Drinking Water Microbiology)	MS00021	12/31/2023
C04	Ms Dept of Health (Drinking Water Chemistry)	MS00021	12/31/2023
C05	Ms DEQ Lead Firm Certification	PBF-00000028	03/31/2024
C06	MsDEQ Asbestos Inspector : C.D. Bingham	ABI-00001348	02/09/2024
C07	MsDEQ Air Monitor : C.D. Bingham	AM-011572	02/10/2024
C08	MsDEQ Asbestos Inspector: C. W. Meins	ABI-00001821	09/09/2022
C09	MsDEQ Air Monitor : C.W. Meins	AM-011189	02/10/2024
C14	MsDEQ Lead Paint Inspector : C.D. Bingham	PBI-00003690	02/07/2024
C15	MsDEQ Lead Paint Inspector : C.W. Meins	PBI-00001740	02/07/2024

Report Definitions

TNC	Too Numerous To Count
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the minimum reporting limit
NR	Not Reported
RPD	Relative Percent Difference
ICV	Initial Calibration Verification
CCV	Continuing Calibration Verification Standard
SSV	Secondary Source Verification Standard
LCS	Lab Control Spike - Lab matrix prepared with known concentration of analyte/s of interest analyzed by method.
MS	Matrix Spike - Sample prepared with known concentration of analyte/s of interest analyzed by method.
MSD	Matrix Spike Duplicate - Duplicate sample prepared with known concentration of analyte/s of interest analyzed by method.
MRL	Minimum Reporting Limit
%REC	Percentage Recovery of known concentration added to matrix
Batch	Group of samples prepared for analysis not to exceed 20 samples.
Matrix	Material containing analyte/s of interest
Surrogate	Analyte added to sample to determine extraction efficiency of method.



6500 Sunplex Drive
Ocean Springs, MS 39564
228-875-6420 Phone
228-875-6423 Fax

Choctaw Generation LP
2391 Pensacola Rd.
Ackerman MS, 39735

Project: CGLP CCR Semi Annual
Project Number: [none]
Project Manager: Jim Ward

Reported:
10/09/2023 13:31

Analyst Initials Key

<u>FullName</u>	<u>Initials</u>
Charles L Vorhoff	CLV
Christa R Gray	CRG
Dortha L. Wells	DLW
Garrett Givhan	GWG
Sarah E. Tomek	SET
Teresa Meins	TKM
Tina Tomek	TPT



2309244

TN ID # TN101397

2309244

Page 31 of 49

5

Turn Around Time & Reporting

Our normal turn around time is 10 working days

Next Day*
2nd Day*
requests must be
prior approved
M
F

Other* _____

— 10 —

W = Water

SO = Soil

L = Liquid

O = Oil
SI = Slud

10

Preser

$$2 = \text{H}_3\text{PO}_4$$
 $4 = \text{ZnCl}_4$ NaOH
$$7 = \text{Na}_2\text{S}_2\text{O}_8$$
 $9 = \text{NaHSO}_4$

day for

-

1

4-day car

2

2.

2

Page 1 of 2

PO Box 1410, Ocean Springs, MS 39566-1410
(228) 875-6420 FAX (228) 875-6423

Lab ID# MS00021
LEIAP ID # 01960
TNI ID # TNI01397

www.micromethodslab.com

Company Name: Choctaw Generation Limited Partnership LLP

Project Manager: **Jim Ward**

Address: **2391 Pensacola Rd.**

Purchase Order #:

City: **Ackerman** State: **MS** Zip: **39735**

Email Address: **jward@southernco.com**

Phone: **662-387-5758**

Sampler Name Printed:

Fax:

Sampler Name Signed:

Project Name: **CGLP CCR**

List Analyses Requested

Project #: **Semi-Annual**

Sample Identification: **CCR-5** Sampling Date/Time: **9/13/23, 14:56** Matrix Code: **W**

Preservative:	Grab (G) or Composite (C)	TDS	Chloride, Fluoride, Sulfate	Antimony, Arsenic	Barium, Boron	Beryllium, Cadmium	Chromium, Lead	Calcium, Cobalt	Lithium	Molybdenum, Selenium	Total Radium 226 & 228
	4	G	X	X	X	X	X	X	X	X	X

Turn Around Time & Reporting

Our normal turn around time is 10 working days

Normal ☐ All rush order requests must be prior approved.

