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120 Tredegar Street, Richmond, VA 23219
DominionEnergy.com

BY ELECTRONIC MAIL

January 31, 2025

Ms. Shannon George, P.G.
Virginia Department of Environmental Quality – Valley Regional Office
Attn: Division of Land Protection and Revitalization
4411 Early Road
Harrisonburg, Virginia 22801
shannon.george@deq.virginia.gov

RE: Bremo Power Station East Pond, Solid Waste Permit No. 618:
2024 CCR & VSWMR Annual Groundwater Monitoring and Corrective Action Report

Dear Ms. George:

In accordance with Solid Waste Permit No. 618 Module XI.J.1.a, Virginia Electric and Power Company (Dominion Energy) is providing the attached 2024 CCR and VSWMR Annual Groundwater Monitoring and Corrective Action Report for the Bremo Power Station East Pond. In accordance with 40 CFR 257.90(e) and 40 CFR 257.105(h)(1), this document was placed in the facility's operating record today and in accordance with 40 CFR 257.107(h)(1), will also be posted to our CCR website within 30 days.

If you have any questions regarding this submittal, please contact Kelly Hicks at (804) 273-4903 or via email at kelly.a.hicks@dominionenergy.com.

Sincerely,

Dennis A. Slade
Manager, Environmental

Attachments

ecc: Geoff Christe, DEQ-CO – geoff.christe@deq.virginia.gov
Laura Stuart, DEQ-VO – laura.stuart@deq.virginia.gov

2024 CCR & VSWMR Annual Groundwater Monitoring and Corrective Action Report

Bremo Power Station
East Pond
Solid Waste Permit No. 618

Prepared for:

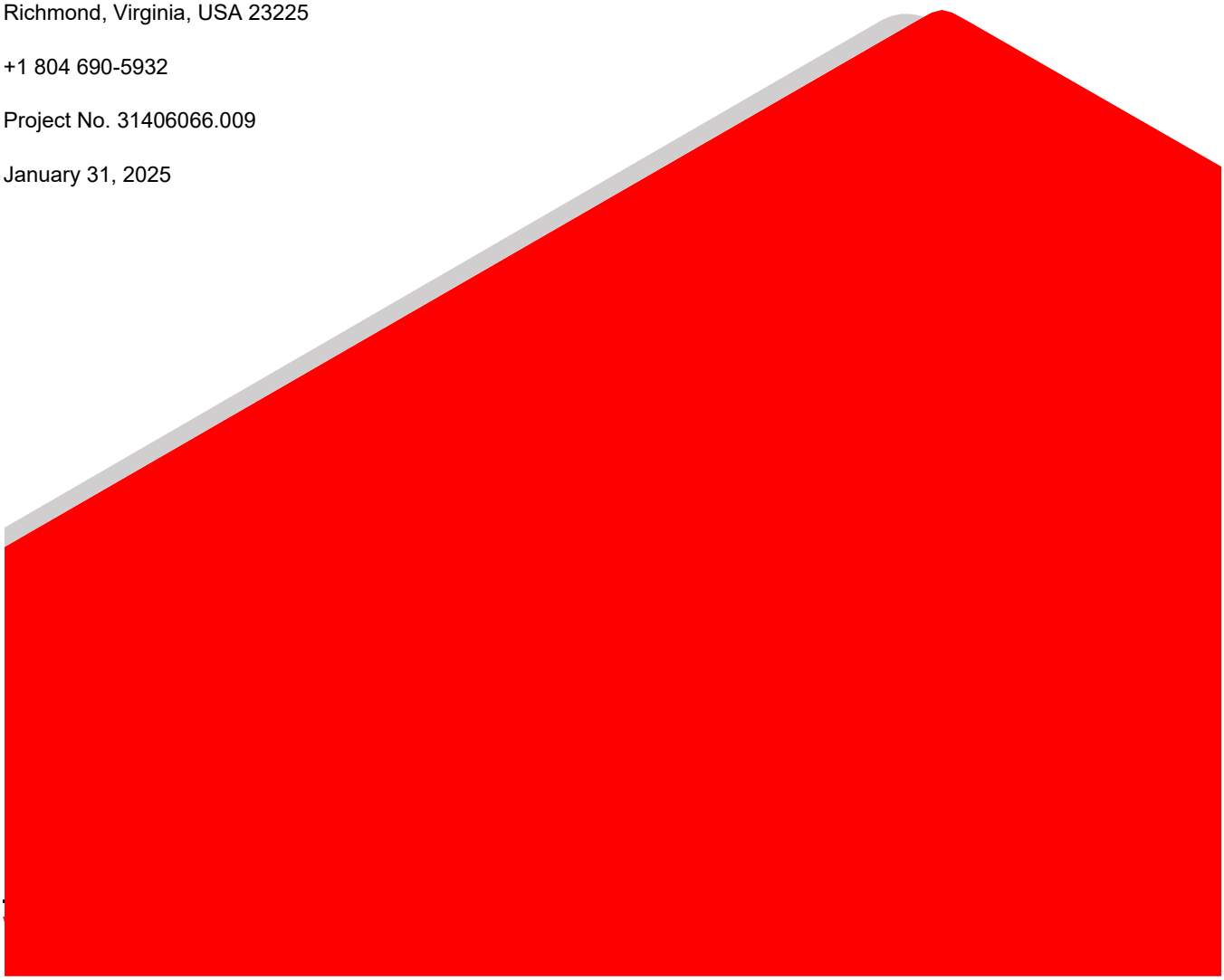
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Project No. 31406066.009

January 31, 2025



EXECUTIVE SUMMARY

This 2024 *CCR and VSWMR Annual Groundwater Monitoring and Corrective Action Report* (Report) was prepared on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy) for the East Pond (Unit) at the Bremo Power Station (Station). Historically, the Station operated the Unit as an unlined surface impoundment for management of Coal Combustion Residuals (CCR) from power generation operations at the Station. The Unit is considered an inactive CCR surface impoundment under Title 40 Code of Federal Regulations (CFR) Part 257.50 *et seq*. [Disposal of CCR from Electric Utilities (Final Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended) – CCR Rule] as well as the Commonwealth of Virginia adoption of 40 CFR Part 257 Subpart D by reference into the Virginia Solid Waste Management Regulations (VSWMR) [Title 9 Virginia Administrative Code (VAC) Agency 20, Chapter 81, section 800 *et seq*. (9VAC20-81-800)]. Pursuant to the CCR Rule and the Virginia Department of Environmental Quality (DEQ)-issued solid waste permit (SWP) No. 618, the Station is required to complete an Annual Groundwater Monitoring and Corrective Action Report (Report) for the Unit by January 31st annually or within 120 days of completing the laboratory analyses for the second semi-annual compliance event of the year, whichever occurs first.

The Report is designed to meet the reporting requirements for the CCR Rule, the VSWMR, and SWP 618. Specifically, this Report documents the status of the groundwater monitoring program for the Unit, summarizes key actions completed, describes issues encountered and actions to resolve identified issues, and key project activities for the upcoming year. More specifically, this Report describes the performance of the Modified Assessment Monitoring Program (AMP) consistent with the Unit's SWP and the CCR Rule, activities performed to comply with CCR Rule and the Unit's SWP requirements, and the progression of future sampling activities pursuant to the CCR Rule and the Unit's SWP.

In accordance with 40 CFR §257.90(e)(6), the following information is being provided as an overview of the current status of groundwater monitoring and corrective action for the Unit:

i. *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 start of 2024, the Unit was operating under the AMP in accordance with §257.95 and the Modified AMP in accordance with the SWP.

ii. *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.*
   - At the end of 2024, the Unit was operating under the AMP in accordance with §257.95 and the Modified AMP in accordance with the SWP.

iii. *If it was determined that there was a statistically significant increase over background for one (1) or more constituents listed in appendix III to this part pursuant to §257.94(e).*

(A) Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase.

EXECUTIVE SUMMARY

- In 2024, there were statistically significant increases over background for the following appendix III constituents at the following wells:
  - Boron – wells MW-19, MW-20S, MW-20D, MW-21, MW-22, MW-23
  - Calcium – wells MW-19, MW-20S, MW-20D, MW-21

(B) Provide the date when the assessment program was initiated for the CCR unit.

- The Unit initiated the AMP on October 7, 2019.

iv. If it was determined that there was a statistically significant level above the groundwater protection standard for one (1) or more constituents listed in appendix IV to this part pursuant to §257.95(g)

(A) Identify those constituents listed in appendix IV to this part and the names of the monitoring wells associated with such an increase.

- In 2024, there were statistically significant increases over the federal CCR Rule groundwater protection standard (GWPS) for the following constituents at the following wells:
  - Cobalt – wells MW-20S, MW-21
  - Lithium – well MW-20S
- In 2024, there were statistically significant increases over the SWP groundwater protection standard (GPS) for the following constituents at the following wells:
  - Cobalt – wells MW-20S, MW-21
  - Lithium – well MW-20S
  - Nickel – well MW-22

(B) Provide the date when the assessment of corrective measures was initiated for the CCR unit.

- The Unit initiated the assessment of corrective measures (ACM) on April 4, 2020.

(C) Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.

- The public meeting for the ACM was held on December 8, 2021.

(D) Provide the date when the Assessment of Corrective Measures was completed for the CCR Unit

- An ACM Report and Nature and Extent Study (NES) Report were completed on September 1, 2020, and placed in the operating record on the same day and were submitted to DEQ on November 10, 2020. Addendum or revised reports were completed in April 2021, October 2021, January 2022, and June 2022.

v. Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of the remedy selection.

- A remedy was not selected during the current annual reporting period.

vi. Whether remedial activities were initiated or are ongoing pursuant to §257.98 during the current annual reporting period

- Remedial activities were not initiated or are not ongoing during this current annual reporting period.

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1.0 INTRODUCTION

This 2024 *CCR and VSWMR Annual Groundwater Monitoring and Corrective Action Report* (Report) was prepared by WSP USA Inc. (WSP) on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy) for the East Pond (Unit) at the Bremo Power Station (Station). Historically, the Station operated the Unit as an unlined surface impoundment for management of Coal Combustion Residuals (CCR) generated at the Station. The Unit is considered an inactive CCR surface impoundment under Title 40 Code of Federal Regulations (CFR) §257.50 *et seq*. [Disposal of CCR from Electric Utilities (Final Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended – CCR Rule) as well as the Commonwealth of Virginia adoption of 40 CFR Part 257 Subpart D by reference [Title 9 Virginia Administrative Code (VAC) Agency 20, Chapter 81, section 800 *et seq*. (9VAC20-81-800)]. Pursuant to the CCR Rule, the Station is required to complete an Annual Groundwater Monitoring and Corrective Action Report (Report) for the Unit by January 31st annually.

The Unit is also subject to regulation under the Virginia Solid Waste Management Regulations (VSWMR; Title 9, Virginia Administrative Code, Agency 20, Chapter 81 *et seq*.) as an inactive CCR surface impoundment and is operated by Dominion Energy under Solid Waste Permit (SWP) No. 618 issued by the Virginia Department of Environmental Quality (DEQ) on June 5, 2019 (DEQ, 2019). These regulations and the SWP require groundwater monitoring and reporting activities that are in addition to those required by the CCR Rule. Specifically, the SWP also requires the submission of an Annual Report by January 31st of each calendar year or within 120 days of completing the laboratory analyses for the second semi-annual event, whichever occurs first. A completed copy of the DEQ's annual report checklist is presented in Appendix A.

WSP has prepared this Report for the Unit on behalf of Dominion Energy in accordance with CCR Rule §257.90(e), the SWP, and VSWMR requirements. This Report provides the monitoring data and the required data evaluations for the first and second semi-annual Modified Assessment Monitoring Program (AMP) events performed in February and August 2024.

1.1 Site Location

The Station is owned and maintained by Dominion Energy and is located at 1038 Bremo Road, Bremo Bluff, Virginia (Fluvanna County) on the east side of State Route 15 (James Madison Highway) and north of the James River. A site location map is presented as Figure 1.

1.2 Site History

The Station commenced operations as a coal-fired power plant in the 1930's. The Station converted from coal to natural gas-fired power plant in 2014 and was placed in cold storage in 2018. Decommissioning of the Station commenced in 2020 and was completed in 2023. The Unit covers approximately 26.5 acres. Placement of CCR into the Unit began in the mid-1930s and ceased in the mid-1980s. No newly generated CCR has been placed in

this Unit since the mid-1980s. CCR from past operations was stored in the Unit using a wet sluice process. The CCR materials in the Unit were transferred to the North Pond as part of the closure by removal process completed in 2020. All CCR material has been removed and the Unit has been converted to a stormwater management basin. The Unit remains subject to the groundwater monitoring requirements of the CCR Rule and the Unit's SWP.

1.3 Key Actions

Key actions for the Unit to date are as follows:

- Placed a copy of the *Groundwater Monitoring Plan* (GMP) documenting the design information for the monitoring wells pursuant to the CCR Rule [257.91(e)(1)] in the Unit's operating record on October 17, 2017 (updated January 2021), pursuant to the CCR Rule [257.105(h)(2)];
- Initiated the collection of eight (8) baseline/background samples on October 23, 2016, and completed the background monitoring activities October 16, 2018, pursuant to the CCR Rule [257.94(b)];
- Conducted the initial Detection Monitoring Program (DMP) compliance sampling event on January 7-8, 2019, and completed the sample analyses on April 17, 2019, pursuant to the CCR Rule [257.94];
- Certified the Unit's groundwater monitoring system pursuant to the CCR Rule [257.91(e)(1) and posted the certification in the Unit's operating record on April 17, 2019, pursuant to the CCR Rule [257.105(h)(3)];
- Certified the selection of a statistical method pursuant to the CCR Rule [257.93(f)(6)] and posted the certification in the Unit's operating record on April 17, 2019, pursuant to the CCR Rule [257.105(h)(4)];
- The DEQ issued SWP No. 618 on June 5, 2019. The SWP initiated the Modified AMP and includes provisions for closure, groundwater monitoring, and surface water monitoring requirements for the East Pond;
- The *East Ash Pond Closure by Removal Report and Engineering Certification* was submitted on June 24, 2019;
- A notification of Statistically Significant Increases (SSI) over Unit background concentrations under the DMP was placed in the Unit's operating record on July 16, 2019;
- The *East Ash Pond Facility Background Determination Report* (Golder, 2019) was submitted to the DEQ on August 15, 2019 (revised March 2020). The report included proposed SWP Groundwater Protection Standards (GPS);
- Pursuant to §257.95 of the CCR Rule, an AMP was initiated on October 7, 2019, within 90 days of identifying SSIs for DMP constituents;

- DEQ provided the Station with a letter on October 1, 2019, acknowledging the removal of CCR material and 6-inch over excavation in conformance with the SWP closure plan;
- Notification of AMP establishment placed in the Unit's operating record on November 1, 2019;
- Established federal CCR groundwater protection standards (GWPS) for detected constituents in Appendix IV of Part 257 on January 5, 2020, pursuant to the CCR Rule [257.95(d)(2)];
- Notification of second semi-annual 2019 CCR Rule GWPS exceedances was placed in the Unit's operating record on January 31, 2020;
- Received a letter from DEQ on March 12, 2020, approving background-based SWP GPS for the Unit;
- An Assessment of Corrective Measures (ACM) was initiated on April 4, 2020, with the notification of initiation placed in the Unit's operating record on May 4, 2020;
- Completed the NES-ACM for boron, cobalt, lithium, and molybdenum on September 1, 2020; and placed it into the Unit's operating record on the same day;
- Updated the statistical method certification pursuant to the CCR Rule [257.93(f)(6)] and posted the certification in the Unit's operating record on March 3, 2021, pursuant to the CCR Rule [257.105(h)(4)];
- Completed an NES-ACM Addendum for arsenic on April 28, 2021, and placed it into the Unit's operating record on the same day;
- Completed a Revised NES on October 28, 2021, and place in the Unit's operating record on the same day;
- Held ACM public meeting on December 8, 2021, in accordance with 9VAC20-81-260(C)(4) and CCR Rule [257.96(e)];
- Submitted an ACM Addendum with the public participation documentation to the DEQ on January 12, 2022;
- Submitted an NES Addendum to DEQ addressing SWP GPS exceedances of nickel on June 20, 2022;
- Completed revised NES/ACM Reports for exceedances of arsenic, boron, cobalt, lithium, molybdenum, and nickel on October 3, 2022, and submitted them to DEQ and placed them into the Unit's operating record on the same day;
- The *2023 Updated Facility Background Determination Report* was submitted to the DEQ on March 2, 2023. The report included updated SWP GPS and was approved by DEQ on May 26, 2023;
- Updated the statistical method certification pursuant to the CCR Rule [257.93(f)(6)] and posted the certification in the Unit's operating record on March 2, 2023, pursuant to the CCR Rule [257.105(h)(4)];

- The station was issued a minor modification to SWP No. 618 on March 3, 2023, allowing the use of alternate GPS for cobalt, lead, lithium, and molybdenum as established in the 2018 amendment to the CCR Rule. In addition, the permit modification allows for the use of an alternate GPS for boron per the Virginia Unified Risk Assessment Model (VURAM).
- Placed a copy of the East Pond Semi-Annual Remedy Selection Progress Report No. 7 in the Unit's operating record on February 12, 2024;
- Conducted the first semi-annual 2024 Modified AMP compliance event on February 12-14, 2024, and completed analysis on April 1, 2024, pursuant to the CCR Rule [257.95] and the Unit's SWP;
- Notification of first annual 2024 SWP GPS SSIs was submitted to DEQ on May 15, 2024. A CCR Rule GWPS exceedance notification was placed in the operating record on the same day;
- Submitted the first semi-annual 2024 Groundwater Monitoring Report to DEQ on July 30, 2024;
- Placed a copy of the East Pond Semi-Annual Remedy Selection Progress Report No. 8 in the Unit's operating record on August 9, 2024;
- Conducted the second semi-annual 2024 Modified AMP compliance event on August 26-28, 2024, and completed analysis on October 14, 2024, pursuant to the CCR Rule [257.95] and the Unit's SWP;
- Notification of second semi-annual 2024 SWP GPS and federal CCR GWPS SSIs was submitted to the DEQ on November 22, 2024, and placed in the Unit's operating record on the same day; and
- Submitted a Corrective Action Plan and Corrective Action Monitoring Plan to DEQ on December 23, 2024, pursuant to DEQ direction in a letter dated June 28, 2024.

1.4 Monitoring Program Issues

There were no monitoring program concerns identified during the compliance monitoring events conducted in 2024.

1.5 Variances

The Station currently does not have any variances related to the groundwater monitoring program for the Unit.

2.0 SITE INFORMATION

The Station property consists of wooded, open, and developed land just north of the James River. The Station's northern, eastern, and western boundaries are bordered by primarily undeveloped parcels, and the Station is bordered to the south by a CSX rail line and the James River. Land use surrounding the Station is classified as "A-1 Agricultural," and consists of undeveloped wooded and agricultural properties within a rural residential setting.

Power generation activities at the Station were initiated in the 1930s. CCR from the power generation activities had historically been stored in the three (3) on-site CCR surface impoundments (East Pond, North Pond, and West Pond). In 2014, the Station converted from a coal-fired power plant to a natural gas-fired power plant. No newly generated CCR has been placed in these impoundments since the conversion to a gas-fired plant. Removal of the CCR materials from the East Pond to the North Pond was completed in March 2019.

Historically, groundwater at the Station had been monitored on a 5-year cycle under Virginia Pollutant Discharge Elimination System (VPDES) Permit (Permit No. VA0004138). Groundwater monitoring under the VPDES requirements was terminated following issuance of the Solid Waste Permit (SWP) 618 in June 2019. The Unit commenced groundwater monitoring under the provisions of the CCR Rule by April 17, 2019, and the provisions of the DEQ-issued SWP on June 5, 2019.

2.1 Monitoring Well Network

The updated GMP (Golder, 2021c) details the design of the Unit's CCR Rule groundwater monitoring network. As presented in the GMP, the monitoring network is comprised of three (3) upgradient/background wells [MW-11, MW-29D, and MW-29S] and six (6) downgradient monitoring wells (MW-19, MW-20S, MW-20D, MW-21, MW-22, and MW-23) designed to monitor the uppermost aquifer beneath the Unit. The groundwater monitoring well locations relative to the Unit are shown on Figure 2.

2.1.1 Monitoring Well Installation and Decommissioning Activities

No groundwater monitoring wells associated with the Unit's compliance monitoring network were installed or decommissioned in calendar year 2024.

2.1.2 Annual Review of Monitoring Network

Wells were inspected during each sampling event and were determined to be functioning appropriately, and no wells require replacement.

2.2 Geology and Hydrogeology

A summary of the geology and hydrogeology for the Station is presented in the following sections.

2.2.1 Geology

The Station is in the central part of the Piedmont physiographic province on the Chopawamsic Terrane (Bailey and Owens, 2012; VDMR, 1993). The surrounding area is characterized by undulating terrain incised by several dendritically patterned, intermittent, and perennial stream channels flowing in a generally southern direction towards the James River. The Piedmont physiographic province is characterized by igneous and metamorphic rock formations of Pre Cambrian (Catoctin Formation) to Ordovician geologic age. The province consists of a mosaic of accreted terrain and has been folded and faulted near the end of Ordovician time.

Site observations and regional mapping indicate that portions of the Station near the James River are underlain by unconsolidated Quaternary-age alluvial sediments. Locally, a basal stratum is observed to overlie competent bedrock or saprolite and is generally characterized as a gravel or cobble deposit of variable thickness. The gravel is in turn overlain by fine-grained sediments that appear to be associated with fluvial overbank deposits.

2.2.2 Hydrogeology

The uppermost aquifer beneath the Unit is unconfined and found in the surficially exposed overburden (alluvium) and underlying bedrock (gneiss). Locally, the groundwater flow direction in the uppermost aquifer is from the northeast to the southwest across the Unit towards the James River.

Locally, the fractured bedrock aquifer is used as a source of potable water for some properties. As of this time of this Report, WSP is not aware of any adjoining downgradient properties that use the bedrock aquifer as a source of potable water.