Next Day* ☐ Phone ☐ Mail ☐ Fax ☐ Email ☐

2nd Day* ☐

Other* ☐

QC Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Field Testing

ID#	ID#	ID#	ID#
Field Test	Field Test	Field Test	Field Test

Matrix: **W = Water**
DW = Drinking Water
S = Solid
SO = Soil
SE = Sediment
L = Liquid
A = Air
O = Oil
SL = Sludge

Preservation:

- 1 = H2SO4
- 2 = H3PO4
- 3 = NaOH
- 4 = ZnCAH1006
- 5 = ZnCAH1006 & NaOH
- 6 = HNO3
- 7 = Na2S2O3
- 8 = HCl
- 9 = NaHSO4

Received on Ice ☒ N Thermometer # **5** Cooler # **CLT** Receipt Temp Corrected (°C) **1.9, 0.9, 1.9**

All Temps are Corrected Values

Date & Time: **9/13/23** By: **Caleb Jones**

Signature: **Caleb Jones**

Company: **ECs**

Date: **9/13/23** Time: **19:48**

Notes:

Printed Name	Signature	Company	Date	Time
Caleb Jones	Caleb Jones	ECs	9/13/23	19:48
Received by	Teresa Meins		9/13/23	8:55
Relinquished by				
Received by				
Relinquished by				
Received by				
Relinquished by				
Received by				
Relinquished by				



October 09, 2023

Tina Tomek
Micro-Methods Lab
6500 Sunplex Drive
Ocean Springs, MS 39564

RE: Project: 2309244
Pace Project No.: 30624440

Dear Tina Tomek:

Enclosed are the analytical results for sample(s) received by the laboratory on September 21, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Justin P. Horn
justin.horn@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Accounts Payable, Micro-Methods Lab



REPORT OF LABORATORY ANALYSIS

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



CERTIFICATIONS

Project: 2309244
Pace Project No.: 30624440

Pace Analytical Services Pennsylvania

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

ANAB DOD-ELAP Rad Accreditation #: L2417

ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010

Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572023-03

New Hampshire/TNI Certification #: 297622

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-015

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18

Utah/TNI Certification #: PA014572223-14

USDA Soil Permit #: 525-23-67-77263

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

REPORT OF LABORATORY ANALYSIS

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



SAMPLE SUMMARY

Project: 2309244
Pace Project No.: 30624440

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30624440001	2309244-01	Water	09/13/23 12:05	09/21/23 10:10
30624440002	2309244-02	Water	09/13/23 14:52	09/21/23 10:10
30624440003	2309244-03	Water	09/13/23 16:07	09/21/23 10:10
30624440004	2309244-04	Water	09/13/23 11:57	09/21/23 10:10
30624440005	2309244-05	Water	09/13/23 10:30	09/21/23 10:10
30624440006	2309244-06	Water	09/13/23 10:35	09/21/23 10:10
30624440007	2309244-07	Water	09/13/23 00:00	09/21/23 10:10
30624440008	2309244-08	Water	09/13/23 13:35	09/21/23 10:10
30624440009	2309244-09	Water	09/13/23 15:45	09/21/23 10:10
30624440010	2309244-10	Water	09/13/23 11:10	09/21/23 10:10
30624440011	2309244-11	Water	09/13/23 15:50	09/21/23 10:10
30624440012	2309244-12	Water	09/13/23 14:56	09/21/23 10:10

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: 2309244
Pace Project No.: 30624440

Lab ID	Sample ID	Method	Analysts	Analytes Reported
30624440001	2309244-01	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440002	2309244-02	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440003	2309244-03	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440004	2309244-04	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440005	2309244-05	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440006	2309244-06	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440007	2309244-07	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440008	2309244-08	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440009	2309244-09	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440010	2309244-10	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440011	2309244-11	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1
30624440012	2309244-12	EPA 903.1	MAR1	1
		EPA 904.0	ZPC	1
		Total Radium Calculation	JAL	1

REPORT OF LABORATORY ANALYSIS

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



SAMPLE ANALYTE COUNT

Project: 2309244
Pace Project No.: 30624440

Lab ID	Sample ID	Method	Analysts	Analytes Reported
PASI-PA = Pace Analytical Services - Greensburg				

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2309244
Pace Project No.: 30624440

Sample: 2309244-01 **Lab ID: 30624440001** Collected: 09/13/23 12:05 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.301 ± 0.426 (0.722) C:NA T:84%	pCi/L	10/05/23 14:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.611 ± 0.405 (0.765) C:81% T:79%	pCi/L	10/05/23 14:47	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.912 ± 0.831 (1.49)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-02 **Lab ID: 30624440002** Collected: 09/13/23 14:52 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	-0.0667 ± 0.570 (1.16) C:NA T:80%	pCi/L	10/05/23 14:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.545 ± 0.378 (0.709) C:80% T:77%	pCi/L	10/05/23 14:48	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.545 ± 0.948 (1.87)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-03 **Lab ID: 30624440003** Collected: 09/13/23 16:07 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.330 ± 0.383 (0.619) C:NA T:95%	pCi/L	10/05/23 14:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	1.44 ± 0.494 (0.663) C:79% T:88%	pCi/L	10/05/23 14:48	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.77 ± 0.877 (1.28)	pCi/L	10/09/23 13:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2309244
Pace Project No.: 30624440

Sample: 2309244-04 **Lab ID: 30624440004** Collected: 09/13/23 11:57 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.530 ± 0.512 (0.795) C:NA T:89%	pCi/L	10/05/23 14:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.153 ± 0.319 (0.706) C:84% T:84%	pCi/L	10/05/23 14:48	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.683 ± 0.831 (1.50)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-05 **Lab ID: 30624440005** Collected: 09/13/23 10:30 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	-0.115 ± 0.423 (0.914) C:NA T:86%	pCi/L	10/05/23 14:32	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.439 ± 0.391 (0.788) C:72% T:86%	pCi/L	10/05/23 14:48	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.439 ± 0.814 (1.70)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-06 **Lab ID: 30624440006** Collected: 09/13/23 10:35 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.327 ± 0.463 (0.785) C:NA T:82%	pCi/L	10/05/23 14:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.679 ± 0.388 (0.691) C:77% T:88%	pCi/L	10/05/23 14:48	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.01 ± 0.851 (1.48)	pCi/L	10/09/23 13:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2309244
Pace Project No.: 30624440

Sample: 2309244-07 **Lab ID: 30624440007** Collected: 09/13/23 00:00 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.116 ± 0.424 (0.815) C:NA T:81%	pCi/L	10/05/23 14:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	1.02 ± 0.472 (0.751) C:77% T:85%	pCi/L	10/05/23 14:48	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.14 ± 0.896 (1.57)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-08 **Lab ID: 30624440008** Collected: 09/13/23 13:35 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.1000 ± 0.460 (0.871) C:NA T:93%	pCi/L	10/05/23 14:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	0.648 ± 0.427 (0.806) C:79% T:80%	pCi/L	10/05/23 14:48	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	0.748 ± 0.887 (1.68)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-09 **Lab ID: 30624440009** Collected: 09/13/23 15:45 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.692 ± 0.507 (0.698) C:NA T:89%	pCi/L	10/05/23 14:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	1.80 ± 0.630 (0.888) C:78% T:77%	pCi/L	10/05/23 14:49	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	2.49 ± 1.14 (1.59)	pCi/L	10/09/23 13:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2309244
Pace Project No.: 30624440

Sample: 2309244-10 **Lab ID: 30624440010** Collected: 09/13/23 11:10 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.0694 ± 0.707 (1.35) C:NA T:82%	pCi/L	10/05/23 14:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	1.11 ± 0.517 (0.856) C:77% T:80%	pCi/L	10/05/23 14:49	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.18 ± 1.22 (2.21)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-11 **Lab ID: 30624440011** Collected: 09/13/23 15:50 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.460 ± 0.454 (0.691) C:NA T:86%	pCi/L	10/05/23 14:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	1.36 ± 0.530 (0.772) C:78% T:80%	pCi/L	10/05/23 14:49	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.82 ± 0.984 (1.46)	pCi/L	10/09/23 13:17	7440-14-4	

Sample: 2309244-12 **Lab ID: 30624440012** Collected: 09/13/23 14:56 Received: 09/21/23 10:10 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • Sampler name and signature not on COC.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 903.1	0.429 ± 0.495 (0.805) C:NA T:86%	pCi/L	10/05/23 14:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 904.0	1.54 ± 0.553 (0.766) C:76% T:79%	pCi/L	10/05/23 14:49	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	1.97 ± 1.05 (1.57)	pCi/L	10/09/23 13:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: 2309244
Pace Project No.: 30624440

QC Batch:	617732	Analysis Method:	EPA 903.1
QC Batch Method:	EPA 903.1	Analysis Description:	903.1 Radium-226
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30624440001, 30624440002, 30624440003, 30624440004, 30624440005, 30624440006, 30624440007, 30624440008, 30624440009, 30624440010, 30624440011, 30624440012		