2.2.3 Potentiometric Surface Evaluation

The purpose of this evaluation is to determine the groundwater flow directions beneath the Unit by generating potentiometric surface contour surfaces using groundwater elevations from the compliance well network. The surfaces are used to determine if the monitoring wells are properly located to monitor the groundwater at the Unit. Historical static water level data for the Unit are summarized in Appendix B.

The Groundwater Potentiometric Surface Map presented as Figure 2 was prepared using static water level data obtained during the first semi-annual 2024 Modified AMP compliance event on February 12, 2024. The Groundwater Potentiometric Surface Map presented as Figure 3 was prepared using static water level data obtained on August 26, 2024, during the second semi-annual 2024 Modified AMP compliance event. The interpreted data indicates that the groundwater gradient and flow directions remain consistent (southwest) with previous monitoring events. Consequently, the groundwater monitoring network continues to adequately monitor

the uppermost aquifer in accordance with provisions of the CCR Rule (257.91) and the VSWMR (9VAC20-81-250.A.3).

2.2.4 Groundwater Flow Rate Calculation

Consistent with the requirements of the CCR Rule, the rate and direction of groundwater flow within the uppermost aquifer beneath the Unit was determined after each compliance sampling event. Appendix C presents the equations used to calculate the approximate horizontal rate of groundwater flow in the uppermost aquifer beneath the Unit during the two (2) compliance events conducted in 2024. As presented, the average groundwater flow rate in the uppermost aquifer beneath the Unit is approximately 65 to 67 feet per year for the alluvium and 710 to 740 feet per year for the gneiss bedrock. The calculated groundwater flow rates are consistent with previous results developed based on the current Site Conceptual Model.

With respect to the variable groundwater flow rates observed between the alluvium and underlying gneiss bedrock, the estimated average hydraulic conductivity values for the alluvium and underlying gneiss bedrock are based on the geometric mean of the assorted slug testing results that have been generated for the two (2) lithologies at the Unit as outlined in the GMP submitted to DEQ on January 5, 2021 (Golder, 2021c). As presented in the updated 2021 GMP, the average hydraulic conductivity for the alluvium is currently estimated at 1.11E-05 feet per second [ft/s; range of 6.14E-07 ft/s to 6.59E-05 ft/s is currently observed)]. The average hydraulic conductivity for the lower gneiss bedrock is currently estimated at 1.53E-05 ft/s with significant variability observed in the results on a well-by-well basis (range of 1.56E-08 ft/s to 5.09E-04 ft/s is currently observed). These average values are consistent with publish values for fractured igneous and metamorphic rocks as well as clayey/silty soils (Freeze, 1979; Heath, 1983). Thus, the estimated average hydraulic conductivity values for the alluvium and underlying bedrock are close. Therefore, the difference between the calculated groundwater flow rates between the alluvium and underlying fractured gneiss bedrock is primarily associated with the estimated whole-rock porosity that is assumed for the fractured bedrock (2.5%) versus the higher effective porosity that is assumed for the physically and chemically weathered overlying alluvium (20%). The estimated whole rock porosity is consistent with field observations for recovered rock cores at the Station [rock cores generally have a very high rock quality designations (RQDs)], as well as published effective porosity values for fractured rock (Barari, 1985; Fetter, 1988). While a higher flow rate is generally calculated for the bedrock due to fracture flow, the total volume of water flux in the alluvium and fractured bedrock on a cross-sectional flow area basis are essentially the same.

2.2.5 Network Certification

Based on this evaluation and previous evaluations completed for the Unit, the Unit's permitted groundwater monitoring system as constructed continues to adequately monitor the uppermost aquifer beneath the Unit in accordance with requirements of 9VAC20-81-250.A.3 and 9VAC20-81-250.E.2.a.(2)(e).

3.0 FIELD ACTIVITIES

Compliance groundwater sampling activities that occurred during 2024 are summarized in the following sections.

3.1 First Semi-Annual 2024 Sampling Activities

Pursuant to the requirements in Title 40 CFR 257.95(d)(1) and the SWP, a first semi-annual Modified AMP monitoring event was completed for the Unit for the constituents and parameters listed in Appendices III and IV of the CCR Rule and the additional constituents and parameters listed the SWP.

During the first semi-annual Modified AMP sampling event, the compliance monitoring wells were sampled in accordance with the procedures presented in the Station's GMP. The samples were couriered by WSP on ice in secured coolers under chain-of-custody control to Pace Analytical Services, LLC (Pace) in Huntersville, North Carolina on February 13 and 15, 2024. The samples were then distributed to the Asheville, North Carolina; Charlotte, North Carolina; and Mount Juliet, Tennessee locations of Pace for analysis.

Pace is a Virginia Environmental Laboratory Accreditation Program (VELAP) accredited laboratory for the analyses they performed as required under the federal and state regulations, and as outlined in the GMP and SWP. The corresponding VELAP certification for the Pace locations are as follows: Asheville, North Carolina (#460222); Charlotte, North Carolina (#460221) and Mount Juliet, Tennessee (#110033). The field data sheets for the first semi-annual 2024 Modified AMP sampling events are included in Appendix D.1. A summary of the first semi-annual 2024 Modified AMP sampling event is presented in the following table:

Monitoring Event	Sample Date(s)	Final Laboratory Package Receipt Date
First Semi-Annual Modified AMP Event	February 12-14, 2024	April 1, 2024

3.2 Second Semi-Annual 2024 Sampling Activities

Pursuant to the requirements in Title 40 CFR 257.95(d)(1) and the SWP, a second semi-annual Modified AMP monitoring event was completed for the Unit for the constituents and parameters listed in Appendices III and IV of the CCR Rule and the constituents and parameters listed the SWP.

During the second semi-annual Modified AMP sampling event, the compliance monitoring wells were sampled in accordance with the procedures presented in the Station's GMP. Samples collected during the second semi-annual Modified AMP event were shipped on ice in secured coolers under chain-of-custody control to Pace in Huntersville, North Carolina on August 26-29, 2024. The samples were then distributed to the Charlotte, North Carolina; Asheville, North Carolina; and Mount Juliet, Tennessee locations of Pace for analysis. The field data sheets for the

second semi-annual 2024 Modified AMP sampling events are included in Appendix D.2. A summary of the second semi-annual 2024 Modified AMP sampling event is presented in the following table:

Monitoring Event	Sample Date(s)	Final Laboratory Package Receipt Date
Second Semi-Annual Modified AMP Event	August 26-28, 2024	October 14, 2024

4.0 LABORATORY ANALYTICAL RESULTS

Laboratory analytical results from the sampling events conducted in 2024 are summarized in the following sections.

4.1 First Semi-Annual 2024 Modified AMP Event

Groundwater samples collected during the first semi-annual 2024 Modified AMP event were analyzed for the presence and concentrations of the constituents and parameters listed in Appendices III and IV of the CCR Rule, as well as additional SWP-required constituents (VSWMR Table 3.1 metals not included in the CCR Rule, former VPDES constituents not included in the CCR Rule, and hexavalent chromium). The laboratory certificates of analysis and chain-of-custody forms for the sampling event are presented in Appendix E.1. A summary of the sampling data for the event is presented in Table 1.

4.2 Second Semi-Annual 2024 Modified AMP Event

Groundwater samples collected during the second semi-annual 2024 Modified AMP event were analyzed for the presence and concentrations of the constituents and parameters listed in Appendices III and IV of the CCR Rule, as well as additional SWP-required constituents. The laboratory certificates of analysis and chain-of-custody forms for the sampling event are presented in Appendix E.2. A summary of the sampling data for the event is presented in Table 2.

4.3 Review of Prior Detections

A summary of historically detected constituents for each well is presented in Appendix F.

5.0 GROUNDWATER EVALUATION

During the first and second semi-annual 2024 Modified AMP sampling events, groundwater samples were analyzed for constituents and parameters listed in Appendices III and IV of the CCR Rule, as well as additional SWP-required constituents (VSWMR Table 3.1 metals not included in the CCR Rule, former VPDES constituents, and hexavalent chromium). The analytical results from these 2024 sampling events are discussed in the following.

5.1 Ammonia

Ammonia was detected at an estimated concentration above the analytical laboratory method detection limit (MDL) in the first semi-annual sample collected from MW-20S. Ammonia was detected at quantified concentrations above the laboratory reporting limit (RL) in both semi-annual samples collected from upgradient well MW-29D and downgradient wells MW-19, MW-20D, and MW-21 at concentrations ranging from 0.14 milligrams per liter (mg/L) in the second semi-annual sample collected from MW-20D to 0.25 mg/L in the second semi-annual collected from upgradient well MW-29D.

5.2 Antimony

Antimony was not detected in 2024 samples.

5.3 Arsenic

Arsenic was detected at estimated concentrations above the MDL in both semi-annual samples collected from MW-20S and MW-20D. Arsenic was not detected above the RL in 2024 samples.

5.4 Barium

Barium was detected at an estimated concentration above the MDL in both semi-annual samples collected from upgradient well MW-11. Barium was detected at quantified concentrations above the RL in the remaining 2024 samples at concentrations from 16.5 micrograms per liter (µg/L) in the first semi-annual sample collected from upgradient well MW-29S to 252 µg/L in both semi-annual samples collected from MW-20S.

5.5 Beryllium

Beryllium was not detected in 2024 samples.

5.6 Boron

Boron was detected at estimated concentrations above the MDL in the second semi-annual sample collected from upgradient well MW-29D. Boron was detected at quantified concentrations above the RL both semi-annual samples collected from MW-19, MW-20S, MW-20D, MW-21, MW-22, and MW-23 at concentrations ranging from 141 µg/L

in the second semi-annual sample collected from MW-23 to 1,490 µg/L in the second semi-annual sample collected from MW-20S.

5.7 Cadmium

Cadmium was not detected in 2024 samples.

5.8 Calcium

Calcium was detected at quantified concentrations above the RL in both semi-annual samples collected from each compliance well at concentrations ranging from 7,310 µg/L in the first semi-annual sample collected from upgradient well MW-29S to 108,000 µg/L in the first semi-annual sample collected from MW-20D.

5.9 Chloride

Chloride was detected at quantified concentrations above the RL in both semi-annual samples collected from each compliance well at concentrations ranging from 6.4 mg/L in the first semi-annual sample collected from MW-20S to 42.9 mg/L in the second semi-annual sample collected from upgradient well MW-29D.

5.10 Chromium

Chromium was detected at estimated concentrations above the MDL in both samples collected from upgradient well MW-29S, in the first semi-annual sample collected from MW-22, and the second semi-annual sample collection from MW-20D. Chromium was not detected above the RL in 2024 samples.

5.11 Chromium, Hexavalent

Hexavalent chromium was detected at estimated concentrations above the RL in the second semi-annual samples collected from upgradient well MW-11 and downgradient wells MW-20S, MW-20D and MW-22. Hexavalent chromium was detected at quantified concentrations above the RL in the first semi-annual samples collected from upgradient wells MW-11 and MW-29S, and downgradient well MW-22. It was also detected in the second semi-annual samples collected from MW-20D and MW-23. Hexavalent chromium was detected at concentrations ranging from 0.085 µg/L in the first semi-annual sample collected from MW-11 to 1.1 µg/L in the second semi-annual sample collected from upgradient well MW-11.

5.12 Cobalt

Cobalt was detected at estimated concentrations above the MDL in both semi-annual samples collected from upgradient wells MW-11 and MW-29D and in the first semi-annual sample collected from upgradient well MW-29S. Cobalt was detected at a quantified concentration above the RL in both semi-annual samples collected from MW-19,

MW-20S, MW-20D, MW-21, MW-22, MW-23 at concentrations ranging from 2.1 µg/L in the second semi-annual sample collected from well MW-23 to 49.7 µg/L in the second semi-annual sample collected from MW-20S.

5.13 Copper

Copper was detected at estimated concentrations above the MDL in both semi-annual samples collected from upgradient wells MW-11 and MW-29D. Copper was not detected above the RL in 2024 samples.

5.14 Fluoride

Fluoride was detected at estimated concentrations above the MDL in both semi-annual samples collected from MW-19, MW-20D, and MW-21 and in the first semi-annual sample collected from MW-22. Fluoride was detected at quantified concentrations above the RL in both semi-annual samples collected from upgradient well MW-29D and downgradient wells MW-20S and MW-23 and in the second semi-annual sample collected from MW-22 at concentrations ranging from 0.11 mg/L in the first semi-annual sample collected from MW-23 to 0.14 mg/L in the second semi-annual sample collected from MW-23.

5.15 Hardness

Hardness was detected at quantified concentrations above the RL in both semi-annual samples collected from each compliance well at concentrations ranging from 24,200 µg/L in the first semi-annual sample collected from upgradient well MW-29S to 478,000 µg/L in the first semi-annual sample collected from MW-20D.

5.16 Iron

Iron was detected at quantified at concentrations above the RL in both semi-annual samples collected from each compliance well at concentrations ranging from 63.2 µg/L in the second semi-annual sample collected from MW-22 to 11,400 µg/L in the second semi-annual sample collected from MW-19.

5.17 Lead

Lead was detected at an estimated concentration above the MDL in the first semi-annual sample collected from MW-20D. Lead was not detected above the RL 2024 samples.

5.18 Lithium

Lithium was detected at estimated concentrations above the MDL in both semi-annual samples collected from upgradient well MW-29D and downgradient wells MW-19, MW-21, MW-22, and MW-23 and in the second semi-annual samples collected from upgradient wells MW-11 and MW-29S. Lithium was detected at quantified concentrations above the RL in both semi-annual samples collected from MW-20S and MW-20D at concentrations

ranging from 32.4 µg/L in the first semi-annual sample collected from MW-20D to 219 µg/L in the first semi-annual sample collected from MW-20S.

5.19 Manganese

Manganese was detected at quantified concentrations above the RL in both semi-annual samples collected from each compliance well at concentrations ranging from 3.0 µg/L in the first semi-annual sample collected from upgradient well MW-11 to 1,550 µg/L in the second semi-annual sample collected from MW-21.

5.20 Mercury

Mercury was not detected in 2024 samples.

5.21 Molybdenum

Molybdenum was detected at quantified concentrations above the RL in both semi-annual samples collected from MW-19, MW-20S, and MW-20D at concentrations ranging from 12.9 µg/L in the first semi-annual sample collected from MW-19 to 69.0 µg/L in the second semi-annual sample collected from MW-20S.

5.22 Nickel

Nickel was detected at estimated concentrations above the MDL in both semi-annual samples collected from upgradient well MW-29D and downgradient wells MW-20S, MW-21, MW-23 and in the second semi-annual sample collected from MW-19. Nickel was detected at quantified concentrations above the RL in both semi-annual samples collected from MW-22 at concentrations of 8.7 and 9.8 µg/L, respectively.

5.23 Nitrate

Nitrate was detected at an estimated concentration above the MDL in the first semi-annual samples collected from upgradient well MW-11 and downgradient well MW-22 and in the second semi-annual sample collected from upgradient well MW-29D. Nitrate was detected at concentrations above the RL in the first semi-annual samples collected from wells MW-29S and MW-20S and the second semi-annual samples collected from wells MW-21 and MW-29S at concentrations ranging from 0.10 mg/L in the second semi-annual sample collected from MW-21 to 2.8 mg/L in the first semi-annual sample collected from MW-20S. Nitrate was not detected in the remaining 2024 samples.

5.24 pH

For 2024, pH measurements ranged from 5.02 Standard Units (S.U.) in the first semi-annual sample collected from upgradient well MW-11 to 7.13 S.U. in the first semi-annual sample collected from MW-20D.

5.25 Radium 226 and 228 (combined)

Radium 226 and 228 (combined) was detected at estimated concentrations above the Minimum Detectable Concentration (MDC) in both semi-annual samples collected from upgradient wells MW-29S and MW-29D and downgradient wells MW-19, MW-20S, MW-20D, MW-21; in the first semi-annual sample collected from MW-23; and in the second semi-annual sample collected from MW-22. Radium 226 and 228 (combined) was detected above the MDC at concentrations ranging from 0.589 picoCuries per liter (pCi/L) in the first semi-annual sample collected from MW-20S to 2.89 pCi/L in the second semi-annual sample collected from MW-20D.

5.26 Selenium

Selenium was not detected in 2024 samples.

5.27 Silver

Silver was not detected in 2024 samples.

5.28 Sulfate

Sulfate was detected at quantified concentrations above the RL in both semi-annual samples collected from each compliance well at concentrations ranging from 5.0 mg/L in the second semi-annual sample collected from upgradient well MW-11 to 121 mg/L in the second semi-annual sample collected from MW-19.

5.29 Thallium

Thallium was not detected in 2024 samples.

5.30 Tin

Tin was detected at an estimated concentration above the MDL in the second semi-annual sample collected from upgradient well MW-29D. Tin was not detected above the RL in 2024 samples.

5.31 Total Dissolved Solids

Total dissolved solids (TDS) was detected at quantified concentrations above the RL in both semi-annual samples collected from each well at concentrations ranging from 119 mg/L in the second semi-annual sample collected from upgradient well MW-29S to 467 mg/L in the first semi-annual sample collected from upgradient well MW-29D.

5.32 Vanadium

Vanadium was detected at quantified concentrations above the RL in both semi-annual samples collected from upgradient well MW-11 at concentrations of 15.9 and 11.2 µg/L, respectively. Vanadium was not detected in the remaining 2024 samples.

5.33 Zinc

Zinc was detected at an estimated concentration above the MDL in both semi-annual samples collected from upgradient well MW-29D and in the first semi-annual event downgradient well MW-21. Zinc was detected at quantified concentrations above the RL in both semi-annual samples collected from MW-22 at concentrations of 11.4 and 10.7 µg/L, respectively.

6.0 DATA QUALITY VALIDATION

The Quality Assurance (QA) and Quality Control (QC) data provided by the laboratory for the 2024 semi-annual sampling events were reviewed to ensure that the analytical results met the project's data quality objectives as outlined in the Station's GMP. The review process was performed by Environmental Standards, Inc. (ESI) in general accordance with procedures outlined in the *National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017* (EPA, 2017).

6.1 First Semi-Annual 2024 Compliance Event Findings

The laboratory and field QA/QC data for the first semi-annual 2024 monitoring event samples collected February 12-14, 2024, were reviewed in accordance with EPA protocol by ESI. The field QA/QC samples for this event included a field blank that was collected at the Unit on February 12, 2024, and a duplicate sample that was collected from well MW-23 on February 14, 2024. These QA/QC samples were analyzed for the same constituents as the groundwater compliance samples. A description of the laboratory QA/QC data associated with the February 2024 groundwater monitoring event is presented in Appendix G.1.

As presented in Appendix G.1, laboratory QC results (with the exceptions listed below) were within acceptable limits. It is noted that select reported results for combined radium were flagged as estimated (J)/estimated non-detect (UJ) due to field blank contamination, laboratory blank contamination, field duplicate imprecision, and/or chemical yield outside of acceptance limits. The reported copper result for MW-20S was flagged as not detected (U) due to laboratory blank contamination. The reported hexavalent chromium result for MW-23 was flagged as UJ due to field duplicate imprecision. The reported boron result for MW-29D was flagged as U due to field blank contamination. Based on ESI's review of the analytical results and laboratory-provided QC data, the laboratory results meet the project data quality objectives and are suitable for use with the provided data qualifiers.

6.2 Second Semi-Annual 2024 Compliance Event Findings

The laboratory and field QA/QC data for the second semi-annual 2024 monitoring event samples collected from August 26-28, 2024, and were reviewed in accordance with EPA protocol by ESI. The field QA/QC samples for this event included a field blank that was collected on August 26, 2024, and field duplicate that was collected from well MW-22 on August 28, 2024. These QA/QC samples were analyzed for the same constituents as the groundwater compliance samples. A description of the laboratory QA/QC data associated with the August 2024 groundwater monitoring event is presented in Appendix G.2.

As presented in Appendix G.2, laboratory QC results (with the exceptions listed below) were within acceptable limits. It is noted that select nitrate and hexavalent chromium reported results were flagged as U, UJ, or J due to exceeded hold times and/or field blank contamination. In accordance with ESI data validation protocol, sample results analyzed more than twice the method-required holding time (*e.g.*, > 48 hours for hexavalent chromium)

would be considered unusable; however, the hexavalent chromium results were considered usable (with qualification), as the samples were analyzed within 48 hours of sample collection. Select combined radium results were flagged as J or estimated, biased high (J+) due to chemical yields outside of recovery limits and/or field duplicate imprecision. Based on ESI's review of the analytical results and laboratory-provided QC data, the laboratory results meet the project data quality objectives and are suitable for use with the provided data qualifiers.

7.0 STATISTICAL EVALUATION OF GROUNDWATER DATA

This section presents a statistical evaluation for the semi-annual data according to the requirements of the CCR Rule and the SWP. Two (2) types of statistical analyses have been conducted as follows:

- Data have been evaluated with respect to background data; this evaluation identifies SSIs in downgradient wells over site-specific background using a value-to-value comparison; and
- Data have been evaluated with respect to GPS/GWPS using a value-to-standard comparison.

7.1 Site-Specific Background Evaluation

7.1.1 First Semi-Annual 2024 Modified AMP Event

Consistent with Section XI.H.2 of the Unit's SWP and §257.93(h) of the CCR Rule, WSP evaluated the DMP constituent detections from the first semi-annual event against established background values. The evaluation was performed with the site-specific background values calculated in the *2023 Updated Facility Background Determination Report*. Based on this evaluation, the following SSIs for DMP constituents (CCR Rule Appendix III constituents) over the Unit's background concentrations were identified during the 2024 first semi-annual groundwater monitoring event (see Table 1):

- Boron (MW-19, MW-20S, MW-20D, MW-21, MW-22, MW-23)
- Calcium (MW-19, MW-20S, MW-20D, MW-21)

Consistent with §257.93(h) of the CCR Rule, WSP evaluated the AMP constituent detections from the first semi-annual event against established site background values. The evaluation was performed with the site-specific background values calculated in the *2023 Updated Facility Background Determination Report*. Based on this evaluation, the following SSIs for AMP constituents (CCR Rule Appendix IV constituents) over background were identified during the 2024 first semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 1):

- Barium (MW-19, MW-20S, MW-20D, MW-21, MW-22, MW-23)
- Cobalt (MW-19, MW-20S, MW-20D, MW-21, MW-22, MW-23)
- Lithium (MW-20S, MW-20D)
- Molybdenum (MW-19, MW-20S, MW-20D)

In addition, a SSI for VSWMR constituent nickel was identified in the sample collected from MW-22. A notification of these SSIs was submitted to the DEQ on May 15, 2024, pursuant to Section XI.H.4.a of the SWP.