METHOD BLANK:	3008854	Matrix:	Water
Associated Lab Samples:	30624440001, 30624440002, 30624440003, 30624440004, 30624440005, 30624440006, 30624440007, 30624440008, 30624440009, 30624440010, 30624440011, 30624440012		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.303 ± 0.228 (0.117) C:NA T:83%	pCi/L	10/05/23 14:32	

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

REPORT OF LABORATORY ANALYSIS

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



QUALITY CONTROL - RADIOCHEMISTRY

Project: 2309244
Pace Project No.: 30624440

QC Batch:	617734	Analysis Method:	EPA 904.0
QC Batch Method:	EPA 904.0	Analysis Description:	904.0 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30624440001, 30624440002, 30624440003, 30624440004, 30624440005, 30624440006, 30624440007, 30624440008, 30624440009, 30624440010, 30624440011, 30624440012		

METHOD BLANK:	3008857	Matrix:	Water
Associated Lab Samples:	30624440001, 30624440002, 30624440003, 30624440004, 30624440005, 30624440006, 30624440007, 30624440008, 30624440009, 30624440010, 30624440011, 30624440012		

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.354 ± 0.372 (0.769) C:77% T:77%	pCi/L	10/05/23 14:47	

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

REPORT OF LABORATORY ANALYSIS

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



QUALIFIERS

Project: 2309244
Pace Project No.: 30624440

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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



MICRO-METHODS

LABORATORY, INC.

SUBCONTRACT ORDER

Sending Laboratory:

Micro-Methods Laboratory, Inc.
6500 Sunplex Drive
Ocean Springs, MS 39564
Phone: 228.875.6420
Fax: 228.875.6423

Project Manager: Teresa Meins

Subcontracted Laboratory:

Pace Analytical-7
1638 Roseytown Rd. Suites 2, 3, 4
Greensburg, PA 15601
Phone: (724) 850-5600
Fax: -

WO#: 30624440



Work Order: 2309244

Analysis	Due	Expires	Comments
Sample ID: 2309244-01 Water Sampled: 09/13/2023 12:05 Sample Name: MW-9			001
Radium, Total 226 & 228 by EPA 903.1 & 90	09/22/2023	10/11/2023 12:05	
Containers Supplied: 1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)			
Sample ID: 2309244-02 Water Sampled: 09/13/2023 14:52 Sample Name: OW-2			002
Radium, Total 226 & 228 by EPA 903.1 & 90	09/22/2023	10/11/2023 14:52	
Containers Supplied: 1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)			
Sample ID: 2309244-03 Water Sampled: 09/13/2023 16:07 Sample Name: MW-13			003
Radium, Total 226 & 228 by EPA 903.1 & 90	09/22/2023	10/11/2023 16:07	
Containers Supplied: 1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)			
Sample ID: 2309244-04 Water Sampled: 09/13/2023 11:57 Sample Name: MW-7			004
Radium, Total 226 & 228 by EPA 903.1 & 90	09/22/2023	10/11/2023 11:57	
Containers Supplied: 1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)			
Sample ID: 2309244-05 Water Sampled: 09/13/2023 10:30 Sample Name: MW-14			005
Radium, Total 226 & 228 by EPA 903.1 & 90	09/22/2023	10/11/2023 10:30	

Received by Pace Greensburg
Therm ID Corr Factor +/-
Receipt Temp
Corrected Temp
Correct Preservation Y/N

Snah Jemel 9/15/23 1630
Released By Date

VPS
Released By Date

Released By Date

Released By Date

Released By Date

VPS 9/15/23 1630
Received By Date

[Signature] 9/15/23 1630
Received By Date

Received By Date

Received By Date

Received By Date



MICRO-METH
LABORATORY, INC.

SUBCONTRACT

WO# : 30624440

PM: JPH

Due Date: 10/12/23

CLIENT: MICROMETHOD

Work Order: 2309244 (Continued)

Analysis	Due	Expires	Comments
----------	-----	---------	----------

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2309244-06 *Water* **Sampled: 09/13/2023 10:35** **Sample Name: Field Blank**

006

Radium, Total 226 & 228 by EPA 903.1 & 9C 09/22/2023 10/11/2023 10:35

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2309244-07 *Water* **Sampled: 09/13/2023 00:00** **Sample Name: Duplicate**

007

Radium, Total 226 & 228 by EPA 903.1 & 9C 09/22/2023 10/11/2023 00:00

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2309244-08 *Water* **Sampled: 09/13/2023 13:35** **Sample Name: MW-12**

008

Radium, Total 226 & 228 by EPA 903.1 & 9C 09/22/2023 10/11/2023 13:35

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2309244-09 *Water* **Sampled: 09/13/2023 15:45** **Sample Name: CCR-2**