7.1.2 Second Semi-Annual 2024 Modified AMP Event

Consistent with Section XI.H.2 of the Station's SWP and §257.93(h) of the CCR Rule, WSP evaluated the DMP constituent detections from the second semi-annual event against established site background values. The evaluation was performed with the site-specific background values calculated in the *2023 Updated Facility Background Determination Report*. Based on this evaluation, the following SSIs for DMP constituents (CCR Rule Appendix III constituents) over background were identified during the 2024 second semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 2):

- Boron (MW-19, MW-20S, MW-20D, MW-21, MW-22, MW-23)
- Calcium (MW-19, MW-20S, MW-20D, MW-21)

Consistent with §257.93(h) of the CCR Rule, WSP evaluated the AMP constituent detections from the second semi-annual event against site background values. The evaluation was performed with the site-specific background values calculated in the *2023 Updated Facility Background Determination Report*. Based on this evaluation, the following SSIs for AMP constituents (CCR Rule Appendix IV constituents) over background were identified during the 2024 second semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 2):

- Barium (MW-19, MW-20S, MW-20D, MW-21, MW-22, MW-23)
- Cobalt (MW-19, MW-20S, MW-20D, MW-21, MW-22, MW-23)
- Lithium (MW-20S, MW-20D)
- Molybdenum (MW-19, MW-20S, MW-20D)

In addition, a SSI for nickel was identified in the sample collected from MW-22. A notification of these SSIs was submitted to the DEQ on November 22, 2024, pursuant to Section XI.H.4.a of the SWP.

7.2 First Semi-Annual 2024 Event Groundwater Protection Standard Evaluation

7.2.1 SWP GPS Evaluation

Consistent with SWP Section XI.H.2, WSP evaluated the first semi-annual Modified AMP constituent data against DEQ-approved GPS. Based on this evaluation, the following SWP GPS SSIs were identified during the 2024 first semi-annual groundwater monitoring event based on a value-to-standard comparison.

Constituent	SWP GPS	Monitoring Well	1st Semi-Annual 2024 Concentration
Cobalt (µg/L)	6	MW-20S	40.8
		MW-21	6.5
Lithium (µg/L)	40	MW-20S	219

Constituent	SWP GPS	Monitoring Well	1st Semi-Annual 2024 Concentration
Nickel (µg/L)	QL	MW-22	8.7

Notes: µg/L = Microgram per liter QL = Quantitation Limit J = Result is estimated

Notification of these SWP GPS SSIs was submitted to the DEQ on May 15, 2024, pursuant to Section XI.H.4.a of the SWP. The NES and ACM that included cobalt and lithium were completed on September 1, 2020, in accordance with 9VAC20-81-260 *et seq*. of the VSWMR. An NES Addendum that addressed nickel was completed and submitted to the DEQ on June 20, 2022, in accordance with 9VAC20-81-260 *et seq.* of the VSWMR. The Unit's NES/ACM Reports were revised and consolidated per DEQ comment and resubmitted on October 3, 2022.

7.2.2 CCR GWPS Evaluation

WSP evaluated the first semi-annual AMP constituent detections (CCR Rule Appendix IV constituents) against the federal GWPS. Based on this evaluation, the following federal CCR GWPS SSIs were identified during the 2024 first semi-annual groundwater monitoring event based on a value-to-standard comparison.

Constituent	CCR GWPS	Monitoring Well	1st Semi-Annual 2024 Concentration
Cobalt (µg/L)	6	MW-20S	40.8
		MW-21	6.5
Lithium (µg/L)	40	MW-20S	219

Note: µg/L = Microgram per liter

A notification of these federal CCR GWPS exceedances was placed in the Unit's operating record on May 15, 2024, pursuant to §257.95(g) and §257.105(h)(8) of the CCR Rule. Dominion Energy completed an NES and an ACM for the cobalt and lithium federal CCR GWPS exceedances at the East Pond on September 1, 2020, consistent with §257.96 of the CCR Rule. The Unit's NES/ACM Reports were revised and consolidated per DEQ comment and resubmitted on October 3, 2022 (Golder, 2022a; Golder, 2022b).

7.3 Second Semi-Annual 2024 Event Groundwater Protection Standard Evaluation

7.3.1 SWP GPS Evaluation

Consistent with SWP Section XI.H.2, WSP evaluated the second semi-annual Modified AMP monitoring data against DEQ approved GPS. Based on this evaluation, the following SWP GPS SSIs were identified during the 2024 second semi-annual groundwater monitoring event based on a value-to-standard comparison.

Constituent	SWP GPS	Monitoring Well	2nd Semi-Annual 2024 Concentration
Cobalt (µg/L)	6	MW-20S	49.7
Lithium (µg/L)	40	MW-20S	165
Nickel (µg/L)	QL	MW-22	9.8

Notes: µg/L = Microgram per liter QL = Quantitation Limit

A notification of these SWP GPS SSIs was submitted to the DEQ on November 22, 2024, pursuant to Section XI.H.4.a of the SWP. The cobalt, lithium, and nickel exceedances were addressed in the September 2020 ACM and April 2021/June 2022 ACM addendums. The Bremo East Pond NES/ACMs were revised and consolidated per DEQ comment and resubmitted on October 3, 2022 (Golder, 2022a; Golder, 2022b).

7.3.2 CCR GWPS Evaluation

WSP evaluated the second semi-annual AMP constituent detections (CCR Rule Appendix IV constituents) against the federal CCR GWPS. Based on this evaluation, the following federal CCR GWPS SSIs were identified during the 2024 second semi-annual groundwater monitoring event based on a value-to-standard comparison.

Constituent	CCR GWPS	Monitoring Well	2nd Semi-Annual 2024 Concentration
Cobalt (µg/L)	6	MW-20S	49.7
Lithium (µg/L)	40	MW-20S	165

Note: µg/L = Microgram per liter

A notification of the federal CCR GWPS exceedances was placed in the Unit's operating record on November 22, 2024, pursuant to §257.95(g) and §257.105(h)(8) of the CCR Rule. Dominion Energy completed an NES and an ACM for the cobalt and lithium federal CCR GWPS exceedances at the East Pond on September 1, 2020, consistent with §257.96 of the CCR Rule. Both NES/ACM Reports were revised and consolidated per DEQ comment and resubmitted on October 3, 2022.

8.0 CONCLUSIONS

The following conclusions are presented based on the results of the groundwater sampling activities conducted at the Unit in 2024:

8.1 Summary of Findings

- The overall direction of groundwater flow at the Unit generally follows topography and flows toward the southwest at an estimated horizontal velocity of 65 to 67 feet/year in the alluvium and at an estimated horizontal velocity of 710 to 740 feet/year in the underlying gneiss bedrock;
- Downgradient wells are located close to the Unit boundary and are able to determine groundwater quality downgradient to the Unit;
- During 2024, the monitoring well network functioned as designed and had the ability to determine the Unit's impact on the quality of the groundwater in the uppermost aquifer;
- Review of the current potentiometric map indicates the monitoring wells network fulfills the requirements of 9VAC20-81-250.A.3;
- Review of the 2024 monitoring data did not indicate any significant changes in the groundwater quality;
- Modified AMP sampling results identified SSIs over the Unit's background for barium, boron, calcium, cobalt, lithium, molybdenum, and nickel in one (1) or more compliance wells;
- SWP GPS SSIs were identified for cobalt, lithium, and nickel in one (1) or more compliance wells;
- Federal CCR GWPS SSIs were identified for cobalt, and lithium in one (1) or more compliance wells; and
- A Corrective Action Plan and associated Corrective Action Monitoring Plan were submitted to DEQ on December 23, 2024.

8.2 Planned Activities

Based on the results from the 2024 compliance sampling, Dominion Energy intends to continue with the Modified AMP in 2025 consistent with the provisions in the CCR Rule [§257.95] and the Unit's SWP. Pending selection of the final remedy and consistent with the provisions of the CCR Rule [§257.97(a) and 257.105(h)(12)], Dominion Energy will continue to prepare the semi-annual progress reports for remedy design and selection.

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Golder. 2022c. *Alternate Source Demonstration, Cobalt and Vanadium—MW-11; First Semi-Annual 2022 Modified Assessment Monitoring Program Sampling Event North and West Pond, Bremo Power Station, Permit No. 618.* Bremo Power Station, Fluvanna County, Virginia. August 3.

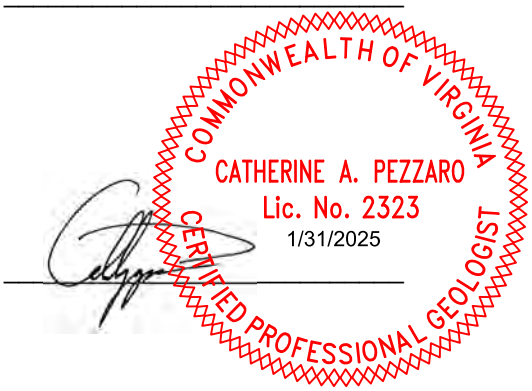
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WSP. 2023. *2023 Updated Facility Background Determination Report*, Bremo Power Station, Fluvanna County, Virginia. March 2.

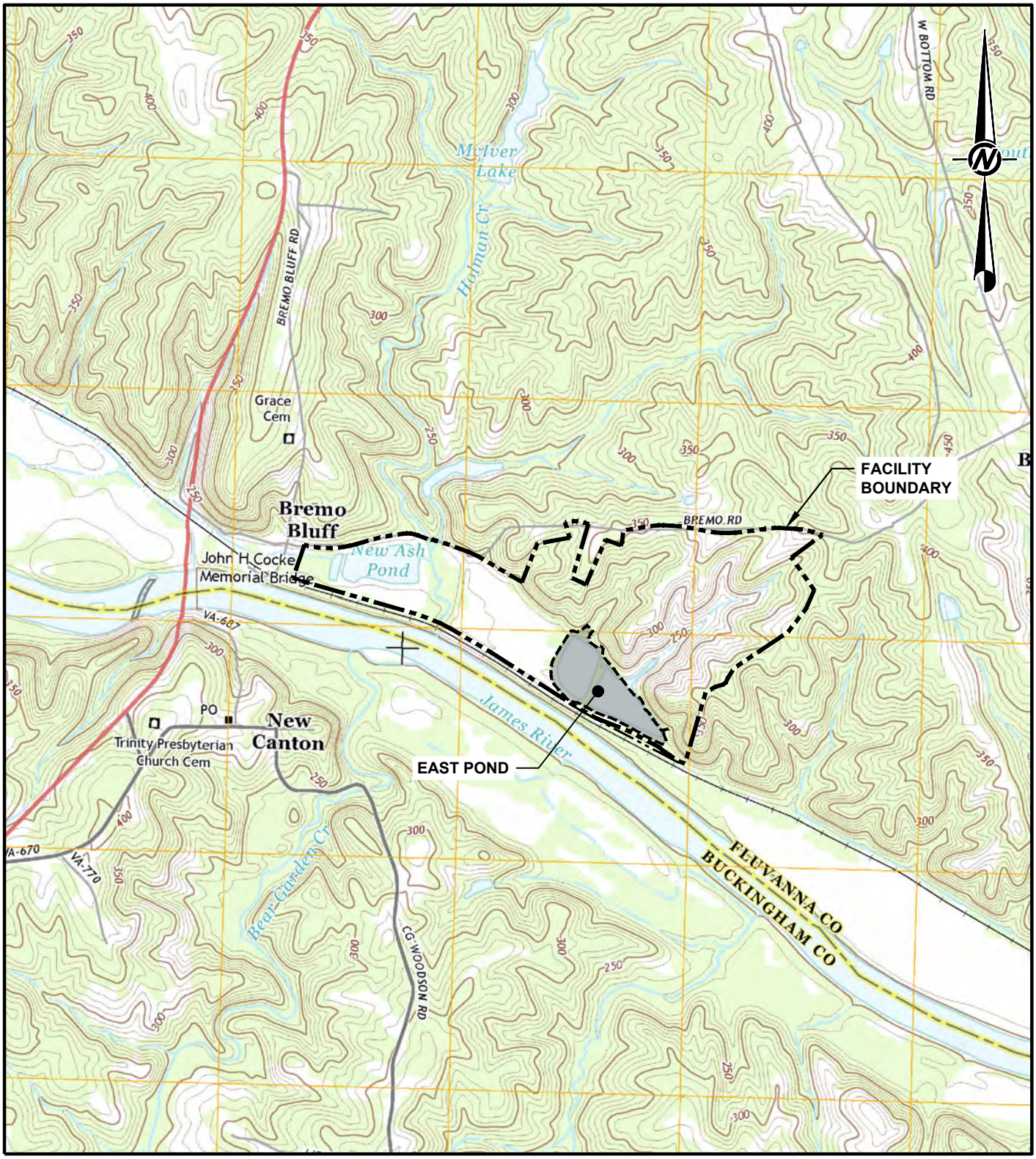
10.0 SIGNATURE SECTION

This *2024 CCR & VSWMR Annual CCR Groundwater Monitoring and Corrective Action Report* (Report) has been prepared by qualified groundwater scientists and engineers on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy) for the Unit at the Station in Bremo Bluff, Virginia. This document was prepared by scientists and engineers who have received baccalaureate and/or post-graduate degrees in the natural sciences and/or engineering and who have sufficient training and experience in groundwater hydrology, engineering, statistical evaluations, and related fields as demonstrated by state professional registrations and completion of an accredited university program that enables sound professional judgments consistent with the industry standard of care for groundwater monitoring, contaminant fate and transport, environmental corrective actions, and cost estimate development. This Report also satisfies the reporting requirements specified in 9VAC20-81-250.E.2.a of the VSWMR (VWMB, 2024) and the DEQ SWP No. 618 (DEQ, 2019).

Signature	Name & Title
	Crystal Shadle Assistant Vice President, Geologist
	Catherine Pezzaro, C.P.G. Senior Consultant, Geologist

https://wsponlinenam.sharepoint.com/sites/us-rvadominion/shared documents/bremo/31406066.009 bremo gw 2024/6 deliverables/2025-01-31 2024 east pond amr/2024-01-xx bremo ep ccr+vswmr agwmr.docx

FIGURES



REFERENCE

BASE MAP CONSISTS OF 7.5-MINUTE USGS TOPOGRAPHIC QUADRANGLE NAMED ARVONIA, VIRGINIA, DATED 2013.

2000 0 2000
SCALE FEET

CLIENT
DOMINION ENERGY

CONSULTANT
wsp

YYYY-MM-DD	2021-05-11
DESIGNED	ALR
PREPARED	SIB
REVIEWED	MGW
APPROVED	MGW

PROJECT
BREMO POWER STATION
EAST POND
FLUVANNA COUNTY, VIRGINIA

TITLE
SITE LOCATION MAP

PROJECT NO.	REV.	FIGURE
31406066.009	0	1

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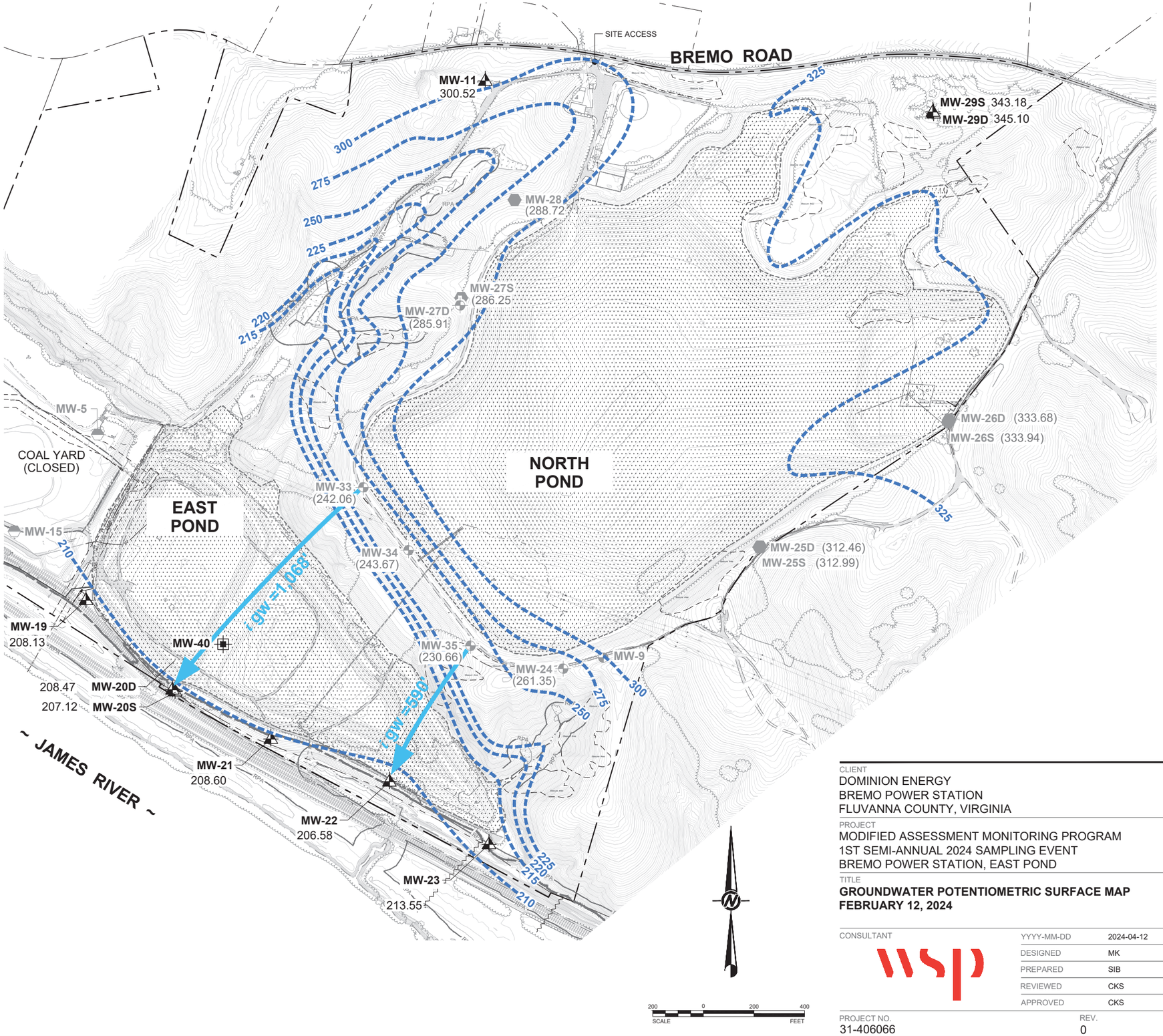
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER SURFACE CONTOUR INTERVAL = 5 FEET TO 25 FEET
3. STATIC WATER LEVELS MEASURED ON FEBRUARY 12, 2024.
4. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATUM, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
5. GROUNDWATER CONTOUR LINES SHOW THE WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.
6. BASEMAP INFORMATION (e.g., EXISTING TOPOGRAPHY, ROADS, TREE LINES, FENCE LINES) TAKEN FROM AERIAL SURVEY PREPARED BY McKENZIE SNYDER. DATE OF AERIAL PHOTOGRAPHY: FEBRUARY 18, 2017.
7. NON-POTABLE WELL LOCATION IS TO BE CONSIDERED APPROXIMATE.
8. MW-20D IS A DEEP WELL NOT USED TO EVALUATE THE WATER TABLE SURFACE.