009

Radium, Total 226 & 228 by EPA 903.1 & 9C 09/22/2023 10/11/2023 15:45

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2309244-10 *Water* **Sampled: 09/13/2023 11:10** **Sample Name: CCR-3**

010

Radium, Total 226 & 228 by EPA 903.1 & 9C 09/22/2023 10/11/2023 11:10

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2309244-11 *Water* **Sampled: 09/13/2023 15:50** **Sample Name: CCR-4**

011

Radium, Total 226 & 228 by EPA 903.1 & 9C 09/22/2023 10/11/2023 15:50

Containers Supplied:

1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)

Sample ID: 2309244-12 *Water* **Sampled: 09/13/2023 14:56** **Sample Name: CCR-5**

Smah Jorner 9/15/23 1630
Released By Date

UPS 9/15/23 1630
Received By Date

UPS
Released By Date

Jim Alto 9/21/23 1010
Received By Date

Released By Date

Received By Date

Released By Date

Received By Date

Released By Date

Received By Date



**SUBCONTRACT
ORDER**
(Continued)

Work Order: 2309244 (Continued)

Analysis	Due	Expires	Comments
Sample ID: 2309244-12 Water Sampled: 09/13/2023 14:56 Sample Name: CCR-5			
Radium, Total 226 & 228 by EPA 903.1 & 9C 09/22/2023 10/11/2023 14:56			
<i>Containers Supplied:</i> 1000mL Plastic w/HNO3 (A) 1000mL Plastic w/HNO3 (B)			

012

WO#: 30624440

PM: JPH Due Date: 10/12/23
CLIENT: MICROMETHOD

Smah Jomet 9/15/23 1630
Released By Date

LPS
Released By Date

Released By Date

Released By Date

Released By Date

LPS 9/15/23 1630
Received By Date

[Signature] 9/21/23 1010
Received By Date

Received By Date

Received By Date

Received By Date

Pace
ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v05_Sample Condition Upon Receipt-
Pittsburgh

Effective Date: 07/06/2023

Client Name: Micro Methods

PM: JPH Due Date: 10/12/23
CLIENT: MICROMETHOD

WO#: 30624440

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

Tracking Number: 123530630368500223

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals Intact: ☒ Yes ☐ No

Thermometer Used: _____ Type of Ice: Wet Blue None

Cooler Temperature: Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Initial / Date

Examined By: PS 9/22/23
Labeled By: PS 9/22/23
Tempered By: _____

Comments:	Yes	No	NA	pH paper Lot# <u>1000831</u>	D.P.D. Residual Chlorine Lot # _____
Chain of Custody Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.	
Chain of Custody Filled Out: -Were client corrections present on COC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. <u>9/22/23</u>	
Chain of Custody Relinquished	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.	
Sampler Name & Signature on COC:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4.	
Sample Labels match COC: -Includes date/time/ID	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.	
Matrix: <u>WT</u>					
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.	
Short Hold Time Analysis (<72hr remaining):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.	
Rush Turn Around Time Requested:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.	
Sufficient Volume:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	
Correct Containers Used: -Pace Containers Used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	
Containers Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	
Orthophosphate field filtered:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12.	
Hex Cr Aqueous samples field filtered:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13.	
Organic Samples checked for dechlorination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14.	
Filtered volume received for dissolved tests:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15.	
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	
All containers meet method preservation requirements:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Initial when completed <u>PS</u>	Date/Time of Preservation _____
				Lot# of added Preservative _____	
8260C/D: Headspace in VOA Vials (> 6mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17.	
624.1: Headspace in VOA Vials (0mm)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18.	
Trip Blank Present:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Trip blank custody seal present? YES or NO	
Rad Samples Screened <0.5 mrem/hr.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Initial when completed <u>JS</u>	Date: <u>9/21/23</u> Survey Meter SN: <u>1503</u>
Comments:					

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client

Site 2309244

Page 1 of 1

Profile Number

14466

Notes

Sample Line Item	Amber Glass					Plastic								Vials					Other								
	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGPU	ZPLC	GCUB	GJN	12GN	GN	BG1U
001	WT						2																				
002																											
003																											
004																											
005																											
006																											
007																											
008																											
009																											
010																											
011																											
012																											

Container Codes

Glass		Glass	
GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
B3S	250mL amber glass H2SO4		
B3U	250mL amber glass unpreserved		

W0#: 30624440

PN: JPH Due Date: 10/12/23

CLIENT: MICROMETHOD

Qualtrax ID: 55678

Analytical Services, LLC

Page 1 of 1

Plastic/Misc.

GCUB	1 gallon cubitainer	EZL	5g Encore
12GN	1/2 gallon cubitainer	VOAK	Kit Volatile Solid
SP5T	120mL coliform Na Thiosulfate	I	Wipe/Swab
BP1N	1L plastic HNO3	ZPLC	Spiloc Bag
BP1U	1L plastic unpreserved	WT	Water
BP3S	250mL plastic H2SO4	SL	Solid
BP3N	250mL plastic HNO3	OL	Non-Aq Liquid
BP3U	250mL plastic unpreserved	WP	Wipe
BP3C	250mL plastic NAOH		
BP2S	500mL plastic H2SO4		
BP2U	500mL plastic unpreserved		

APPENDIX C

FIELD SAMPLING DATA

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Monitor Well: CCR-2 **Well Diameter:** 4 inches
Date: 03/13/23
Sampling Method: Pumped
Measured Well Depth: 84.5 ft
Static Water Level: 49.94 ft
 (Depth to Water)
Maximum Drawdown Depth 53.40 ft
 (10% of WCH + SWL)
Water Column Height: 34.56 ft
 (Measured Well Depth - Static Water Level)
TOC Elevation⁽¹⁾: 542.50 ft
GW Elevation: 492.56 ft
 (TOC Elevation - Static Water Level)
Well Volume: 22.46 gal
 (Water Column Height x Well Casing Volume Factor)

[illegible]

Sample Time: 15:50

Sample Analyzed for: Appendix III (Boron, Calcium, Chloride, Fluoride, Sulfate, & TDS). pH measured in the field. Appendix IV (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Molybdenum, Selenium, & Radium 226/228).

Total Drawdown (ft): 2.04 (SWL - Final Depth)

Drawdown/Water Column (%): 5.90% (Total Drawdown / WCH)

[Signature] 03/13/23

Sampler Signature:

If possible, total drawdown will not exceed 0.33 ft.
If drawdown exceeds 10% of water column height, flow will be stopped and well allowed to recover.

Well Stabilization	
pH:	0.1 standard units
conductivity:	within 3%
temperature:	0.1 deg. C
turbidity:	<5 NTU or 10%

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

#REF!

Monitor Well: MW-12
Date: 5-10-23

Date: 5-10-23

Well Volume: 8.52 gal
(Water Column Height x Well Casing Volume Factor)

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Monitor Well: CCR-2 **Well Diameter:** 4 inches
Date: 5-10-23
Sampling Method: Pumped
Measured Well Depth: 84.5 ft
Static Water Level: 50.36 ft
 (Depth to Water)
Maximum Drawdown Depth: 53.77 ft
 (10% of WCH + SWL)

[illegible]

Sample Time: 11:25
Sample Analyzed for: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium 226/228

Total Drawdown (ft): 1.43'
Drawdown/Water Column (%): 4.19%

Sampler Signature: _____

If possible, total drawdown will not exceed 0.33 ft.
If drawdown exceeds 10% of water column height, flow will be stopped and well allowed to recover.

Well Stabilization	
pH:	0.1 standard units
conductivity:	within 3%
temperature:	0.1 deg. C
turbidity:	<5 NTU or 10%

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Monitor Well: CCR-4

Date: 5-10-23

Date: 5-10-23

Well Volume: 18.12 gal
(Water Column Height x Well Casing Volume Factor)

FINAL DEPTH = 26.28'

If drawdown exceeds 10% of water column height, flow will be stopped and well allowed to recover.

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Monitor Well: CCR-3
Date: 5-10-23

Date: 5-10-23

Well Volume: 17.86 gal
(Water Column Height x Well Casing Volume Factor)

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Monitor Well: OW-2
Date: 5-10-23

Date: 5-10-23

Water Column Height: 16.12 ft
(Measured Well Depth - Static Water Level)

GW Elevation: 478.47 ft
(TOC Elevation - Static Water Level)

Well Volume: 10.48 gal
(Water Column Height x Well Casing Volume Factor)

Sample Time: 14:40
 Sample Analyzed for: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium 226/228

Total Drawdown (ft): 0.96'
Drawdown/Water Column (%): 5.96%

Sampler Signature:

If possible, total drawdown will not exceed 0.33 ft.

If drawdown exceeds 10% of water column height, flow will be stopped and well allowed to recover.

Well Stabilization	
pH:	0.1 standard units
conductivity:	within 3%
temperature:	0.1 deg. C
turbidity:	<5 NTU or 10%

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 6.87	

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Additional repair is needed. Sampling tube is ripped at connection point

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

#REF!