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE NOTE 6)
- GROUNDWATER CONTOURS
- WETLANDS
- SURFACE WATER BOUNDARY
- APPROXIMATE LIMITS OF EXISTING ASH PONDS
- LIMITS OF 100-YR FLOOD PLAIN
- MW-19 — FEDERAL CCR RULE COMPLIANCE WELL LOCATION AND IDENTIFICATION - EAST ASH POND
- MW-27S — STATE GROUNDWATER COMPLIANCE WELL LOCATION AND IDENTIFICATION
- MW-2 — GROUNDWATER OBSERVATION WELL LOCATION AND IDENTIFICATION
- MW-9 — FORMER VPDES MONITORING WELL
- MW-33 — FEDERAL CCR RULE COMPLIANCE WELL LOCATION AND IDENTIFICATION - NORTH ASH POND
- 210.86 — STATIC GROUNDWATER ELEVATION [FEET ABOVE MEAN SEA LEVEL (ASML)]
- MW-40 — CLOSURE DEMONSTRATION WELL
- APPROXIMATE GROUNDWATER FLOW LINE
- i_{gw} = 862' — GROUNDWATER FLOW PATH LENGTH (FEET)



CLIENT
DOMINION ENERGY
BREMO POWER STATION
FLUVANNA COUNTY, VIRGINIA

PROJECT
MODIFIED ASSESSMENT MONITORING PROGRAM
1ST SEMI-ANNUAL 2024 SAMPLING EVENT
BREMO POWER STATION, EAST POND

TITLE
GROUNDWATER POTENTIOMETRIC SURFACE MAP
FEBRUARY 12, 2024

CONSULTANT
wsp

YYYY-MM-DD	2024-04-12
DESIGNED	MK
PREPARED	SIB
REVIEWED	CKS
APPROVED	CKS

PROJECT NO. 31-406066 | REV. 0 | FIGURE 2

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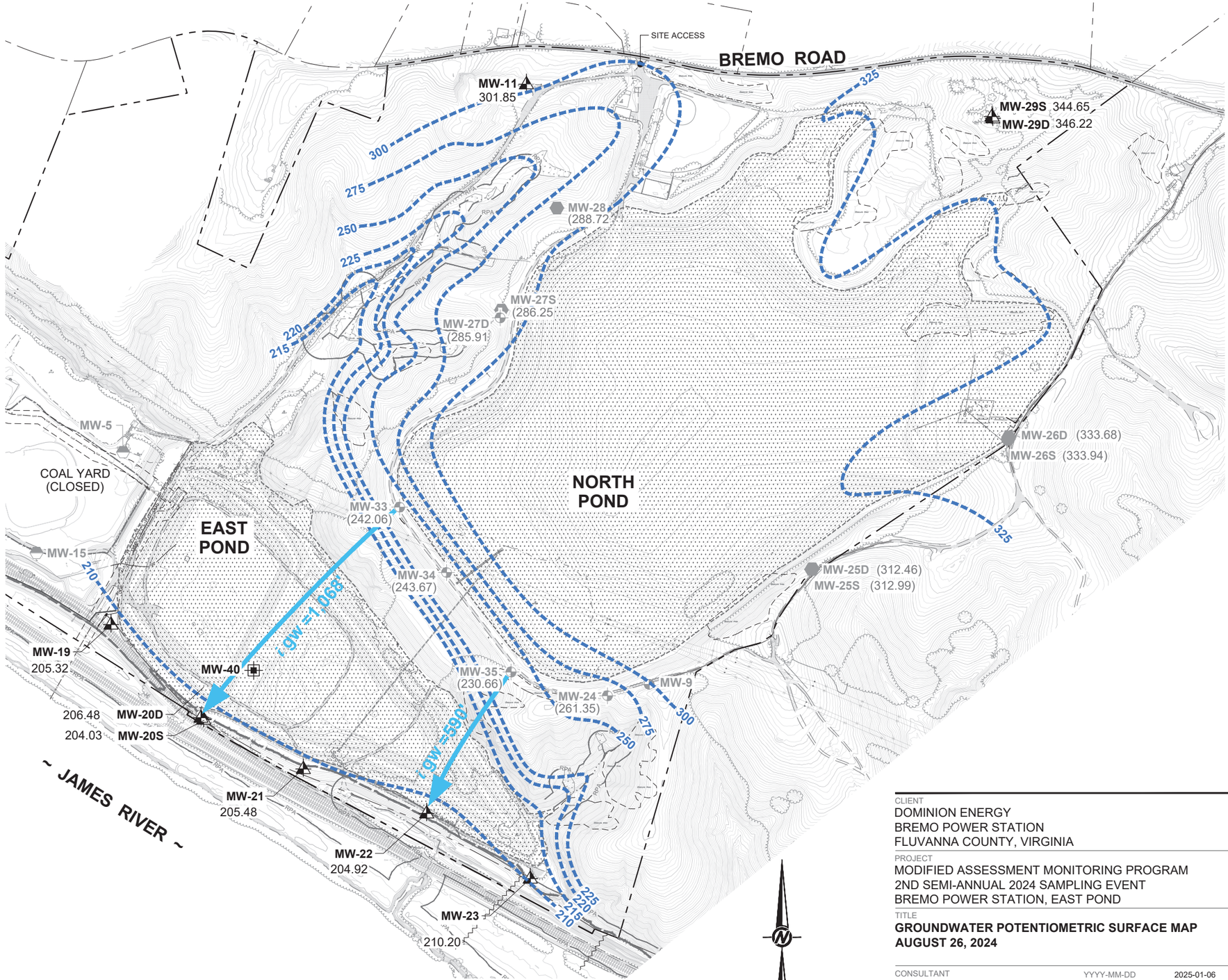
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D
0 1in

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER SURFACE CONTOUR INTERVAL = 5 FEET TO 25 FEET
3. STATIC WATER LEVELS MEASURED ON AUGUST 26, 2024.
4. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATUM, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
5. GROUNDWATER CONTOUR LINES SHOW THE WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.
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CLIENT
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BREMO POWER STATION
FLUVANNA COUNTY, VIRGINIA

PROJECT
MODIFIED ASSESSMENT MONITORING PROGRAM
2ND SEMI-ANNUAL 2024 SAMPLING EVENT
BREMO POWER STATION, EAST POND

TITLE
GROUNDWATER POTENTIOMETRIC SURFACE MAP
AUGUST 26, 2024

CONSULTANT

YYYY-MM-DD	2025-01-06
DESIGNED	JD
PREPARED	SIB
REVIEWED	CKS
APPROVED	CKS

PROJECT NO. 31-406066 | REV. 0 | FIGURE 3

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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TABLES

Table 1
Summary of First Semi-Annual Modified Assessment Monitoring Program Sampling Event Data (February 2024)
East Pond, Bremo Power Station

					Upgradient Wells												Downgradient Wellls											
				Sample ID:	MW-11				MW-29S				MW-29D				MW-19				MW-20S				MW-20D			
				Sample Date:	2/12/2024				2/12/2024				2/12/2024				2/14/2024				2/14/2024				2/14/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS**	**SWP GPS[1]**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**
CCR Appendix III Constituents																												
Boron	µg/L	QL	--	4,000	< 4.0	U	4.0	50.0	< 4.0	U	4.0	50.0	< 40.9	U	40.9	50.0	**969**		4.0	50.0	**996**		4.0	50.0	**819**		4.0	50.0
Calcium	µg/L	48,900	--	--	**19900**		14.7	100	**7310**		14.7	100	**42200**		14.7	100	**50600**		14.7	100	**82500**		14.7	100	**108000**		73.7	500
Chloride	mg/L	102.2	--	--	**11.4**		0.60	1.0	**10.9**		0.60	1.0	**42.1**		0.60	1.0	**8.5**		0.60	1.0	**6.4**		0.60	1.0	**11.9**		0.60	1.0
Fluoride	mg/L	0.16	4	4	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	**0.12**		0.050	0.10	**0.092**	J	0.050	0.10	**0.10**		0.050	0.10	**0.075**	J	0.050	0.10
pH	SU	4.94-8.84	--	--	5.02		--	--	5.62		--	--	7.05		--	--	6.29		--	--	6.66		--	--	7.13		--	--
Sulfate	mg/L	237.8	--	--	**6.3**		0.50	1.0	**7.5**		0.50	1.0	**26.4**		0.50	1.0	**120**		1.5	3.0	**31.3**		0.50	1.0	**34.0**		0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**149**		10.0	10.0	**124**		10.0	10.0	**467**		10.0	10.0	**326**		10.0	10.0	**374**		10.0	10.0	**418**		10.0	10.0
CCR Appendix IV Constituents																												
Antimony	µg/L	QL	6	6	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0
Arsenic	µg/L	QL	10	10	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	**4.0**	J	2.5	10.0	**3.7**	J	2.5	10.0
Barium	µg/L	40.4	2,000	2,000	**3.3**	J	0.79	5.0	**16.5**		0.79	5.0	**33.7**		0.79	5.0	**101**		0.79	5.0	**252**		0.79	5.0	**96.2**		0.79	5.0
Beryllium	µg/L	QL	4	4	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0
Cadmium	µg/L	QL	5	5	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0
Chromium	µg/L	QL	100	100	< 0.63	U	0.63	5.0	**1.1**	J	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0
Cobalt	µg/L	1.57	6	6	**0.34**	J	0.050	1.0	**0.070**	J	0.050	1.0	**0.43**	J	0.050	1.0	**2.3**		0.050	1.0	**40.8**		0.050	1.0	**2.4**		0.050	1.0
Fluoride	mg/L	0.16	4	4	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	**0.12**		0.050	0.10	**0.092**	J	0.050	0.10	**0.10**		0.050	0.10	**0.075**	J	0.050	0.10
Lead	µg/L	QL	15*	15	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0	**0.13**	J	0.077	1.0
Lithium	µg/L	QL	40	40	< 0.50	U	0.50	2.5	< 0.50	U	0.50	2.5	**1.3**	J	0.50	2.5	**1.6**	J	0.50	2.5	**219**		1.0	5.0	**32.4**		0.50	2.5
Mercury	µg/L	QL	2	2	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20
Molybdenum	µg/L	9.3	100	100	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	**12.9**		2.6	5.0	**60.6**		2.6	5.0	**35.1**		2.6	5.0
Selenium	µg/L	QL	50	50	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0
Thallium	µg/L	QL	2	2	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20
Radium 226 and 228 (combined)	pCi/L	4.254	5	5	0.717	U	--	--	**0.635**	J	--	--	**1.44**	J	--	--	**1.17**	J	--	--	**0.589**	J	--	--	**1.78**	J	--	--
VSWMR Constituents																												
Copper	µg/L	QL	--	1,300	**2.5**	J	0.62	5.0	< 0.62	U	0.62	5.0	**1.4**	J	0.62	5.0	< 0.62	U	0.62	5.0	< 1.5	U	1.5	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL	< 0.88	U	0.88	5.0	< 0.88	U	0.88	5.0	**2.6**	J	0.88	5.0	< 0.88	U	0.88	5.0	**1.8**	J	0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0
Tin	µg/L	QL	--	QL	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0
Vanadium	µg/L	19.1	--	19.1	**15.9**		1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0
Zinc	µg/L	11.5	--	11.5	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0	**5.8**	J	3.0	10.0	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0
Speciation of Chromium																												
Hexavalent Chromium	µg/L	13	--	--	**0.085**		0.025	0.025	**0.50**		0.10	0.10	< 0.025	U	0.025	0.025	< 0.025	U	0.025	0.025	< 0.025	U	0.025	0.025	< 0.025	U	0.025	0.025
Former VPDES Constituents																												
Ammonia	mg/L	--	--	--	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	**0.21**		0.031	0.10	**0.22**		0.031	0.10	**0.031**	J	0.031	0.10	**0.22**		0.031	0.10
Hardness	µg/L	--	--	--	**103000**		36.8	662	**24200**		36.8	662	**147000**		36.8	662	**196000**		36.8	662	**313000**		36.8	662	**478000**		184	3310
Iron	µg/L	--	--	--	**313**		20.9	50.0	**84.1**		20.9	50.0	**418**		20.9	50.0	**9810**		105	250	**455**		20.9	50.0	**9980**		105	250
Manganese	µg/L	--	--	--	**3.0**		1.0	2.0	**4.9**		1.0	2.0	**913**		10.2	20.0	**640**		5.1	10.0	**871**		10.2	20.0	**748**		5.1	10.0
Nitrate	mg/L	--	--	--	**0.061**	J	0.060	0.10	**1.3**		0.060	0.10	< 0.060	U	0.060	0.10	< 0.060	U	0.060	0.10	**2.8**		0.060	0.10	< 0.060	U	0.060	0.10
Field Parameters																												
Conductivity	µS/cm	--	--	--	241.4		0.1	0.1	136.7		0.1	0.1	794		0.1	0.1	496.0		0.1	0.1	643		0.1	0.1	681		0.1	0.1
Dissolved Oxygen	mg/L	--	--	--	3.76		0.01	0.01	6.57		0.01	0.01	2.41		0.01	0.01	2.73		0.01	0.01	0.18		0.01	0.01	1.80		0.01	0.01
Oxidation Reduction Potential	millivolts	--	--	--	239.7		0.1	0.1	202.7		0.1	0.1	-82.4		0.1	0.1	3.6		0.1	0.1	56.0		0.1	0.1	-106.5		0.1	0.1
Temperature	C	--	--	--	14.5		0.1	0.1	12.3		0.1	0.1	13.6		0.1	0.1	15.5		0.1	0.1	16.0		0.1	0.1	15.7		0.1	0.1
Turbidity	NTU	--	--	--	9.60		0.01	0.01	9.43		0.01	0.01	6.88		0.01	0.01	8.05		0.01	0.01	7.70		0.01	0.01	1.91		0.01	0.01

Notes:
MDL = Method Detection Limit
RL = Reporting Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
pCi/L = picoCurie per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
CCR = Coal Combustion Residuals
SWP = Solid Waste Permit

Notes:
QL = Laboratory quantitation limit
GPS/GWPS = Groundwater Protection Standards
VPDES = Virginia Pollutant Discharge Elimination System
VSWMR = Virginia Solid Waste Management Regulations
* - EPA Action Level

Bold font = Detected constituent

[1]Site-specific background and GPS values for CCR and VSWMR constituents were calculated in the March 2, 2023, 2023 Updated Facility Background Determination Report North and East Ponds

Qualifiers:
J = Quantitation is approximate due to limitations identified during data validation
U = The analyte was not detected above the level of the sample reporting limit
UJ = The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.

= Concentration greater than site-specific background

= Concentration greater than Federal GWPS, SWP GPS, and site-specific background

= Concentration greater than SWP GPS and site-specific background

Table 1
Summary of First Semi-Annual Modified Assessment Monitoring Program Sampling Event Data (February 2024)
East Pond, Bremo Power Station

					Downgradient Wells												Field Quality Control Samples							
				Sample ID:	MW-21				MW-22				MW-23				MW-23 Field Duplicate				Field Blank			
				Sample Date:	2/14/2024				2/14/2024				2/14/2024				2/14/2024				2/12/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS**	**SWP GPS[1]**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**
CCR Appendix III Constituents																								
Boron	µg/L	QL	--	4,000	**468**		4.0	50.0	**387**		4.0	50.0	**160**		4.0	50.0	**164**		4.0	50.0	**24.0**	J	4.0	50.0
Calcium	µg/L	48,900	--	--	**62600**		14.7	100	**33700**		14.7	100	**33400**		14.7	100	**34400**		14.7	100	< 14.7	U	14.7	100
Chloride	mg/L	102.2	--	--	**12.8**		0.60	1.0	**15.3**		0.60	1.0	**16.1**		0.60	1.0	**16.1**		0.60	1.0	< 0.60	U	0.60	1.0
Fluoride	mg/L	0.16	4	4	**0.077**	J	0.050	0.10	**0.084**	J	0.050	0.10	**0.11**		0.050	0.10	**0.11**		0.050	0.10	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--	6.36		--	--	5.82		--	--	6.04		--	--	--		--	--	--		--	--
Sulfate	mg/L	237.8	--	--	**47.2**		0.50	1.0	**75.5**		0.50	1.0	**14.4**		0.50	1.0	**14.4**		0.50	1.0	< 0.50	U	0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**319**		10.0	10.0	**262**		10.0	10.0	**225**		10.0	10.0	**232**		10.0	10.0	< 10.0	U	10.0	10.0
CCR Appendix IV Constituents																								
Antimony	µg/L	QL	6	6	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0
Arsenic	µg/L	QL	10	10	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0
Barium	µg/L	40.4	2,000	2,000	**117**		0.79	5.0	**76.5**		0.79	5.0	**66.6**		0.79	5.0	**68.2**		0.79	5.0	< 0.79	U	0.79	5.0
Beryllium	µg/L	QL	4	4	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0
Cadmium	µg/L	QL	5	5	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0
Chromium	µg/L	QL	100	100	< 0.63	U	0.63	5.0	**0.90**	J	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0
Cobalt	µg/L	1.57	6	6	**6.5**		0.050	1.0	**3.6**		0.050	1.0	**2.9**		0.050	1.0	**2.9**		0.050	1.0	< 0.050	U	0.050	1.0
Fluoride	mg/L	0.16	4	4	**0.077**	J	0.050	0.10	**0.084**	J	0.050	0.10	**0.11**		0.050	0.10	**0.11**		0.050	0.10	< 0.050	U	0.050	0.10
Lead	µg/L	QL	15*	15	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0
Lithium	µg/L	QL	40	40	**1.3**	J	0.50	2.5	**1.7**	J	0.50	2.5	**1.2**	J	0.50	2.5	**1.2**	J	0.50	2.5	< 0.50	U	0.50	2.5
Mercury	µg/L	QL	2	2	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20
Molybdenum	µg/L	9.3	100	100	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0
Selenium	µg/L	QL	50	50	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0
Thallium	µg/L	QL	2	2	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20	< 0.050	U	0.050	0.20
Radium 226 and 228 (combined)	pCi/L	4.254	5	5	**0.894**	J	--	--	0.317	U	--	--	**1.11**	J	--	--	0.451	UJ	--	--	**0.841**	J	--	--
VSWMR Constituents																								
Copper	µg/L	QL	--	1,300	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL	**0.97**	J	0.88	5.0	**8.7**		0.88	5.0	**2.3**	J	0.88	5.0	**2.9**	J	0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0
Tin	µg/L	QL	--	QL	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0	< 0.43	U	0.43	1.0
Vanadium	µg/L	19.1	--	19.1	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0
Zinc	µg/L	11.5	--	11.5	**3.4**	J	3.0	10.0	**11.4**		3.0	10.0	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0
Speciation of Chromium																								
Hexavalent Chromium	µg/L	13	--	--	< 0.0043	U	0.0043	0.025	**0.096**		0.025	0.025	< 0.025	UJ	0.025	0.025	**0.12**	J	0.025	0.025	< 0.025	U	0.025	0.025
Former VPDES Constituents																								
Ammonia	mg/L	--	--	--	**0.21**		0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10
Hardness	µg/L	--	--	--	**210000**		36.8	662	**139000**		36.8	662	**166000**		36.8	662	**171000**		36.8	662	< 36.8	U	36.8	662
Iron	µg/L	--	--	--	**10300**		105	250	**76.5**		20.9	50.0	**462**		20.9	50.0	**454**		20.9	50.0	< 20.9	U	20.9	50.0
Manganese	µg/L	--	--	--	**1540**		20.4	40.0	**1090**		10.2	20.0	**628**		5.1	10.0	**615**		5.1	10.0	< 1.0	U	1.0	2.0
Nitrate	mg/L	--	--	--	< 0.060	U	0.060	0.10	**0.067**	J	0.060	0.10	< 0.060	U	0.060	0.10	< 0.060	U	0.060	0.10	< 0.060	U	0.060	0.10
Field Parameters																								
Conductivity	µS/cm	--	--	--	524		0.1	0.1	414.1		0.1	0.1	382.7		0.1	0.1	--		--	--	--		--	--
Dissolved Oxygen	mg/L	--	--	--	0.61		0.01	0.01	0.63		0.01	0.01	0.22		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential	millivolts	--	--	--	-42.6		0.1	0.1	152.1		0.1	0.1	69.5		0.1	0.1	--		--	--	--		--	--
Temperature	C	--	--	--	15.8		0.1	0.1	16.0		0.1	0.1	15.6		0.1	0.1	--		--	--	--		--	--
Turbidity	NTU	--	--	--	9.02		0.01	0.01	3.50		0.01	0.01	1.50		0.01	0.01	--		--	--	--		--	--

Notes:
MDL = Method Detection Limit
RL = Reporting Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
pCi/L = picoCurie per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
CCR = Coal Combustion Residuals
SWP = Solid Waste Permit

Notes:
QL = Laboratory quantitation limit
GPS/GWPS = Groundwater Protection Standards
VPDES = Virginia Pollutant Discharge Elimination System
VSWMR = Virginia Solid Waste Management Regulations
* - EPA Action Level

Bold font = Detected constituent

[1]Site-specific background and GPS values for CCR and VSWMR constituents were calculated in the March 2, 2023, 2023 Updated Facility Background Determination Report North and East Ponds

Qualifiers:
J = Quantitation is approximate due to limitations identified during data validation
U = The analyte was not detected above the level of the sample reporting limit
UJ = The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.

= Concentration greater than site-specific background

= Concentration greater than Federal GWPS, SWP GPS, and site-specific background

= Concentration greater than SWP GPS and site-specific background

Table 2
Summary of Second Semi-Annual Modified Assessment Monitoring Program Sampling Event Data (August 2024)
East Pond, Bremo Power Station