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

Monitor Well: OW-2
Date: 9-13-23


Date: 7-15-23

Water Column Height: 25.36 ft
(Measured Well Depth - Static Water Level)

TOC Elevation⁽¹⁾: 489.40 ft

GW Elevation: 477.14 ft
(TOC Elevation - Static Water Level)

Well Volume: 16.48 gal
(Water Column Height x Well Casing Volume Factor)

Sample Time: 11:10
Sample Analyzed for: Appendix III (Boron, Calcium, Chloride, Fluoride, Sulfate, & TDS). pH measured in the field. Appendix IV (Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Molybdenum, Selenium, & Radium 226/228).
Total Drawdown (ft): 1.87 (SWL - Final Depth)
Drawdown/Water Column (%): 0.073738 - 7.37% (Total Drawdown / WCH)
Sampler Signature: 

Well Stabilization	
pH:	0.1 standard units
conductivity:	within 3%
temperature:	0.1 deg. C
turbidity:	<5 NTU or 10%

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

(Water Column Height x Well Casing Volume Factor)

#REF!

If drawdown exceeds 10% of water column height, flow will be stopped and well allowed to recover.

Monitor Well: CCR-4

Date: 9-13-23

Date: 7-13-23

TOC Elevation⁽¹⁾: 505.68 ft
GW Elevation: 480.02 ft
 (TOC Elevation - Static Water Level)
Well Volume: 17.77 gal
 (Water Column Height x Well Casing Volume Factor)

[illegible]

If possible, total drawdown will not exceed 0.33 ft.
If drawdown exceeds 10% of water column height, flow will be stopped and well allowed to recover.

Well Casing Volumes (gal/ft)			
1" = 0.041	1 1/2" = 0.10	2" = 0.16	2 1/2" = 0.24
3" = 0.37	3 1/2" = 0.50	4" = 0.65	6" = 1.46
8" = 2.61	10" = 4.08	12" = 5.87	

APPENDIX D

2023 GROUNDWATER MONITORING SUMMARY

Choctaw Generation CCR Groundwater Results for Calendar Year 2023

Detection and Assessment Monitoring Results:

	Detected
	Detected above Prediction Limit
	Detected above Prediction Limit and Groundwater Protection Standard (GWPS)

NS = Not Sampled

Antimony (Sb) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.002, GWPS = 0.006																

Arsenic (As) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.002, GWPS = 0.010																

Barium (Ba) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	0.131	0.071	0.146	0.087	NS	NS	NS	0.064	0.080	0.203	0.169	0.012	NS	NS	NS	0.034
5/10/23	0.098	0.058	0.122	0.054	NS	NS	NS	0.053	0.082	0.171	0.14	0.01	NS	NS	NS	0.035
9/13/23	0.11	0.046	0.157	0.083	NS	NS	NS	0.065	0.045	0.173	0.149	0.012	NS	NS	NS	0.029
Prediction Limit = 0.2558, GWPS = 2																

Choctaw Generation CCR Groundwater Results for Calendar Year 2023

Beryllium (Be) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	0.00114	ND	ND	NS	NS	NS	ND	0.00395	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	0.00122	ND	ND	NS	NS	NS	ND	0.00413	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	0.00235	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.001, GWPS = 0.004																

Boron (B) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	0.058	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
9/13/23	ND	ND	ND	0.067	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.050																

(1) Appendix III constituent not required to be monitored during the annual monitoring event.

Calcium (Ca) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	15.7	35.4	23.7	104	NS	NS	NS	25.9	43.3	30.7	20.4	0.608	NS	NS	NS	41.1
5/10/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
9/13/23	13.5	17.5	23.9	47.9	NS	NS	NS	24.7	20.6	25.2	16.9	0.59	NS	NS	NS	40.9
Prediction Limit = 85.8879																

(1) Appendix III constituent not required to be monitored during the annual monitoring event.

Choctaw Generation CCR Groundwater Results for Calendar Year 2023

Cadmium (Cd) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.001, GWPS = 0.005																

Chloride (Cl) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	354	61.4	ND	11.6	NS	NS	NS	92.5
5/10/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
9/13/23	5.08	8.48	10.7	7.32	NS	NS	NS	7.68	337	43.7	7.28	25.6	NS	NS	NS	156
Prediction Limit = 26.6034																

(1) Appendix III constituent not required to be monitored during the annual monitoring event.

Chromium (Cr) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.001, GWPS = 0.1																

Choctaw Generation CCR Groundwater Results for Calendar Year 2023

Cobalt (Co) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	0.00228	0.0236	0.00418	0.0106	NS	NS	NS	ND	0.0157	0.019	ND	ND	NS	NS	NS	ND
5/10/23	0.00203	0.0213	0.00269	0.00962	NS	NS	NS	ND	0.0158	0.019	ND	ND	NS	NS	NS	ND
9/13/23	0.0013	0.00999	0.00248	0.00261	NS	NS	NS	ND	0.00806	0.00491	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.001, GWPS = 0.006																

Fluoride (F) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	0.39	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	0.25	0.41	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	0.27	ND	ND	NS	NS	NS	ND	0.23	ND	ND	ND	NS	NS	NS	0.22
Prediction Limit = 0.30, GWPS = 4.0																

Lead (Pb) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.001, GWPS = 0.015																

Choctaw Generation CCR Groundwater Results for Calendar Year 2023

Lithium (Li) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	0.088	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	0.086	ND	ND	NS	NS	NS	ND	0.041	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	0.058	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.050, GWPS = 0.050																

Mercury (Hg) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
Prediction Limit = 0.002, GWPS = 0.002																

(1) Appendix IV constituent not required to be monitored during semi-annual assessment monitoring.

Molybdenum (Mo) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.001, GWPS =0.100																

Choctaw Generation CCR Groundwater Results for Calendar Year 2023

Selenium (Se) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
Prediction Limit = 0.001, GWPS = 0.05																

Sulfate (SO4) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	10.6	242.00	27.9	422	NS	NS	NS	40.5	96.7	66.7	5.04	17.00	NS	NS	NS	99.2
5/10/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
9/13/23	10.1	71.5	18.3	96.4	NS	NS	NS	44.7	101	29.7	6.1	7.65	NS	NS	NS	89.1
Prediction Limit = 44.8102																

(1) Appendix III constituent not required to be monitored during the annual monitoring event.

Thallium (Tl) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
5/10/23	ND	ND	ND	ND	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	ND
9/13/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
Prediction Limit = 0.001, GWPS = 0.002																

(1) Appendix IV constituent not required to be monitored during semi-annual assessment monitoring.

Choctaw Generation CCR Groundwater Results for Calendar Year 2023

Total Dissolved Solids (TDS) Monitoring Results (mg/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	70	435	170	758	NS	NS	NS	149	887	243	142	87	NS	NS	NS	358
5/10/23 ⁽¹⁾	-	-	-	-	NS	NS	NS	-	-	-	-	-	NS	NS	NS	-
9/13/23	89	213	174	386	NS	NS	NS	163	556	174	151	80	NS	NS	NS	449
Prediction Limit = 320.8384																

(1) Appendix III constituent not required to be monitored during the annual monitoring event.

pH Monitoring Results (S.U.)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	7.00	6.19	6.69	6.50	NS	NS	NS	6.30	4.51	6.20	6.88	4.80	NS	NS	NS	6.12
5/10/23	6.74	5.9	6.40	6.61	NS	NS	NS	6.44	4.65	5.68	6.86	5.04	NS	NS	NS	5.62
9/13/23	6.75	5.63	6.72	6.96	NS	NS	NS	6.34	4.7	6.29	6.82	4.95	NS	NS	NS	6.48
Prediction Limit = 3.77 – 9.97																

Radium 226 and 228 Combined (Ra) Monitoring Results (pCi/L)

Monitoring Well																
Date	CCR-2	CCR-3	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	MW-7	MW-9	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	OW-2
	Down	Down	Down	Down/ Boundary	Mine Property	Mine Property	Mine Property	Up	Down	Down	Up	Up	Down	Down	MW16 Replacement Well/Down	Down
3/13/23	1.632	1.186	1.483	1.925	NS	NS	NS	1.645	3.82	1.97	1.663	1.935	NS	NS	NS	1.691
5/10/23	1.693	1.904	1.873	1.748	NS	NS	NS	1.291	2.703	1.488	1.764	1.714	NS	NS	NS	1.828
9/13/23	2.498	2.46	2.051	2.345	NS	NS	NS	1.501	1.487	1.677	2.059	1.702	NS	NS	NS	1.869
Prediction Limit = X, GWPS = 5 pCi/L																

(1) Per MS Dept. of Health (BJ Smith) and EPA guidance for drinking water standards, Radium 226/228 Combined is calculated by adding Radium 226 and Radium 228 Activity (Act) concentrations together if they are detected above the MDC; otherwise, the MDC is used.