					Upgradient Wells												Downgradient Wellls											
				Sample ID:	MW-11				MW-29S				MW-29D				MW-19				MW-20S				MW-20D			
				Sample Date:	8/26/2024				8/26/2024				8/26/2024				8/28/2024				8/28/2024				8/28/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS**	**SWP GPS[1]**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**
CCR Appendix III Constituents																												
Boron	µg/L	QL	--	4,000	< 4.0	U	4.0	50.0	< 4.0	U	4.0	50.0	**47.0**	J	4.0	50.0	**987**		4.0	50.0	**1490**		4.0	50.0	**924**		4.0	50.0
Calcium	µg/L	48,900	--	--	**20300**		14.7	100	**7650**		14.7	100	**40600**		14.7	100	**59600**		14.7	100	**84400**		14.7	100	**99900**		14.7	100
Chloride	mg/L	102.2	--	--	**11.2**		0.60	1.0	**10.1**		0.60	1.0	**42.9**		0.60	1.0	**8.8**		0.60	1.0	**7.2**		0.60	1.0	**11.8**		0.60	1.0
Fluoride	mg/L	0.16	4	4	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	**0.13**		0.050	0.10	**0.059**	J	0.050	0.10	**0.10**		0.050	0.10	**0.098**	J	0.050	0.10
pH	SU	4.94-8.84	--	--	5.14		--	--	5.35		--	--	7.12		--	--	5.97		--	--	6.40		--	--	6.95		--	--
Sulfate	mg/L	237.8	--	--	**5.0**		0.50	1.0	**9.3**		0.50	1.0	**27.3**		0.50	1.0	**121**		1.5	3.0	**44.4**		0.50	1.0	**31.0**		0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**152**		25.0	25.0	**119**		25.0	25.0	**448**		25.0	25.0	**374**		25.0	25.0	**375**		10.0	10.0	**402**		25.0	25.0
CCR Appendix IV Constituents																												
Antimony	µg/L	QL	6	6	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0
Arsenic	µg/L	QL	10	10	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	**9.4**	J	2.5	10.0	**4.1**	J	2.5	10.0
Barium	µg/L	40.4	2,000	2,000	**3.0**	J	0.79	5.0	**16.6**		0.79	5.0	**33.8**		0.79	5.0	**133**		0.79	5.0	**252**		0.79	5.0	**113**		0.79	5.0
Beryllium	µg/L	QL	4	4	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0
Cadmium	µg/L	QL	5	5	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0
Chromium	µg/L	QL	100	100	< 0.63	U	0.63	5.0	**0.99**	J	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	**0.74**	J	0.63	5.0
Cobalt	µg/L	1.57	6	6	**0.39**	J	0.14	1.0	< 0.14	U	0.14	1.0	**0.21**	J	0.14	1.0	**3.7**		0.14	1.0	**49.7**		0.14	1.0	**2.4**		0.14	1.0
Fluoride	mg/L	0.16	4	4	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	**0.13**		0.050	0.10	**0.059**	J	0.050	0.10	**0.10**		0.050	0.10	**0.098**	J	0.050	0.10
Lead	µg/L	QL	15*	15	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0
Lithium	µg/L	QL	40	40	**0.44**	J	0.33	2.5	**0.53**	J	0.33	2.5	**1.2**	J	0.33	2.5	**2.2**	J	0.33	2.5	**165**		1.0	5.0	**37.7**		0.33	2.5
Mercury	µg/L	QL	2	2	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20
Molybdenum	µg/L	9.3	100	100	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	**14.4**		2.6	5.0	**69.0**		2.6	5.0	**41.7**		2.6	5.0
Selenium	µg/L	QL	50	50	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0
Thallium	µg/L	QL	2	2	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20
Radium 226 and 228 (combined)	pCi/L	4.254	5	5	0.590	U	--	--	**1.07**	J	--	--	**2.45**	J+	--	--	**1.66**	J	--	--	**1.07**	J	--	--	**2.89**	J	--	--
VSWMR Constituents																												
Copper	µg/L	QL	--	1,300	**0.76**	J	0.62	5.0	< 0.62	U	0.62	5.0	**0.81**	J	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL	< 0.88	U	0.88	5.0	< 0.88	U	0.88	5.0	**1.5**	J	0.88	5.0	**1.3**	J	0.88	5.0	**2.2**	J	0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0
Tin	µg/L	QL	--	QL	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0	**0.24**	J	0.14	1.0	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0
Vanadium	µg/L	19.1	--	19.1	**11.2**		1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0
Zinc	µg/L	11.5	--	11.5	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0	**4.8**	J	3.0	10.0	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10
Speciation of Chromium																												
Hexavalent Chromium	µg/L	13	--	--	**1.1**	J	0.086	0.50	**1.0**	J	0.086	0.50	**0.38**	J	0.0086	0.050	< 0.10	U	0.10	0.10	< 0.010	U	0.010	0.025	**0.13**		0.0043	0.025
Former VPDES Constituents																												
Ammonia	mg/L	--	--	--	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	**0.25**		0.031	0.10	**0.24**		0.031	0.10	< 0.031	U	0.031	0.10	**0.14**		0.031	0.10
Hardness	µg/L	--	--	--	**103000**		36.8	662	**25300**		36.8	662	**143000**		36.8	662	**222000**		36.8	662	**305000**		36.8	662	**331000**		36.8	662
Iron	µg/L	--	--	--	**393**		3.0	20.0	**201**		3.0	20.0	**471**		3.0	20.0	**11400**		14.9	100	**1180**		3.0	20.0	**9870**		3.0	20.0
Manganese	µg/L	--	--	--	**3.7**		0.24	2.0	**4.6**		0.24	2.0	**918**		2.4	20.0	**707**		1.2	10.0	**827**		10.2	20.0	**697**		1.2	10.0
Nitrate	mg/L	--	--	--	< 0.060	UJ	0.060	0.10	**1.2**	J	0.060	0.10	**0.093**	J	0.060	0.10	< 0.060	UJ	0.060	0.10	**0.84**	J	0.060	0.10	< 0.060	UJ	0.060	0.10
Field Parameters																												
Conductivity	µS/cm	--	--	--	272.9		0.1	0.1	140.9		0.1	0.1	772		0.1	0.1	528		0.1	0.1	733		0.1	0.1	771		0.1	0.1
Dissolved Oxygen	mg/L	--	--	--	4.50		0.01	0.01	6.47		0.01	0.01	3.07		0.01	0.01	1.85		0.01	0.01	1.52		0.01	0.01	1.1		0.01	0.01
Oxidation Reduction Potential	millivolts	--	--	--	265.9		0.1	0.1	221.2		0.1	0.1	-94.2		0.1	0.1	10.1		0.1	0.1	27.7		0.1	0.1	-113.2		0.1	0.1
Temperature	C	--	--	--	16.6		0.1	0.1	16.8		0.1	0.1	18.5		0.1	0.1	18.5		0.1	0.1	17.6		0.1	0.1	17.8		0.1	0.1
Turbidity	NTU	--	--	--	5.17		0.01	0.01	1.46		0.01	0.01	4.61		0.01	0.01	2.79		0.01	0.01	3.31		0.01	0.01	2.05		0.01	0.01

Notes:
MDL = Method Detection Limit
RL = Reporting Limit
mg/L = Milligram per liter
µg/L = Microgram per liter
pCi/L = picoCurie per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
CCR = Coal Combustion Residuals
SWP = Solid Waste Permit

Notes:
QL = Laboratory quantitation limit
GPS/GWPS = Groundwater Protection Standards
VPDES = Virginia Pollutant Discharge Elimination System
VSWMR = Virginia Solid Waste Management Regulations
* - EPA Action Level

Bold font = Detected constituent

[1]Site-specific background and GPS values for CCR and VSWMR constituents were calculated in the March 2, 2023, 2023 Updated Facility Background Determination Report North and East Ponds

Qualifiers:
J = Quantitation is approximate due to limitations identified during data validation
U = The analyte was not detected above the level of the sample reporting limit
UJ = The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.

= Concentration greater than site-specific background

= Concentration greater than Federal GWPS, SWP GPS, and site-specific background

= Concentration greater than SWP GPS and site-specific background

Table 2
Summary of Second Semi-Annual Modified Assessment Monitoring Program Sampling Event Data (August 2024)
East Pond, Bremo Power Station

					Downgradient Wells												Field Quality Control Samples							
				Sample ID:	MW-21				MW-22				MW-23				MW-22 Field Duplicate				Field Blank			
				Sample Date:	8/27/2024				8/28/2024				8/28/2024				8/28/2024				8/26/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS**	**SWP GPS[1]**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**
CCR Appendix III Constituents																								
Boron	µg/L	QL	--	4,000	**659**		4.0	50.0	**505**		4.0	50.0	**141**		4.0	50.0	**512**		4.0	50.0	< 4.0	U	4.0	50.0
Calcium	µg/L	48,900	--	--	**70800**		14.7	100	**36000**		14.7	100	**33300**		14.7	100	**35500**		14.7	100	< 14.7	U	14.7	100
Chloride	mg/L	102.2	--	--	**11.3**		0.60	1.0	**15.6**		0.60	1.0	**15.9**		0.60	1.0	**15.3**		0.60	1.0	< 0.60	U	0.60	1.0
Fluoride	mg/L	0.16	4	4	**0.061**	J	0.050	0.10	**0.10**		0.050	0.10	**0.14**		0.050	0.10	**0.095**	J	0.050	0.10	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--	6.33		--	--	5.71		--	--	6.06		--	--	--		--	--	--		--	--
Sulfate	mg/L	237.8	--	--	**41.2**		0.50	1.0	**80.3**		0.50	1.0	**16.3**		0.50	1.0	**79.5**		0.50	1.0	< 0.50	U	0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**329**		25.0	25.0	**261**		25.0	25.0	**217**		25.0	25.0	**265**		25.0	25.0	< 25.0	U	25.0	10.0
CCR Appendix IV Constituents																								
Antimony	µg/L	QL	6	6	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0	< 3.6	U	3.6	5.0
Arsenic	µg/L	QL	10	10	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0	< 2.5	U	2.5	10.0
Barium	µg/L	40.4	2,000	2,000	**125**		0.79	5.0	**79.3**		0.79	5.0	**55.8**		0.79	5.0	**78.6**		0.79	5.0	< 0.79	U	0.79	5.0
Beryllium	µg/L	QL	4	4	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0	< 0.16	U	0.16	1.0
Cadmium	µg/L	QL	5	5	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0	< 0.29	U	0.29	1.0
Chromium	µg/L	QL	100	100	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	**0.72**	J	0.63	5.0	< 0.63	U	0.63	5.0
Cobalt	µg/L	1.57	6	6	**5.7**		0.14	1.0	**3.4**		0.14	1.0	**2.1**		0.14	1.0	**3.5**		0.14	1.0	< 0.14	U	0.14	1.0
Fluoride	mg/L	0.16	4	4	**0.061**	J	0.050	0.10	**0.10**		0.050	0.10	**0.14**		0.050	0.10	**0.095**	J	0.050	0.10	< 0.050	U	0.050	0.10
Lead	µg/L	QL	15*	15	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0
Lithium	µg/L	QL	40	40	**1.3**	J	0.33	2.5	**1.8**	J	0.33	2.5	**1.2**	J	0.33	2.5	**1.8**	J	0.33	2.5	< 0.33	U	0.33	2.5
Mercury	µg/L	QL	2	2	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20
Molybdenum	µg/L	9.3	100	100	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0
Selenium	µg/L	QL	50	50	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0	< 4.1	U	4.1	10.0
Thallium	µg/L	QL	2	2	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20	< 0.028	U	0.028	0.20
Radium 226 and 228 (combined)	pCi/L	4.254	5	5	**1.46**	J	--	--	**1.92**	J	--	--	0.228	U	--	--	**1.09**	J	--	--	0.285	U	--	--
VSWMR Constituents																								
Copper	µg/L	QL	--	1,300	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL	**1.1**	J	0.88	5.0	**9.8**		0.88	5.0	**2.6**	J	0.88	5.0	**10.2**		0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0
Tin	µg/L	QL	--	QL	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0
Vanadium	µg/L	19.1	--	19.1	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0	< 1.6	U	1.6	5.0
Zinc	µg/L	11.5	--	11.5	< 3.0	U	3.0	10.0	**10.7**		3.0	10.0	< 3.0	U	3.0	10.0	**11.7**		3.0	10.0	< 3.0	U	3.0	10.0
Speciation of Chromium																								
Hexavalent Chromium	µg/L	13	--	--	< 0.0043	UJ	0.0043	0.025	**0.42**	J	0.022	0.12	**0.14**		0.0043	0.025	**0.35**	J	0.0086	0.050	**0.025**		0.0043	0.025
Former VPDES Constituents																								
Ammonia	mg/L	--	--	--	**0.20**		0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10
Hardness	µg/L	--	--	--	**229000**		36.8	662	**146000**		36.8	662	**160000**		36.8	662	**145000**		36.8	662	< 36.8	U	36.8	662
Iron	µg/L	--	--	--	**10300**		9.0	60.0	**63.2**		3.0	20.0	**342**		3.0	20.0	**69.9**		3.0	20.0	< 3.0	U	3.0	20.0
Manganese	µg/L	--	--	--	**1550**		2.4	20.0	**1020**		2.4	20.0	**578**		1.2	10.0	**1030**		2.4	20.0	< 0.24	U	0.24	2.0
Nitrate	mg/L	--	--	--	**0.10**		0.060	0.10	< 0.060	UJ	0.060	0.10	< 0.060	UJ	0.060	0.10	< 0.060	UJ	0.060	0.10	< 0.060	UJ	0.060	0.10
Field Parameters																								
Conductivity	µS/cm	--	--	--	507		0.1	0.1	575		0.1	0.1	377.2		0.1	0.1	--		--	--	--		--	--
Dissolved Oxygen	mg/L	--	--	--	1.14		0.01	0.01	0.79		0.01	0.01	0.21		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential	millivolts	--	--	--	-39.9		0.1	0.1	188.5		0.1	0.1	75.9		0.1	0.1	--		--	--	--		--	--
Temperature	C	--	--	--	16.8		0.1	0.1	16.6		0.1	0.1	16.4		0.1	0.1	--		--	--	--		--	--
Turbidity	NTU	--	--	--	3.33		0.01	0.01	0.81		0.01	0.01	1.65		0.01	0.01	--		--	--	--		--	--

Notes:
MDL = Method Detection Limit
RL = Reporting Limit
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µg/L = Microgram per liter
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SU = Standard Units
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NTU = Nephelometric Turbidity Unit
CCR = Coal Combustion Residuals
SWP = Solid Waste Permit

Notes:
QL = Laboratory quantitation limit
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VPDES = Virginia Pollutant Discharge Elimination System
VSWMR = Virginia Solid Waste Management Regulations
* - EPA Action Level

Bold font = Detected constituent

[1]Site-specific background and GPS values for CCR and VSWMR constituents were calculated in the March 2, 2023, 2023 Updated Facility Background Determination Report North and East Ponds

Qualifiers:
J = Quantitation is approximate due to limitations identified during data validation
U = The analyte was not detected above the level of the sample reporting limit
UJ = The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.

= Concentration greater than site-specific background

= Concentration greater than Federal GWPS, SWP GPS, and site-specific background

= Concentration greater than SWP GPS and site-specific background

APPENDIX A
DEQ FORM ARSC-01

Annual Report QA/QC Submission Checklist
(DEQ Form ARSC-01)

INCLUDED IN FINAL REPORT?	YES		NO
Signature of a qualified groundwater professional	X		
Solid waste facility permit number & facility name	X		
Name of current owner/operator & type of facility	X		
Dates LF began operations and was deemed closed (if applicable)	X		
Date of last waste receipt (if applicable) [2.b]	X		
Identified if site is lined or unlined [2.b]	X		
Identified waste disposal method (trench fill/area fill/etc.) [2.b]	X		
Total site acreage, and acreage used for waste disposal [2.b]	X		
Adjoining land use described including any aquifer users [2.c]	X		
Topographic map included as *Figure 1* [2.a]	X		
Figure 1 shows facility location, includes a bar scale, and north arrow	X		
Discuss the type, name & age of the geologic unit(s) on site [2.d]	X		
Description of general site topography [2.d]	X		
Name of nearest permanent water body, perennial stream, etc. [2.d]	X		
Description of the uppermost aquifer [2.d]	X		
Description of the aquifer type (confined vs unconfined) [2.d]	X		
Date facility entered detection or phase I monitoring [2.b]	X		
Date facility entered assessment or phase II monitoring [2.b]	X		
Identified if the facility monitors groundwater under a variance	X		
Identified the dates of any groundwater variance approvals	N/A		
Approval date for wetlands demonstration (if applicable)	N/A		
Identified all upgradient and downgradient monitoring wells [2.e]	X		
Identified if all monitoring wells were sampled during the year [2.e]	X		
Identified reasons for failure to sample (if applicable) [2.e]	N/A		
Identified if any monitoring wells have been abandoned [2.e]	X		
Identified if any wells require replacement [2.e]	X		
Included network performance certification statement [2.e]	X		
Identified groundwater sampling dates during past year [2.f]	X		
Included site plan drawing as *Figure 2* [2.h]	X		
Figure 2 contains current topographic contours	X		
Figure 2 contains facility and waste management unit boundaries	X		
Figure 2 includes all monitoring wells	X		
Figure 2 includes potentiometric surface contours	X		
Figure 2 includes groundwater flow direction arrows	X		

Annual Report Submission Checklist, DEQ Form ARSC-01 (11/01 – Revised 07/11)

Annual Report QA/QC Submission Checklist
(DEQ Form ARSC-01)

INCLUDED IN FINAL REPORT?	YES		NO
Figure 2 includes all surface water bodies	X		
Figure 2 includes all structures on site, a bar scale, and north arrow	X		
Listing of groundwater elevation readings in past year [2.h]	X		
Table of historical groundwater elevation data as *Appendix B*	X		
Calculated rate of groundwater flow (distance/year) [2.h]	X		
Flow rate calculations included as *Appendix C*	X		
Identified the name of the analytical laboratory [2.h]	X		
Identified whether lab was DCLS certified	X		
Identified type of analytical methods used [2.h]	X		
Identified those constituents found above the LOD and LOQ	X		
Identified if verification sampling was used during any event	X		
Identified statistical methods used to analyze groundwater data as Section 7.0	X		
Identified any SSI's noted during prior year of monitoring	X		
Table of prior detected constituent concentrations in each well [2.g] as *Appendix F*	X		
Field data sheet copies included as *Appendix D*	X		
Laboratory results & certificates of analysis as CDROM in *Appendix E*	X		
Included historical summary of laboratory results in *Appendix F*	X		
Full list of References	X		
Copy of this QA/QC checklist	X		

Notes:
(1) N/A = Not Applicable

APPENDIX B
SUMMARY OF HISTORICAL CCR AND VSWMR STATIC WATER LEVEL DATA

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, East Pond
Permit No. 618

Well Identification	Top of Casing Elevation (feet AMSL)	Measurement Date	Depth to Water (feet below top of casing)	Groundwater Elevation (feet AMSL)
MW-11	330.52	10/23/2017	NM	--
		12/5/2017	30.30	300.22
		2/14/2018	30.62	299.90
		3/26/2018	30.60	299.92
		5/14/2018	29.78	300.74
		6/25/2018	27.70	302.82
		8/15/2018	28.05	302.47
		10/15/2018	28.06	302.46
		1/7/2019	25.32	305.20
		9/9/2019	24.98	305.54
		11/18/2019	26.75	303.77
		3/2/2020	27.32	303.20
		6/2/2020	26.42	304.10
		8/24/2020	28.21	302.31
		10/30/2020	28.58	301.94
		12/1/2020	27.34	303.18
		2/23/2021	23.79	306.73
		6/7/2021	23.14	307.38
		8/30/2021	25.79	304.73
		2/7/2022	28.68	301.84
		8/29/2022	29.03	301.49
		2/13/2023	30.19	300.33
		8/21/2023	30.12	300.40
		2/12/2024	30.00	300.52
		8/26/2024	28.67	301.85
MW-29S	387.32	10/23/2017	NM	--
Formerly		12/5/2017	42.65	344.67
OW-29S		2/14/2018	43.46	343.86
		3/26/2018	43.79	343.53
		5/14/2018	43.91	343.41
		6/25/2018	42.98	344.34
		8/15/2018	42.21	345.11
		10/15/2018	42.21	345.11
		1/7/2019	40.90	346.42
		9/9/2019	37.29	350.03
		11/18/2019	38.85	348.47
		3/2/2020	40.20	347.12
		6/2/2020	40.31	347.01
		8/24/2020	40.82	346.50
		12/1/2020	41.16	346.16
		2/23/2021	39.07	348.25
		6/7/2021	37.13	350.19
		8/30/2021	38.14	349.18
		2/7/2022	40.85	346.47
		8/29/2022	41.97	345.35
		2/13/2023	43.12	344.20
		8/21/2023	43.40	343.92
		2/12/2024	44.14	343.18
		8/26/2024	42.67	344.65

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, East Pond
Permit No. 618

Well Identification	Top of Casing Elevation (feet AMSL)	Measurement Date	Depth to Water (feet below top of casing)	Groundwater Elevation (feet AMSL)
MW-29D	390.43	10/23/2017	NM	--
		12/5/2017	44.48	345.95
		2/14/2018	48.95	341.48
		3/26/2018	45.20	345.23
		5/14/2018	51.34	339.09
		6/25/2018	45.60	344.83
		8/15/2018	44.62	345.81
		10/15/2018	44.32	346.11
		1/7/2019	43.72	346.71
		9/9/2019	40.29	350.14
		11/18/2109	41.65	348.78
		3/2/2020	42.27	348.16
		6/2/2020	42.42	348.01
		8/24/2020	43.00	347.43
		12/1/2020	43.02	347.41
		2/23/2021	42.81	347.62
		6/7/2021	40.10	350.33
		8/30/2021	40.05	350.38
		2/7/2022	42.67	347.76
		8/29/2022	43.78	346.65
		2/13/2023	44.42	346.01
		8/21/2023	44.72	345.71
		2/12/2024	45.33	345.10
		8/26/2024	44.21	346.22
MW-19***	235.21	10/23/2017	32.41	202.80
		12/5/2017	31.57	203.64
		2/14/2018	26.41	208.80
		3/26/2018	28.79	206.42
		5/14/2018	29.27	205.94
		6/25/2018	28.61	206.60
		8/15/2018	31.87	203.34
		10/15/2018	29.29	205.92
		1/7/2019	31.27	203.94
		9/9/2019	33.55	201.66
		10/10/2019	33.86	201.35
		11/18/2019	31.74	203.47
	235.16	3/4/2020	28.75	206.41
		6/2/2020	27.73	207.43
		8/24/2020	27.99	207.17
		12/1/2020	23.97	211.19
		2/23/2021	24.30	210.86
		6/7/2021	28.28	206.88
		8/30/2021	28.87	206.29
		2/7/2022	25.61	209.55
		8/31/2022	28.75	206.41
		2/13/2023	25.73	209.43
		8/21/2023	28.80	206.36
		2/12/2024	27.03	208.13
		8/26/2024	29.84	205.32

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, East Pond
Permit No. 618

Well Identification	Top of Casing Elevation (feet AMSL)	Measurement Date	Depth to Water (feet below top of casing)	Groundwater Elevation (feet AMSL)
MW-20S***	228.07	10/23/2017	25.95	202.12
		12/5/2017	25.94	202.13
		2/14/2018	20.83	207.24
		3/26/2018	23.87	204.20
		5/14/2018	24.00	204.07
		6/25/2018	22.85	205.22
		8/15/2018	26.95	201.12
		10/15/2018	22.94	205.13
		1/7/2019	27.14	200.93
		9/9/2019	27.50	200.57
		11/18/2019	32.44	195.63
	234.13	3/4/2020	29.52	204.61
		6/2/2020	27.80	206.33
		8/24/2020	27.84	206.29
		9/30/2020	28.22	205.91
		10/30/2020	26.16	207.97
		12/1/2020	24.71	209.42
		2/23/2021	24.20	209.93
		6/7/2021	28.11	206.02
		8/30/2021	28.38	205.75
		2/7/2022	26.46	207.67
		8/29/2022	28.48	205.65
		2/13/2023	25.94	208.19
		8/21/2023	28.65	205.48
		2/12/2024	27.01	207.12
		8/26/2024	30.10	204.03
MW-20D***	228.28	10/23/2017	26.39	201.89
		12/5/2017	27.42	200.86
		2/14/2018	23.32	204.96
		3/26/2018	25.84	202.44
		5/14/2018	26.19	202.09
		6/25/2018	24.39	203.89
		8/16/2018	28.70	199.58
		10/15/2018	23.99	204.29
		1/7/2019	29.46	198.82
		9/9/2019	27.79	200.49
		10/10/2019	28.04	200.24
		11/18/2019	32.46	195.82
	234.02	3/4/2020	29.27	204.75
		6/2/2020	27.25	206.77
		8/24/2020	26.79	207.23
		12/1/2020	22.92	211.10
		2/23/2021	23.43	210.59
		4/16/2021	24.41	209.61
		6/7/2021	25.98	208.04
		8/30/2021	26.14	207.88
		2/7/2022	24.96	209.06
		8/29/2022	26.10	207.92
		2/13/2023	24.09	209.93
		8/21/2023	25.98	208.04
		2/12/2024	25.55	208.47
		8/26/2024	27.54	206.48

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, East Pond
Permit No. 618

Well Identification	Top of Casing Elevation (feet AMSL)	Measurement Date	Depth to Water (feet below top of casing)	Groundwater Elevation (feet AMSL)
MW-21***	239.23	10/23/2017	37.77	201.46
		12/5/2017	36.33	202.90
		2/14/2018	31.01	208.22
	233.61	3/26/2018	27.18	206.43
		5/14/2018	27.00	206.61
		6/25/2018	26.43	207.18
		8/15/2018	28.63	204.98
		10/15/2018	24.67	208.94
		1/7/2019	27.25	206.36
		9/9/2019	31.70	201.91
		12/18/2019	29.06	204.55
	233.62	3/4/2020	27.81	205.81
		6/2/2020	26.55	207.07
		8/24/2020	25.44	208.18
		12/1/2020	23.00	210.62
		2/23/2021	22.88	210.74
		6/7/2021	27.08	206.54
		8/30/2021	27.06	206.56
		2/7/2022	25.49	208.13
		8/29/2022	26.95	206.67
		2/13/2023	23.53	210.09
		8/21/2023	26.95	206.67
		2/12/2024	25.02	208.60
		8/26/2024	28.14	205.48
MW-22***	238.79	10/23/2017	37.23	201.56
		12/5/2017	32.27	206.52
		2/14/2018	31.94	206.85
	231.71	3/26/2018	27.61	204.10
		5/14/2018	27.93	203.78
		6/25/2018	27.41	204.30
		8/15/2018	29.10	202.61
		10/15/2018	25.20	206.51
		1/7/2019	27.51	204.20
		9/9/2019	30.08	201.63
		11/18/2019	26.18	205.53
	227.66	3/4/2020	23.07	204.59
		6/2/2020	29.11	198.55
		8/24/2020	21.69	205.97
		12/1/2020	18.60	209.06
		2/23/2021	19.03	208.63
		6/7/2021	19.52	208.14
		8/30/2021	22.29	205.37
		2/7/2022	20.84	206.82
		8/29/2022	22.04	205.62
		2/13/2023	20.06	207.60
		8/21/2023	21.12	206.54
		2/12/2024	21.08	206.58
		8/26/2024	22.74	204.92

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, East Pond
Permit No. 618

Well Identification	Top of Casing Elevation (feet AMSL)	Measurement Date	Depth to Water (feet below top of casing)	Groundwater Elevation (feet AMSL)
MW-23***	236.87	10/23/2017	27.60	209.27
		12/5/2017	27.38	209.49
		2/14/2018	26.00	210.87
		3/26/2018	26.72	210.15
		5/14/2018	26.61	210.26
		6/25/2018	26.71	210.16
		8/15/2018	28.05	208.82
		10/15/2018	25.77	211.10
		1/7/2019	25.88	210.99
		9/9/2019	27.34	209.53
		11/18/2019	26.78	210.09
	236.83	3/4/2020	25.19	211.64
		6/2/2020	24.96	211.87
		8/24/2020	25.74	211.09
		12/1/2020	22.87	213.96
		2/23/2021	21.61	215.22
		6/7/2021	24.74	212.09
		8/30/2021	25.48	211.35
		2/7/2022	25.31	211.52
		8/29/2022	26.04	210.79
		2/13/2023	23.86	212.97
		8/21/2023	26.26	210.57
		2/12/2024	23.28	213.55
		8/26/2024	26.63	210.20

Notes:
CCR = Coal Combustion Residuals
VSWMR = Virginia Solid Waste Management Regulations
ft = feet
AMSL = Above Mean Sea Level
NM = Not Measured
*Resurveyed March 2018
**Resurveyed January 2020
***Resurveyed March 2020

APPENDIX C
GROUNDWATER FLOW RATE CALCULATIONS

Appendix C.1

Groundwater Flow Rate Calculations
Bremo Power Station, East Pond
Solid Waste Permit #618

First Semi-Annual Groundwater Monitoring Event (February 2024)

The average hydraulic gradient for the Unit along the ideal flow line beneath the Unit was calculated using the following equation:

$$i = {}^{h_L}/_{L}$$

Where: i = hydraulic gradient (unitless)
h_L = head loss (elevation difference in feet)
L = length (horizontal distance in feet)

The groundwater flow rate was calculated using the following formula:

$$V = {}^{ki}/_{\theta}$$

Where: V = Groundwater Velocity (ft/s)
k = hydraulic conductivity (ft/s)
i = hydraulic gradient (unitless)
θ = assumed porosity (unitless)

Groundwater Flow	Aquifer Formation	Average Hydraulic Conductivity (k, ft/s)	Starting Head (feet amsl)	Ending Head (feet amsl)	Distance (ft)	Gradient (i)	Assumed Porosity (θ)	Approximate Average Groundwater Velocity	
								(ft/s)	(feet/year)
Alluvium	Vgw_1	1.11E-05	242.06	207.12	1,068	3.27E-02	0.20	1.8E-06	57
	Vgw_2		230.66	206.58	590	4.08E-02		2.3E-06	73
	Average Flow Rate - Alluvium							2.1E-06	65
Gneiss Bedrock	Vgw_1	1.53E-05	242.06	207.12	1,068	3.27E-02	0.025	2.0E-05	631
	Vgw_2		230.66	206.58	590	4.08E-02		2.5E-05	788
	Average Flow Rate – Gneiss Bedrock							2.3E-05	710

Notes:
ft/s = feet per second
amsl = above mean sea level
θ = estimated value based on properties of the lithologies comprising the uppermost aquifer

Appendix C.2

Groundwater Flow Rate Calculations
Bremo Power Station, East Pond
Solid Waste Permit #618

Second Semi-Annual Groundwater Monitoring Event (August 2024)

The average hydraulic gradient for the Unit along the ideal flow line beneath the Unit was calculated using the following equation:

$$i = {}^{h_L}/_{L}$$

Where: i = hydraulic gradient (unitless)
h_L = head loss (elevation difference in feet)
L = length (horizontal distance in feet)

The groundwater flow rate was calculated using the following formula:

$$V = {}^{ki}/_{\theta}$$

Where: V = Groundwater Velocity (ft/s)
k = hydraulic conductivity (ft/s)
i = hydraulic gradient (unitless)
θ = assumed porosity (unitless)

Groundwater Flow	Aquifer Formation	Average Hydraulic Conductivity (k, ft/s)	Starting Head (feet amsl)	Ending Head (feet amsl)	Distance (ft)	Gradient (i)	Assumed Porosity (θ)	Approximate Average Groundwater Velocity	
								(ft/s)	(feet/year)
Alluvium	Vgw_1	1.11E-05	241.42	204.03	1,068	3.50E-02	0.20	1.94E-06	61
	Vgw_2		229.50	204.92	590	4.17E-02		2.31E-06	73
	Average Flow Rate - Alluvium							2.13E-06	67
Gneiss Bedrock	Vgw_1	1.53E-05	241.42	204.03	1,068	3.50E-02	0.025	2.14E-05	675
	Vgw_2		229.50	204.92	590	4.17E-02		2.55E-05	804
	Average Flow Rate – Gneiss Bedrock							2.35E-05	740

Notes:
ft/s = feet per second
amsl = above mean sea level
θ = estimated value based on properties of the lithologies comprising the uppermost aquifer

APPENDIX D
FIELD DATA SHEETS

APPENDIX D.1
FIELD DATA SHEETS
FIRST SEMI-ANNUAL GROUNDWATER MONITORING EVENT
(FEBRUARY 2024)

Date: 02/12/2024

WELL GAUGING LOG

Project Name: 1SA24 Groundwater

Project No./Task No. 31406066.009

Sampler(s): J.Davis, M.Knez & Z. Mondshine

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary				
					Protective Casing	Well Casing	Label	Lock	Pad Condition
MW-28	MK/ZM	1035	41.15	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☐ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-27S	MK/ZM	1039	44.63	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-27D	MK/ZM	1040	43.31	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-33	MK/ZM	1043	94.44	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-34	MK/ZM	1046	94.51	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-35	MK/ZM	1049	104.99	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-12	MK/ZM	1111	14.71	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-13	MK/ZM	1115	8.18	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-39S	MK/ZM	1117	7.02	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-39D	MK/ZM	1118	13.64	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-37	MK/ZM	1122	18.70	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-31	MK/ZM	1127	12.05	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-1	MK/ZM	1132	4.21	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-32S	MK/ZM	1137	2.42	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-32D	MK/ZM	1138	15.85	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-24	JD	1035	84.69	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-25D	JD	1040	48.95	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged

Observations/Notes: _____

Signature: _____ Date: 02/15/2024

QA/QC Signature: _____ Date: 02/15/2024

wsp

Date: 02/12/2024

WELL GAUGING LOG

Project Name: 1SA24 Groundwater Project No./Task No. 31406066.009

Sampler(s): J.Davis, M.Knez & Z. Mondshine

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary				
					Protective Casing	Well Casing	Label	Lock	Pad Condition
MW-25S	JD	1042	48.37	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-26S	JD	1045	60.88	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-26D	JD	1047	60.60	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-19	JD	1100	~~27.08~~ ZM 2/15/24 27.03	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-20S	JD	1105	27.01	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-20D	JD	1107	25.55	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-23	JD	1113	23.28	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-22	JD	1116	~~21.08~~ ZM 21.08 2/15/24 ZM	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-21	JD	1124	25.02	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-29S	JD	1229	44.14	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-29D	ZM	1228	45.33	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-11	MK	1219	30.00	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
				--	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged
				--	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged
				--	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged
				--	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged
				--	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged

Observations/Notes: _____

Signature: _____ Date: 02/15/2024

QA/QC Signature: _____ Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 2/12/2024 ~~M. Knez~~
Weather: cloudy, 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): M. Knez
Well ID: MW-11
Field Calibration Completed: 2/12/2024 @ 0945
Well Diameter: 2.0 inches
Initial Depth to Water: 30.00 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 24C103134
- [ ] In-Situ
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ]

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1235	~~5.14~~ 5.14 MA	240.9	24.1	4.49	14.7	204.4	31.29	~200
1240	5.05	211.9	30.4	4.08	14.7	212.2	31.45	~200
1245	5.02	237.3	38.1	~~3.87~~ 3.87 MA	14.8	220.9	31.23	~200
1250	4.97	237.1	32.2	3.75	14.8	227.1	31.47	~300
1255	4.94	238.1	33.6	3.53	14.8	231.3	31.82	~300
1300	4.95	239.0	19.6	3.65	14.8	234.0	32.41	~300
1305	4.96	238.7	18.2	3.75	14.8	236.7	31.91	~300
1310	5.00	239.3	14.9	3.78	14.8	238.3	32.11	~300
1315	5.02	241.4	9.6	3.76	14.5	239.7	31.92	~300
1320				SAMPLE				
1335	4.98	249.5	9.2	3.93	14.2	242.2	32.07	~300

Purge Cycle (End): 15 / 15 @ 30 psi
Flow Rate (ml/min End): ~300
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): ~0.27
Total Purge Volume (Gallons): ~4.5
Purge Water Management: on-site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1229
Sample Time: 1320
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP: 44.91
Sample ID: 021224NMW11

Sampler Signature: M. Knez Date: 2/12/24
QA/QC Signature: Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 02/12/2024
Weather: rainy 40's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): J DAVIS
Well ID: MW-29S
Field Calibration Completed: 02/12/2024 @ 0945
Well Diameter: 2.0 inches
Initial Depth to Water: 44.14 feet
Depth to Bottom: – feet
Water Column Thickness: – feet

Equipment Used:
- [x] WL Indicator
- [ ] Turbidity Meter
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI Pro DSS 23310025 3
- [ ] Peristaltic Pump
- [ ] Compressor
- [ ] Non-dedicated BP
- [ ] In-Situ –
- [ ] MP-10 Controller Box
- [x] MP-15 Controller Box
- [ ] –

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1245	5.23	139.6	22.63	5.81	13.5	200.2	44.64	~150
1250	5.52	136.1	19.49	6.22	13.5	193.4	44.48	~100
1255	5.57	134.9	21.50	6.31	13.2	193.8	44.20	~100
1300	5.56	136.7	14.02	6.57	12.5	190.8	44.31	~100
1305	5.60	136.6	8.73	6.59	12.3	197.2	44.28	~100
1310	5.62	136.7	9.43	6.57	12.3	202.7	44.31	~100
1315	–	S	A	M	D	L	E	–
1420	5.74	139.4	4.14	7.72	12.5	207.5	44.30	~75

Purge Cycle (End): 5713 @ ~40 psi
Flow Rate (ml/min End): ~75 mL/min
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 65.38 x .006 = ~.392
Total Purge Volume (Gallons): ~2.0
Purge Water Management: On site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge time: 1236
Sample Time: 1315
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] Hexavalent Chromium
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate

Other Observations / Equipment Operation Problems: DTP ~~65.38~~ 30 02/12/24 65.38
Sample ID: 021224NMW29S

Sampler Signature: Jonny Davis Date: 02/12/2024
QA/QC Signature: M.Kay Date: 2/15/2024

MICROPURGE SAMPLING LOG

Date: 02/12/24
Weather: overcast, 40s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW-29D
Field Calibration Completed: 0945 on 2/12/24
Well Diameter: 2.0 inches
Initial Depth to Water: 45.33 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [ ] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1240	7.09	809	10.18	1.96	13.8	-69.7	50.27	~250
1245	7.12	813	8.92	2.09	13.7	-74.5	52.75	~250
1250	7.12	809	7.77	2.29	13.7	-76.6	54.47	~250
1255	7.05	794	6.88	2.41	13.6	-82.4	56.13	~250
1300	—	—	— SAMPLE	—	—	—	—	—
1330	6.56	740	3.22	3.93	13.2	-66.3	64.72	~250

Purge Cycle (End): 24/6 @ ~50 psi
Flow Rate (ml/min End): ~250
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.96
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1232
Sample Time: 1330
Field Filtered (0.45um): [ ] Yes [X] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP=169.39
Sample ID: 021224NMW29D

Sampler Signature: [signature] Date: 2/12/24
QA/QC Signature: [signature] Date: 2/13/24

MICROPURGE SAMPLING LOG

Date: 2/12/24
Weather: cloudy, 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): M. Knez
Well ID: Field Blank
Field Calibration Completed: —
Well Diameter: — inches
Initial Depth to Water: — feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [ ] Turbidity Meter
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI —
- [ ] Peristaltic Pump
- [ ] Compressor
- [ ] Non-dedicated BP
- [ ] In-Situ —
- [ ] MP-10 Controller Box
- [x] MP-15 Controller Box
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1240	—	—	—	SAM	PLE	—	—	—

Purge Cycle (End): — @ — psi Flow Rate (ml/min End): —
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): —
Total Purge Volume (Gallons): — Purge Water Management: —
Purge Observations (color, odor, turbidity, sheen): clear grab sample taken by MW-11
Purge time: — using Tub provided D.I. Water
Sample Time: 1240 Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems:
Sample ID: 021224NFBBlank

Sampler Signature: M. Knez Date: 2/12/24 Page 1 of 1
QA/QC Signature: [signature] Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 02/14/24
Weather: Sunny, 50s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW19
Field Calibration Completed: 0815 on 02/14/24
Well Diameter: 2.0 inches
Initial Depth to Water: 26.37 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 17M102881
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1440	6.33	500.0	106.65	2.15	16.1	-4.9	26.48	~150
1445	6.34	499.0	33.70	2.17	16.1	-6.0	26.50	~150
1450	6.34	498.9	22.80	2.66	16.1	-6.0	26.51	~150
1455	6.36	498.2	21.83	2.91	15.9	-5.5	26.51	~150
1500	6.33	496.7	26.92	3.43	15.8	0.6	26.52	~150
1505	6.30	497.5	26.19	3.54	15.6	4.6	26.50	~150
1510	6.30	496.9	26.88	3.23	15.6	4.3	26.50	~150
1515	6.30	496.2	28.52	2.88	15.5	3.2	26.51	~150
1520	6.29	496.0	8.05	2.73	15.5	3.6	26.52	~150
1525	—	—	—	SAMPLE	—	—	—	—
1540	6.34	492.2	7.98	2.46	15.9	-2.7	26.54	~150

Purge Cycle (End): 25/5 @ ~35 psi
Flow Rate (ml/min End): ~150
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.28
Total Purge Volume (Gallons): ~2.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1429
Sample Time: 1525
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP: 47.41
Sample ID: 021424NMW19

Sampler Signature: [signature] Date: 02/14/24
QA/QC Signature: M. Kuz Date: 2/15/24

MICROPURGE SAMPLING LOG

Date: 02/14/2024
Weather: SUNNY 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): J. DAVIS
Well ID: MW-20S
Field Calibration Completed: 02/14/2024 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 26.64 feet
Depth to Bottom: ~ feet
Water Column Thickness: ~ feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 23F100253
- [ ] In-Situ ~
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] ~

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1455	6.75	634	30.62	2.35	16.1	142.2	27.00	~250
1500	6.70	632	30.32	0.46	16.0	142.1	27.02	~250
1505	6.70	631	23.67	0.29	16.0	140.4	27.02	~250
1510	6.71	632	22.95	0.26	16.0	138.7	27.00	~250
1515	6.70	633	17.42	0.24	15.9	136.5	27.00	~250
1520	6.69	634	12.84	0.21	15.9	133.3	27.01	~250
1525	6.68	635	14.09	0.21	15.9	125.5	27.00	~250
1530	6.68	635	20.03	0.24	15.7	111.4	27.00	~250
1535	6.68	639	16.38	0.21	16.0	103.4	26.96	~250
1540	6.67	641	8.69	0.45	15.9	89.5	26.95	~250
1545	6.67	642	35.90	0.19	16.0	74.4	27.11	~250
1550	6.67	643	15.93	0.19	15.9	64.7	27.08	~250
1555	6.66	643	7.70	0.18	16.0	56.0	27.04	~250
1600	~	S	A	M	P	L	E	~
1615	6.67	643	3.94	0.24	15.8	34.9	27.10	~250

Purge Cycle (End) 25/5 @ ~40 psi
Flow Rate (ml/min End): ~250 mL/min
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 89.50 x .006 = ~.537
Total Purge Volume (Gallons): ~6.5
Purge Water Management: On site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge time: 1446 @ 25/5 = 30 02/14/2024
Sample Time: 1600
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3 1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP = 89.54
Sample ID: 021424NMW20S

Sampler Signature: [signature] Date: 02/14/2024 Page 1 of 1
QA/QC Signature: M. Kay Date: 2/14/24

MICROPURGE SAMPLING LOG

Date: 02/14/24
Weather: sunny, 50s

Project Name: Bremo Power Station
Project No./Task No.: 31406066 009
Event: 1SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW-20D
Field Calibration Completed: 0815 on 2/14/24
Well Diameter: 2.0 inches
Initial Depth to Water: 25.31 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 17M10288
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0 3 feet	<500
1610	7.12	663	1.84	1.79	15.7	-103.8	30.10	~250
1615	7.13	668	2.62	1.72	15.7	-105.8	31.45	~250
1620	7.14	674	2.31	1.84	15.7	-106.4	32.87	~250
1625	7.13	681	1.91	1.80	15.7	-106.5	33.54	~250
1630	—	—	SAMPLE	—	—	—	—	—
1645	7.04	698	~~4~~ 3.23 (2/15/24)	1.71	15.4	-97.5	34.36	~250

Purge Cycle (End): 2218 @ ~50 psi
Flow Rate (ml/min End): ~250
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.54
Total Purge Volume (Gallons): ~2.5
Purge Water Management: onsite containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1559
Sample Time: 1630
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3 1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP: 89.27
Sample ID: 021424NMW20D

Sampler Signature: Z. Mondshine Date: 02/14/24
QA/QC Signature: M. Kuy Date: 2/15/24

MICROPURGE SAMPLING LOG

Date: 02/14/24
Weather: ½ sunny, 40s

Project Name: Bremo Power Station
Project No./Task No.: 31406066 009
Event: 1SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW-21
Field Calibration Completed: 0815 on 2/14/24
Well Diameter: 20 inches
Initial Depth to Water: 24.43 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 17M102881
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1310	6.49	532	64.74	1.01	15.6	-46.1	26.34	~350
1313	6.44	522	49.36	1.62	15.7	-30.4	26.45	~350
1316	6.41	523	24.10	1.28	15.7	-34.5	26.57	~350
1319	6.40	524	18.69	1.12	15.7	-37.3	26.66	~350
1322	6.39	524	15.53	0.83	15.7	-41.0	26.71	~350
1325	6.37	524	14.04	0.68	15.7	-42.6	26.79	~350
1328	6.36	524	9.02	0.61	15.8	-42.6	26.88	~350
1330	—	—	SAMPLE	—	—	—	—	—
1405	6.21	509	8.28	0.56	15.7	-25.2	27.51	~350

Purge Cycle (End): 16/4 @ ~30 psi
Flow Rate (ml/min End): ~350
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.27
Total Purge Volume (Gallons): ~4.25
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1302
Sample Time: 1330
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP: 45.53
Sample ID: 021424NMW21, 021424NEPMS, 021424NEPMSD MS/MSD taken here

Sampler Signature: [signature] Date: 02/14/24
QA/QC Signature: M. Kay Date: 2/15/24

MICROPURGE SAMPLING LOG

Date: 2/14/24
Weather: Partly cloudy, 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): M. Knez
Well ID: MW-22
Field Calibration Completed: 02/14/24 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 20.81 feet
Depth to Bottom: ~~~ feet
Water Column Thickness: ~~~ feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 22C103134
- [ ] In-Situ ~~~
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] ~~~

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1543	5.90	614	15.0	5.56	16.1	147.6	22.89	~300
1546	5.86	529	10.6	3.69	16.1	149.6	23.21	~300
1549	5.85	474.4	7.5	2.39	16.0	149.6	23.42	~300
1552	5.84	447.3	6.0	1.62	16.0	149.7	23.91	~300
1555	5.83	433.8	5.1	1.22	15.9	150.3	24.21	~300
1558	5.82	423.8	4.1	0.91	16.0	150.6	24.23	~300
1601	5.82	420.0	3.8	0.77	16.0	151.4	24.19	~300
1604	5.82	414.1	3.5	0.63	16.0	152.1	24.22	~200
1610	~~~	~~~	~~~	SAMPLE	~~~	~~~	~~~	~~~
1624	5.82	401.1	2.0	0.49	15.9	158.3	23.92	~300

Purge Cycle (End): 25/5 secs @ 30 psi
Flow Rate (ml/min End): ~300
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.18
Total Purge Volume (Gallons): ~3.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1537
Sample Time: 1610
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP: 30.81
Sample ID: 021424MMW22

Sampler Signature: M. Knez Date: 2/14/24
QA/QC Signature: James Deni Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 2/14/24
Weather: sunny, 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): M. Knez
Well ID: MW-23
Field Calibration Completed: 02/14/24 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 23.21 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 22C103134
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1433	6.09	403.1	1.7	~~15.6~~ 0.54 mg	15.6	97.4	25.78	~300
1436	6.12	400.4	1.6	~~15.6~~ 0.54 mg	15.6	85.6	26.48	~300
1439	6.06	380.6	1.6	0.32	15.6	72.8	27.46	~300
1442	6.05	380.8	1.5	0.28	15.6	70.7	27.52	~300
1445	6.04	382.7	1.5	0.22	15.6	69.5	28.00	~300
1450	—	—	—	SAMPLE	—	—	—	—
1515	6.06	391.6	1.6	0.57	15.4	70.5	28.35	~300

Purge Cycle (End): 15.5/4.5 sec @ 30 psi
Flow Rate (ml/min End): ~300
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.24
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1427
FD taken here @ 1500
Sample Time: 1450
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems: DTP: 49.01
Sample ID: 021424NMW23

Sampler Signature: M. Knez
Date: 2/14/~~23~~24
Page 1 of 1

QA/QC Signature: [signature]
Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 2/14/24
Weather: sunny, 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): M. Knez
Well ID: EP Field Duplicate
Field Calibration Completed: —
Well Diameter: — inches
Initial Depth to Water: — feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI —
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1500	—	—	—	SAMPLE	—	—	—	—

Purge Cycle (End): — @ — psi Flow Rate (ml/min End): —
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): —
Total Purge Volume (Gallons): — Purge Water Management: —
Purge Observations (color, odor, turbidity, sheen): clear grab sample taken from MW-23
Purge time: —
Sample Time: 1500 Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents: Ammonia, Hardness, Iron, Manganese, Nitrate
- [x] Hexavalent Chromium

Other Observations / Equipment Operation Problems:
Sample ID: 021424NEPFDDuplicate
Sampler Signature: M. Knez Date: 2/14/24 Page 1 of 1
QA/QC Signature: Date:

APPENDIX D.2
FIELD DATA SHEETS
SECOND SEMI-ANNUAL GROUNDWATER MONITORING EVENT
(AUGUST 2024)

wsp

Date: 08/26/2024

WELL GAUGING LOG

Project Name: 2SA24 Groundwater East Pond Project No./Task No. 31406066.009

Sampler(s): J.Davis & Z. Mondshine

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary				
					Protective Casing	Well Casing	Label	Lock	Pad Condition
MW-14	ZM	1018	15.90	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-15	ZM	1020	17.34	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-5	ZM	1024	6.25	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-4	ZM	1028	9.86	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-19	ZM	1032	29.84	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-20S	ZM	1035	30.10	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-20D	ZM	1037	27.54	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-21	ZM	1049	28.14	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-22D	ZM	1052	31.97	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-22	ZM	1110	22.74	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-40	ZM	1118	7.43	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-23	ZM	1058	26.63	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-23D	ZM	1100	30.62	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-11	ZM	~~1137~~ 1132	28.67	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
					☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged
					☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged
					☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged

Observations/Notes: —

—

Signature: [signature] Date: 09/03/2024

QA/QC Signature: [signature] Date: 09/03/2024

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wsp

Date: 08/26/2024

WELL GAUGING LOG

Project Name: 2SA24 Groundwater North Pond Project No./Task No. 31406066.009

Sampler(s): J.Davis & Z. Mondshine

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary				
					Protective Casing	Well Casing	Label	Lock	Pad Condition
MW-11	ZM	1132	28.67	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-36D	JD	1024	12.84	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-36S	JD	1025	18.66	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-28	JD	1028	41.48	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-27D	JD	1031	42.12	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-27S	JD	1030	43.65	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-33	JD	1035	95.08	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-34	JD	1037	94.90	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-35	JD	1042	106.15	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-24	JD	1045	84.48	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-9	JD	1047	DRY	45.38	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-26D	JD	1057	61.78	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-26S	JD	1100	62.04	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-25D	JD	1105	49.33	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-25S	JD	1107	48.30	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-29D	JD	1140	44.21	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
MW-29S	JD	1138	42.67	--	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged

Observations/Notes: —

Signature: [signature] Date: 09/03/2024

QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/26/24
Weather: sunny, 80s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW11
Field Calibration Completed: 645 on 08/26/24
Well Diameter: 2.0 inches
Initial Depth to Water: 28.67 feet
Depth to Bottom: 51.85 feet
Water Column Thickness: 23.18 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 23008
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI ProDSS R24104692
- [ ] Peristaltic Pump
- [ ] Compressor
- [ ] Non-dedicated BP
- [ ] In-Situ —
- [ ] MP-10 Controller Box
- [x] MP-15 Controller Box
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1145	5.16	278.4	7.43	4.96	16.5	244.9	31.09	~350
1150	5.10	276.8	8.29	4.51	16.7	262.2	31.12	~350
1155	5.11	273.3	6.81	4.46	16.5	265.8	31.16	~350
1200	5.14	272.9	5.17	4.50	16.6	265.9	31.19	~350
1205	—	—	SAMPLE	—	—	—	—	—
1220	5.08	269.0	4.86	4.34	16.5	270.6	31.31	~350

Purge Cycle (End): 15/5 seconds @ 30 psi
Flow Rate (ml/min End): ~350
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.27
Total Purge Volume (Gallons): ~4.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1137
Sample Time: 1205
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] Hexavalent Chromium
- [x] CCR Appendix III & Appendix IV
- [x] Ammonia, Hardness, Iron
- [x] Former VPDES Constituents Manganese & Nitrate

Other Observations / Equipment Operation Problems: DTP: 44.92 Field Blank taken here @1230
Sample ID: 082624NMW11 082624NFBBlank

Sampler Signature: Z. Mondshine Date: 08/26/24
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/26/2024
Weather: Sunny 70's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW North Pond
Sampler(s): J. DAVIS
Well ID: MW-29D
Field Calibration Completed: 08/26/2024 @ 0645
Well Diameter: 2.0 inches
Initial Depth to Water: 44.20 feet
Depth to Bottom: 161.65 feet
Water Column Thickness: 117.45 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 21022
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI Pro DSS 16M103153
- [ ] Peristaltic Pump
- [ ] Compressor
- [ ] Non-dedicated BP
- [ ] In-Situ —
- [ ] MP-10 Controller Box
- [x] MP-15 Controller Box
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1310	7.03	793	6.71	225	17.6	-87.0	49.47	~200
1315	7.12	787	5.14	3.08	18.6	-88.1	51.05	~200
1320	7.15	786	4.99	2.98	18.9	-86.6	52.46	~200
1325	7.14	780	4.78	2.65	18.4	-86.8	53.80	~200
1330	7.12	772	4.61	3.07	18.5	-94.2	55.12	~200
1335	-	S	A	M	P	L	E	-
1400	6.89	749	2.96	2.15	18.6	-78.1	62.84	~200

Purge Cycle (End): 2317 seconds @ ~50 psi
Flow Rate (ml/min End): ~200
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 159.45 x .006 = .956
Total Purge Volume (Gallons): ~2.5
Purge Water Management: On site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge Start Time: 1300
Sample Time: 1335
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] Hexavalent Chromium
- [x] CCR Appendix III & Appendix IV
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate
- [x] Former VPDES Constituents

Other Observations / Equipment Operation Problems:
DTP: 159.45
Sample ID: 082624NMW29D

Sampler Signature: [signature] Date: 08/26/2024
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/26/2024
Weather: SUNNY 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW - North Pond
Sampler(s): J. DAVIS
Well ID: MW-29S
Field Calibration Completed: 08/26/2024 @ 0645
Well Diameter: 2.0 inches
Initial Depth to Water: 42.67 feet
Depth to Bottom: 74.55 feet
Water Column Thickness: 31.88 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 21022
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI Pro DSS 16M03153
- [ ] Peristaltic Pump
- [ ] Compressor
- [ ] Non-dedicated BP
- [ ] In-Situ —
- [ ] MP-10 Controller Box
- [x] MP-15 Controller Box
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1200	5.09	142.7	10.6	6.17	16.9	228.1	42.96	~225
1205	5.26	139.9	8.69	6.47	16.7	221.1	42.97	~225
1210	5.31	140.8	2.21	6.51	16.8	220.6	43.05	~225
1215	5.34	141.0	1.82	6.50	16.8	220.9	43.10	~225
1220	5.39	140.9	1.46	6.47	16.8	221.2	43.00	~225
1225	—	S	A	M	P	L	E	—
1245	5.80	140.9	3.10	6.56	17.6	189.8	43.10	~225

Purge Cycle (End): 2515 seconds @ ~40 psi
Flow Rate (ml/min End): ~225
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 64.47*00.6 = .386
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge Start Time: 1152
Sample Time: 1225
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] Hexavalent Chromium
- [x] CCR Appendix III & Appendix IV
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate
- [x] Former VPDES Constituents

Other Observations / Equipment Operation Problems: DTP: 64.47
Sample ID: 082624NMW29S

Sampler Signature: [signature] Date: 08/26/2024
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/28/2024
Weather: sunny 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW East Pond
Sampler(s): J. DAVIS
Well ID: MW-19
Field Calibration Completed: 08/28/2024 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 29.94 feet
Depth to Bottom: 55.61 feet
Water Column Thickness: 25.67 feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS16M103153
- [ ] In-Situ —
- [x] Turbidity Meter 21022
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1115	5.82	473.5	9.92	1.88	19.5	37.7	30.06	~125
1120	5.89	502	5.67	1.63	18.9	23.7	30.13	~125
1125	5.93	514	4.82	1.53	19.0	17.6	30.06	~125
1130	5.94	516	4.96	1.81	18.5	17.1	30.10	~125
1135	5.93	519	3.85	1.82	18.4	15.1	30.12	~125
1140	5.95	521	3.44	1.97	18.5	12.8	30.14	~125
1145	5.96	523	5.75	2.08	18.4	11.6	30.15	~125
1150	5.97	526	4.80	1.97	18.5	11.1	30.14	~125
1155	5.97	528	2.79	1.85	18.5	10.1	30.15	~125
1200	-	S	A	M	P	L	E	-
1220	6.25	527	5.17	1.83	20.1	-2.8	30.13	~125

Purge Cycle (End): 24/6 seconds @ ~35 psi
Flow Rate (ml/min End): ~125
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 47.50 x .006 = 4.285
Total Purge Volume (Gallons): ~25
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1108
Sample Time: 1200
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents
- [x] Hexavalent Chromium
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate

Other Observations / Equipment Operation Problems: DTP: 47.50
Sample ID: 082824NMW19

Sampler Signature: [signature] Date: 08/28/2024
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/28/24
Weather: Sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW20D
Field Calibration Completed: 0815 on 08/28/24
Well Diameter: 2.0 inches
Initial Depth to Water: 27.56 feet
Depth to Bottom: ~~8/28/24 94.24 98.60~~ feet 94.24ft
Water Column Thickness: ~~to+24~~ 66.68 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 19007
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI ProDSS18U04692
- [ ] Peristaltic Pump
- [ ] Compressor
- [ ] Non-dedicated BP
- [ ] In-Situ
- [ ] MP-10 Controller Box
- [x] MP-15 Controller Box
- [ ]

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1235	6.96	759	2.06	1.17	17.7	-114.3	32.22	~250
1240	6.97	764	1.03	1.22	17.7	-114.8	33.65	~250
1245	6.96	766	2.69	1.13	17.8	-114.7	34.67	~250
1250	6.95	771	2.05	1.10	17.8	-113.2	35.62	~250
1255			SAMPLE					
1310	6.93	810	0.52	1.08	18.0	-106.4	37.26	~250

Purge Cycle (End): 22/8 seconds @ 50 psi
Flow Rate (ml/min End): ~250
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.54
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1224
Sample Time: 1255
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] Hexavalent Chromium
- [x] CCR Appendix III & Appendix IV
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate
- [x] Former VPDES Constituents

Other Observations / Equipment Operation Problems: DTP: 89.28
Sample ID: 082824NMW20D

Sampler Signature: [signature] Date: 08/28/24
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/28/24
Weather: Sunny, 90s

Project Name: Bremo Power Station
Project No /Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW20S
Field Calibration Completed: 0815 on 08/28/24
Well Diameter: 2.0 inches 53.54
Initial Depth to Water: 30.17 feet
Depth to Bottom: ~~53.54~~ 47.53 feet
Water Column Thickness: ~~17.36~~ 23.37 feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 18L104693
- [ ] In-Situ —
- [x] Turbidity Meter 19007
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)oC	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1115	6.39	858	5.84	1.70	17.7	31.3	30.44	~250
1120	6.39	832	4.06	1.77	17.7	38.0	30.51	~250
1125	6.41	804	3.59	1.98	17.7	33.5	30.53	~250
1130	6.41	793	3.07	1.92	17.7	31.7	30.51	~250
1135	—	—	change	air tank	—	—	—	—
1140	6.43	780	4.76	1.92	18.0	32.3	30.49	~250
1145	6.42	754	2.97	1.65	17.7	34.9	30.54	~250
1150	6.40	743	2.69	1.67	17.5	28.8	30.58	~250
1155	6.40	733	3.31	1.52	17.6	27.7	30.53	~250
1200	—	—	SAMPLE	—	—	—	—	—
1215	6.43	730	0.83	1.57	17.9	23.5	30.56	~250

Purge Cycle (End): 2416 seconds @ 40 psi
Flow Rate (ml/min End): ~250
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): ZM 08/28/24 ~~0.54~~ 0.3
Total Purge Volume (Gallons): ~4.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1103
Sample Time: 1200
Field Filtered (0.45um). [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents
- [x] Hexavalent Chromium
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate

Other Observations / Equipment Operation Problems:
ZM 08/28/24
DTP: ~~49.56~~ 48.68
Sample ID: 082824NMW20S

Sampler Signature: Z. Mondshine Date: 08/28/24
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/27/2024
Weather: Sunny 90's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW East Pond
Sampler(s): J. DAVIS
Well ID: MW-21
Field Calibration Completed: 08/27/2024 @ 0830
Well Diameter: 2.0 inches
Initial Depth to Water: 28.11 feet
Depth to Bottom: 52.63 feet
Water Column Thickness: 24.52 feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 16M103153
- [ ] In-Situ -
- [x] Turbidity Meter 21022
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] -

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1600 ~~1400~~ SD	6.33	508	23.1	~~10.76~~ SD	16.6	-35.9	30.40	~325
1603	6.37	508	9.70	1.73	16.9	-37.2	30.28	~325
1606	6.37	508	6.61	1.62	17.0	-38.9	30.31	~325
1609	6.35	507	4.26	1.43	16.9	-39.8	30.32	~325
1612	6.33	507	3.33	1.14	16.8	-39.9	30.25	~325
1615	-	S	A	M	P	L	E	-
1630	6.29	512	3.56	0.45	16.8	-43.5	30.41	~325

Purge Cycle (End): 14.5/3.5 seconds @ ~40 psi
Flow Rate (ml/min End): ~325
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 45.63 x .006 = ~.273
Total Purge Volume (Gallons): ~2.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge Start Time: 1553
Sample Time: 1615
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents
- [x] Hexavalent Chromium
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate

Other Observations / Equipment Operation Problems: DTP: 45.63
Sample ID: 082724NMW21

Sampler Signature: [signature] Date: 08/27/2024
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/28/24
Weather: sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW22
Field Calibration Completed: 0815 on 08/28/24
Well Diameter: 2.0 inches
Initial Depth to Water: 22.76 feet
Depth to Bottom: 57.98 feet
Water Column Thickness: 35.22 feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS18L04692
- [ ] In-Situ —
- [x] Turbidity Meter 19007
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1330	6.06	680	1.84	4.24	17.3	166.3	24.19	~300
1333	6.01	658	1.49	3.53	17.1	169.9	24.92	~300
1336	5.90	615	1.29	2.28	16.9	181.6	25.67	~300
1339	5.81	599	1.85	1.68	16.7	186.0	25.98	~300
1342	5.73	582	0.89	1.11	16.6	188.6	26.31	~300
1345	5.72	578	0.94	0.97	16.6	188.8	26.42	~300
1348	5.71	575	0.81	0.79	16.6	188.5	26.56	~300
1350	—	—	— SAMPLE	—	—	—	—	—
1420	5.84	582	3.70	0.92	16.9	153.5	26.53	~300

Purge Cycle (End): 2515 seconds @ 30 psi
Flow Rate (ml/min End): ~300
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.18
Total Purge Volume (Gallons): ~30
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1323
Sample Time: 1350
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents
- [x] Hexavalent Chromium
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate

Other Observations / Equipment Operation Problems: DTP: 30.81
Sample ID: 082824NMW22 Field Dup taken here @1400 ; 082824NEPFDup1 (c
Sampler Signature: Date: 08/28/24
QA/QC Signature: Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/28/2024
Weather: Sunny 90's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW East Pond
Sampler(s): J. DAVIS
Well ID: MW-23
Field Calibration Completed: 08/28/2024 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 26.63 feet
Depth to Bottom: 56.18 feet
Water Column Thickness: 29.55 feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 16M103153
- [ ] In-Situ —
- [x] Turbidity Meter 21022
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1250	5.99	369.9	1.63	0.30	16.4	74.3	31.20	~300
1255	6.03	373.5	1.62	0.26	16.5	73.2	32.13	~300
1300	6.06	377.3	1.64	0.21	16.5	73.6	33.22	~300
1305	6.06	379.2	1.65	0.21	16.4	75.7	33.64	~300
1310	-	S	A	M	P	L	E	-
1345	6.12	377.2	2.49	0.52	16.2	76.4	36.62	~300

Purge Cycle (End): 15.5/14.5 seconds @ ~40 psi
Flow Rate (ml/min End): ~300
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 48.78x.006= ~.293
Total Purge Volume (Gallons): ~3.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge Start Time: 1242 MS/MSD taken here
Sample Time: 1310
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents
- [x] Hexavalent Chromium
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate

Other Observations / Equipment Operation Problems: DTP: 48.98
Sample ID: 082824NMW23, 082824EPMSD, 082824EPMS

Sampler Signature: [signature] Date: 08/28/2024
QA/QC Signature: [signature] Date: 09/03/24

MICROPURGE SAMPLING LOG

Date: 08/28/24
Weather: Sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: Field Dup - EP
Field Calibration Completed: —
Well Diameter: — inches
Initial Depth to Water: — feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] ~~WL Indicator~~ ZM 08/28/24
- [x] ~~YSI~~ ZM 08/28/24
- [ ] In-Situ —
- [x] Turbidity Meter ZM 08/28/24
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor ZM 08/28/24
- [x] MP-15 Controller Box
- [x] ~~Dedicated Bladder Pump~~ ZM 08/28/24
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)°C	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1400	—	—	SAMPLE	—	—	—	—	—

Purge Cycle (End): — seconds @ — psi
Flow Rate (ml/min End): —
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): —
Total Purge Volume (Gallons): —
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample taken from MW22
Purge Start Time: —

Sample Time: 1400
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents
- [x] Hexavalent Chromium
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate

Other Observations / Equipment Operation Problems:
DTP: —
Sample ID: 082824NEPFDDuplicate

Sampler Signature: [signature] Date: 08/28/24
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: ~~08/26/24~~
Weather: sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mandshine
Well ID: Field Blank
Field Calibration Completed: —
Well Diameter: — inches
Initial Depth to Water: — feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] ~~WL Indicator~~ ZM 08/26/24
- [x] ~~YSI~~ ZM 08/26/24
- [ ] In-Situ —
- [x] ~~Turbidity Meter~~ ZM 08/26/24
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] ~~MP-15 Controller Box~~ ZM 08/26/24
- [x] ~~Dedicated Bladder Pump~~ ZM 08/26/24
- [ ] Non-dedicated BP
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
1230	—	—	SAMPLE	—				

Purge Cycle (End): — seconds @ — psi
Flow Rate (ml/min End): —
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): —
Total Purge Volume (Gallons): —
Purge Water Management: —
Purge Observations (color, odor, turbidity, sheen): Clear grab sample taken w/ tubing supplied
Purge Start Time: ~~1230~~ ZM 08/26/24 DI water near MW11
Sample Time: 1230
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [x] VSWMR Table 3.1 Metals
- [x] CCR Appendix III & Appendix IV
- [x] Former VPDES Constituents
- [x] Hexavalent Chromium
- [x] Ammonia, Hardness, Iron, Manganese & Nitrate

Other Observations / Equipment Operation Problems:
DTP: —
Sample ID: 082624NFBBlank

Sampler Signature: [signature] Date: 08/26/24
QA/QC Signature: [signature] Date: ~~08/~~ 09/04/2024

APPENDIX E
LABORATORY ANALYTICAL RESULTS

APPENDIX E.1
LABORATORY ANALYTICAL RESULTS
FIRST SEMI-ANNUAL GROUNDWATER MONITORING EVENT

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 20, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on February 13, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

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CERTIFICATIONS

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92712987001	**021224NMW11**	Water	02/12/24 13:20	02/13/24 10:35

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SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92712987001	**021224NMW11**	EPA 7199	IRC	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JMH1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92712987001	**021224NMW11**					
EPA 7199	Chromium, Hexavalent	0.085	ug/L	0.025	02/13/24 11:57	
EPA 6010D	Barium	3.3J	ug/L	5.0	02/20/24 15:00	
EPA 6010D	Calcium	19900	ug/L	100	02/20/24 15:00	
EPA 6010D	Copper	2.5J	ug/L	5.0	02/20/24 15:00	
EPA 6010D	Hardness, Total(SM 2340B)	103000	ug/L	662	02/20/24 15:00	
EPA 6010D	Vanadium	15.9	ug/L	5.0	02/20/24 15:00	
EPA 6020B	Cobalt	0.34J	ug/L	1.0	02/14/24 20:36	
EPA 6020B	Iron	313	ug/L	50.0	02/14/24 20:36	
EPA 6020B	Manganese	3.0	ug/L	2.0	02/14/24 20:36	
SM 2540C-2015	Total Dissolved Solids	149	mg/L	10.0	02/15/24 10:30	
EPA 9056A	Chloride	11.4	mg/L	1.0	02/13/24 23:10	
EPA 9056A	Nitrate as N	0.061J	mg/L	0.10	02/13/24 23:10	
EPA 9056A	Sulfate	6.3	mg/L	1.0	02/13/24 23:10	

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 832077

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92712989001

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

- MS (Lab ID: 4300171)
  - Fluoride
  - Sulfate
- MSD (Lab ID: 4300172)
  - Fluoride
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 4300172)
  - Fluoride

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Sample: 021224NMW11 **Lab ID: 92712987001** Collected: 02/12/24 13:20 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.085**	ug/L	0.025	0.025	1		02/13/24 11:57	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/14/24 16:02	02/20/24 15:00	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/14/24 16:02	02/20/24 15:00	7440-38-2	
Barium	**3.3J**	ug/L	5.0	0.79	1	02/14/24 16:02	02/20/24 15:00	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/14/24 16:02	02/20/24 15:00	7440-41-7	
Boron	ND	ug/L	50.0	4.0	1	02/14/24 16:02	02/20/24 15:00	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/14/24 16:02	02/20/24 15:00	7440-43-9	
Calcium	**19900**	ug/L	100	14.7	1	02/14/24 16:02	02/20/24 15:00	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/14/24 16:02	02/20/24 15:00	7440-47-3	
Copper	**2.5J**	ug/L	5.0	0.62	1	02/14/24 16:02	02/20/24 15:00	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/14/24 16:02	02/20/24 15:00	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	02/14/24 16:02	02/20/24 15:00	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/14/24 16:02	02/20/24 15:00	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/14/24 16:02	02/20/24 15:00	7440-22-4	
Hardness, Total(SM 2340B)	**103000**	ug/L	662	36.8	1	02/14/24 16:02	02/20/24 15:00		
Vanadium	**15.9**	ug/L	5.0	1.6	1	02/14/24 16:02	02/20/24 15:00	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/14/24 16:02	02/20/24 15:00	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.34J**	ug/L	1.0	0.050	1	02/14/24 13:35	02/14/24 20:36	7440-48-4	
Iron	**313**	ug/L	50.0	20.9	1	02/14/24 13:35	02/14/24 20:36	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/14/24 13:35	02/14/24 20:36	7439-92-1	
Lithium	ND	ug/L	2.5	0.50	1	02/14/24 13:35	02/14/24 20:36	7439-93-2	
Manganese	**3.0**	ug/L	2.0	1.0	1	02/14/24 13:35	02/14/24 20:36	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/14/24 13:35	02/14/24 20:36	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/14/24 13:35	02/14/24 20:36	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/14/24 13:59	02/15/24 12:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**149**	mg/L	10.0	10.0	1		02/15/24 10:30		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		03/06/24 23:40	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Sample: 021224NMW11 **Lab ID: 92712987001** Collected: 02/12/24 13:20 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**11.4**	mg/L	1.0	0.60	1		02/13/24 23:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/13/24 23:10	16984-48-8	
Nitrate as N	**0.061J**	mg/L	0.10	0.060	1		02/13/24 23:10	14797-55-8	
Sulfate	**6.3**	mg/L	1.0	0.50	1		02/13/24 23:10	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

QC Batch: 831931
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92712987001

METHOD BLANK: 4299279 Matrix: Water
Associated Lab Samples: 92712987001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.025	02/13/24 16:40	

LABORATORY CONTROL SAMPLE: 4299280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.11	109	85-115	

MATRIX SPIKE SAMPLE: 4299873

Parameter	Units	92712989003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.089	0.1	0.19	98	90-110	H1

SAMPLE DUPLICATE: 4299872

Parameter	Units	92712987001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	0.085	0.083	2	20	H1

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

QC Batch: 832173
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712987001

METHOD BLANK: 4300422 Matrix: Water
Associated Lab Samples: 92712987001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	02/15/24 11:51	

LABORATORY CONTROL SAMPLE: 4300423

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300424 4300425

Parameter	Units	92712351005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.5	2.5	98	97	75-125	1	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

QC Batch: 832303
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712987001

METHOD BLANK: 4301221 Matrix: Water
Associated Lab Samples: 92712987001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	02/20/24 14:54	
Arsenic	ug/L	ND	10.0	2.5	02/20/24 14:54	
Barium	ug/L	ND	5.0	0.79	02/20/24 14:54	
Beryllium	ug/L	ND	1.0	0.16	02/20/24 14:54	
Boron	ug/L	ND	50.0	4.0	02/20/24 14:54	
Cadmium	ug/L	ND	1.0	0.29	02/20/24 14:54	
Calcium	ug/L	ND	100	14.7	02/20/24 14:54	
Chromium	ug/L	ND	5.0	0.63	02/20/24 14:54	
Copper	ug/L	ND	5.0	0.62	02/20/24 14:54	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	02/20/24 14:54	
Molybdenum	ug/L	ND	5.0	2.6	02/20/24 14:54	
Nickel	ug/L	ND	5.0	0.88	02/20/24 14:54	
Selenium	ug/L	ND	10.0	4.1	02/20/24 14:54	
Silver	ug/L	ND	5.0	0.49	02/20/24 14:54	
Vanadium	ug/L	ND	5.0	1.6	02/20/24 14:54	
Zinc	ug/L	ND	10.0	3.0	02/20/24 14:54	

LABORATORY CONTROL SAMPLE: 4301222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	474	95	80-120	
Arsenic	ug/L	500	482	96	80-120	
Barium	ug/L	500	472	94	80-120	
Beryllium	ug/L	500	479	96	80-120	
Boron	ug/L	500	482	96	80-120	
Cadmium	ug/L	500	466	93	80-120	
Calcium	ug/L	5000	4520	90	80-120	
Chromium	ug/L	500	468	94	80-120	
Copper	ug/L	500	471	94	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	30000	91	80-120	
Molybdenum	ug/L	500	478	96	80-120	
Nickel	ug/L	500	473	95	80-120	
Selenium	ug/L	500	480	96	80-120	
Silver	ug/L	250	232	93	80-120	
Vanadium	ug/L	500	467	93	80-120	
Zinc	ug/L	500	478	96	80-120	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301223 4301224

Parameter	Units	92712987001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	501	505	100	101	75-125	1	20	
Arsenic	ug/L	ND	500	500	509	512	102	102	75-125	1	20	
Barium	ug/L	3.3J	500	500	495	510	98	101	75-125	3	20	
Beryllium	ug/L	ND	500	500	506	509	101	102	75-125	1	20	
Boron	ug/L	ND	500	500	509	513	102	103	75-125	1	20	
Cadmium	ug/L	ND	500	500	482	484	96	97	75-125	0	20	
Calcium	ug/L	19900	5000	5000	24800	25200	97	105	75-125	2	20	
Chromium	ug/L	ND	500	500	486	489	97	98	75-125	1	20	
Copper	ug/L	2.5J	500	500	493	495	98	99	75-125	0	20	
Hardness, Total(SM 2340B)	ug/L	103000	33100	33100	138000	139000	106	109	75-125	1	20	
Molybdenum	ug/L	ND	500	500	491	494	98	99	75-125	1	20	
Nickel	ug/L	ND	500	500	484	486	97	97	75-125	0	20	
Selenium	ug/L	ND	500	500	519	525	104	105	75-125	1	20	
Silver	ug/L	ND	250	250	244	245	98	98	75-125	1	20	
Vanadium	ug/L	15.9	500	500	506	506	98	98	75-125	0	20	
Zinc	ug/L	ND	500	500	491	493	98	98	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

QC Batch: 832223
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712987001

METHOD BLANK: 4300574 Matrix: Water
Associated Lab Samples: 92712987001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.050	02/14/24 20:27	
Iron	ug/L	ND	50.0	20.9	02/14/24 20:27	
Lead	ug/L	ND	1.0	0.077	02/14/24 20:27	
Lithium	ug/L	ND	2.5	0.50	02/14/24 20:27	
Manganese	ug/L	ND	2.0	1.0	02/14/24 20:27	
Thallium	ug/L	ND	0.20	0.050	02/14/24 20:27	
Tin	ug/L	ND	1.0	0.43	02/14/24 20:27	

LABORATORY CONTROL SAMPLE: 4300575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	50.6	101	80-120	
Iron	ug/L	1250	1300	104	80-120	
Lead	ug/L	50	50.1	100	80-120	
Lithium	ug/L	50	51.4	103	80-120	
Manganese	ug/L	50	50.9	102	80-120	
Thallium	ug/L	25	25.0	100	80-120	
Tin	ug/L	50	49.6	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300576 4300577

Parameter	Units	92712987001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	0.34J	50	50	51.3	51.9	102	103	75-125	1	20	
Iron	ug/L	313	1250	1250	1740	1760	114	115	75-125	1	20	
Lead	ug/L	ND	50	50	51.2	50.7	102	101	75-125	1	20	
Lithium	ug/L	ND	50	50	48.3	49.0	96	97	75-125	2	20	
Manganese	ug/L	3.0	50	50	55.9	55.5	106	105	75-125	1	20	
Thallium	ug/L	ND	25	25	25.6	25.6	102	102	75-125	0	20	
Tin	ug/L	ND	50	50	50.9	50.6	102	101	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

QC Batch: 832204
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712987001

METHOD BLANK: 4300531 Matrix: Water
Associated Lab Samples: 92712987001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/15/24 10:09	

LABORATORY CONTROL SAMPLE: 4300532

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	274	110	80-120	

SAMPLE DUPLICATE: 4300533

Parameter	Units	92712623001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	126	125	1	25	

SAMPLE DUPLICATE: 4300534

Parameter	Units	92713208011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	84.0	85.2	1	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

QC Batch: 837078
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712987001

METHOD BLANK: 4323787 Matrix: Water
Associated Lab Samples: 92712987001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	03/06/24 23:35	

LABORATORY CONTROL SAMPLE: 4323788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	4.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4323789 4323790

Parameter	Units	92712989006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	5.2	5.2	104	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4323791 4323792

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.045J	5	5	5.1	5.1	100	100	90-110	0	10	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

QC Batch: 832077
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712987001

METHOD BLANK: 4300169 Matrix: Water
Associated Lab Samples: 92712987001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/13/24 21:29	
Fluoride	mg/L	ND	0.10	0.050	02/13/24 21:29	
Nitrate as N	mg/L	ND	0.10	0.060	02/13/24 21:29	
Sulfate	mg/L	ND	1.0	0.50	02/13/24 21:29	

LABORATORY CONTROL SAMPLE: 4300170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Nitrate as N	mg/L	2.5	2.3	94	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300171 4300172

Parameter	Units	92712989001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.1	50	50	60.6	61.7	101	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	4.8	2.0	192	76	90-110	85	10	M1,R1
Nitrate as N	mg/L	0.15	2.5	2.5	2.6	2.7	98	100	90-110	2	10	
Sulfate	mg/L	158	50	50	185	185	54	56	90-110	0	10	M1

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QUALIFIERS

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_1SA2024_CCR&VSWMR_P_A
Pace Project No.: 92712987

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92712987001	**021224NMW11**	EPA 7199	831931		
92712987001	**021224NMW11**	EPA 3010A	832303	EPA 6010D	832444
92712987001	**021224NMW11**	EPA 3010A	832223	EPA 6020B	832433
92712987001	**021224NMW11**	EPA 7470A	832173	EPA 7470A	832399
92712987001	**021224NMW11**	SM 2540C-2015	832204		
92712987001	**021224NMW11**	EPA 350.1 Rev 2.0 1993	837078		
92712987001	**021224NMW11**	EPA 9056A	832077		

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Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project #: WO# : 92712987

92712987

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other:____ ☑ Client

Carrier Tracking Number: NA

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No **Date/Initials Person Examining Contents:** GCG 2/13/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92T010 **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 1.9 **Correction Factor: Add / Subtract (°C)** -0.1

Corrected Cooler Temp (°C): 1.7

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

		Comments/Discrepancy:
Chain of Custody Present?	☑ Yes ☐ No ☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes ☐ No ☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes ☐ No ☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes ☑ No ☐ N/A	4.
Sufficient Volume?	☑ Yes ☐ No ☐ N/A	5.
Correct Containers Used?	☑ Yes ☐ No ☐ N/A	6.
-Pace Containers Used?	☑ Yes ☐ No ☐ N/A	
Containers Intact?	☑ Yes ☐ No ☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes (Grey) ☐ No ☑ N/A	8.
Sample Labels Match COC?	☑ Yes ☐ No ☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT		
Headspace in VOA Vials (>5-6mm)?	☐ Yes ☐ No ☑ N/A	10.
Trip Blank Present?	☐ Yes ☐ No ☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes ☐ No ☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

Temp Log: Temp must be maintained at <6 C during login, record temp every 20 minutes.	
Time opened:	Temp:
Time:	put in cooler
Time:	Temp:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Qualtrax Document ID: 70677

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project # WO#:92712987

PM: AMB Due Date: 02/27/24

CLIENT: 92-DomEnergy

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1		1	1															—				2				
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	Crystal.Shadle@wsp.com
Customer Project #:			
Project Name:	Bremo_1SA2024_CCR&VSWMR_NEWPonds_A	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50156400
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [✓] ET

County / State origin of sample(s): Virginia

Data Deliverables: [✓] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals	7199 Chromium, Hexavalent	9056 - Cl/F/SO4/NO3	Radium 226	Radium 228 & Total Radium				Sample Comment	Preservation non-conformance identified for sample
0212 24NMW11	WT	G			2/12/24	1320	7			X	X	X	X	X	X	X				-All samples preserved on ice	

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) [illegible] (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Angela Baioni

AcctNum / Client ID:

Table #:

Profile / Template: 13861

Prelog / Bottle Ord. ID: EZ 3059933

Additional Instructions from Pace®:

Collected By: (Printed Name) Michael Knez

Signature: M. Knez

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
M. Knez / WSP M. Knez	2/12/24 @ 1900	GCG Pace Ltr Va	2/13/24 1055
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

March 19, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1706899
Samples Received:	02/17/2024
Project Number:	92712987
Description:	Bremo_1SA2024_CCR&VSWMR_P_A
Site:	001
Report To:	Angela Baioni
	9800 Kincey Avenue, Suite 100
	Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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021224NMW11 L1706899-01 5

Qc: Quality Control Summary 6

Radiochemistry by Method 903.0/9315 6

Radiochemistry by Method 904/9320 7

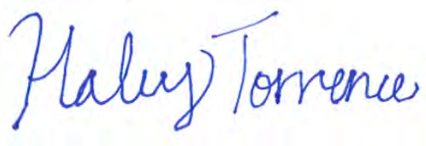
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021224NMW11 L1706899-01 Non-Potable Water			Collected by	Collected date/time 02/12/24 13:20	Received date/time 02/17/24 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 21:43	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238285	1	03/04/24 19:25	03/13/24 17:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/14/24 21:43	DDD	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.239	J	0.248		0.339		03/14/2024 21:43	WG2236782
(T) Barium	*103*					*30.0-143*	*03/14/2024 21:43*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.478	J	0.294	1.36	0.523	0.272	03/13/2024 17:03	WG2238285
(T) Barium	*118*					*30.0-143*	*03/13/2024 17:03*	WG2238285
(T) Yttrium	*106*					*30.0-136*	*03/13/2024 17:03*	WG2238285

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.717		0.385	0.623	03/14/2024 21:43	WG2236782

Method Blank (MB)

(MB) R4046646-1 03/14/24 20:12

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.142	J	0.117	0.170	
(T) Barium	*103*		*103*		

Laboratory Control Sample (LCS)

(LCS) R4046646-2 03/14/24 20:12

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.54	111	80.0-120	
(T) Barium			*102*		

L1706883-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706883-04 03/14/24 21:13 • (MS) R4046646-3 03/14/24 20:12 • (MSD) R4046646-5 03/14/24 20:42

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.630	23.2	20.5	113	99.2	1	75.0-125			12.5		20
(T) Barium		*104*			*102*	*103*							

L1706901-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706901-06 03/14/24 22:43 • (MS) R4046646-4 03/14/24 20:12 • (MSD) R4046646-6 03/14/24 20:42

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.152	21.5	22.1	107	110	1	75.0-125			2.89		20
(T) Barium		*104*			*103*	*104*							

Method Blank (MB)

(MB) R4047078-1 03/13/24 17:03

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.497		0.145	0.251	0.132
(T) Barium	*124*		*124*		
(T) Yttrium	*111*		*111*		

L1707769-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1707769-02 03/13/24 17:03 • (DUP) R4047078-5 03/13/24 17:03

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.92	0.374	0.625	0.328	1.34	0.390	0.676	0.352	35.9	1.08		20	3
(T) Barium	*134*				*109*	*109*							
(T) Yttrium	*100*				*106*	*106*							

Laboratory Control Sample (LCS)

(LCS) R4047078-2 03/13/24 17:03

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.67	113	80.0-120	
(T) Barium			*130*		
(T) Yttrium			*110*		

L1710452-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1710452-01 03/13/24 17:03 • (MS) R4047078-3 03/13/24 17:03 • (MSD) R4047078-4 03/13/24 17:03

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	-0.188	17.5	18.3	104	110	1	70.0-130			4.97		20
(T) Barium		*126*			*124*	*116*							
(T) Yttrium		*99.2*			*119*	*108*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Internal Transfer Chain of Custody

☐ Rush Multiplier_____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: ☒ Yes ☐ No

Workorder: 92712987 Workorder Name: Bremo_1SA2024_CCR&VSWMR_P_A Owner Received Date: 2/13/2024 Results Requested By: 2/27/2024

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

						Preserved Containers						Requested Analysis												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	HNO3						Ra226, 903.0	Ra228, 904.0/Combined Ra											A241 4706899 LAB USE ONLY
1	021224NMW11	PS	2/12/2024 13:20	92712987001	Water	2						X	X											-01
2																								
3																								
4																								
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible]	2/16/24 1800	[illegible]	2/17/24 0900
2				
3				

Comments

Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

2.5+0-2.5 TCM

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres. Correct/Check:	N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

L1706899

INTER_LABORATORY WORK ORDER # 92712987

(To be completed by sending lab)

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Sending Project No:	92712987
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	02/16/24
REQUESTED COMPLETION DATE:	**2/27/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra226, 903.0	BP1N		HNO3	1	SI-38RAD	SUB PASI RAD
Ra228, 904.0/Combined Ra	BP1N		HNO3	1	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 20, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on February 13, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

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CERTIFICATIONS

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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SAMPLE SUMMARY

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92712991001	**021224NFBBLANK**	Water	02/12/24 12:40	02/13/24 10:35

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92712991001	**021224NFBBLANK**	EPA 7199	IRC	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	RVS	1	PASI-A
		EPA 350.1 Rev 2.0 1993	AWL	1	PASI-A
		EPA 9056A	CDC	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92712991001	**021224NFBBLANK**					
EPA 6010D	Boron	24.0J	ug/L	50.0	02/20/24 15:42	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: March 20, 2024

General Information:
1 sample was analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 832077

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92712989001

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

- MS (Lab ID: 4300171)
  - Fluoride
  - Sulfate
- MSD (Lab ID: 4300172)
  - Fluoride
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 4300172)
  - Fluoride

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Sample: 021224NFBBLANK **Lab ID: 92712991001** Collected: 02/12/24 12:40 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.025	1		02/13/24 10:56	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/14/24 16:02	02/20/24 15:42	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/14/24 16:02	02/20/24 15:42	7440-38-2	
Barium	ND	ug/L	5.0	0.79	1	02/14/24 16:02	02/20/24 15:42	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/14/24 16:02	02/20/24 15:42	7440-41-7	
Boron	**24.0J**	ug/L	50.0	4.0	1	02/14/24 16:02	02/20/24 15:42	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/14/24 16:02	02/20/24 15:42	7440-43-9	
Calcium	ND	ug/L	100	14.7	1	02/14/24 16:02	02/20/24 15:42	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/14/24 16:02	02/20/24 15:42	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/14/24 16:02	02/20/24 15:42	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/14/24 16:02	02/20/24 15:42	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	02/14/24 16:02	02/20/24 15:42	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/14/24 16:02	02/20/24 15:42	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/14/24 16:02	02/20/24 15:42	7440-22-4	
Hardness, Total(SM 2340B)	ND	ug/L	662	36.8	1	02/14/24 16:02	02/20/24 15:42		
Vanadium	ND	ug/L	5.0	1.6	1	02/14/24 16:02	02/20/24 15:42	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/14/24 16:02	02/20/24 15:42	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	ND	ug/L	1.0	0.050	1	02/14/24 13:35	02/14/24 22:15	7440-48-4	
Iron	ND	ug/L	50.0	20.9	1	02/14/24 13:35	02/14/24 22:15	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/14/24 13:35	02/14/24 22:15	7439-92-1	
Lithium	ND	ug/L	2.5	0.50	1	02/14/24 13:35	02/14/24 22:15	7439-93-2	
Manganese	ND	ug/L	2.0	1.0	1	02/14/24 13:35	02/14/24 22:15	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/14/24 13:35	02/14/24 22:15	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/14/24 13:35	02/14/24 22:15	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/15/24 14:27	02/17/24 09:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		02/17/24 01:28		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		02/23/24 16:20	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Sample: 021224NFBBLANK **Lab ID: 92712991001** Collected: 02/12/24 12:40 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		02/13/24 22:26	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/13/24 22:26	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/13/24 22:26	14797-55-8	
Sulfate	ND	mg/L	1.0	0.50	1		02/13/24 22:26	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

QC Batch: 831931
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92712991001

METHOD BLANK: 4299279 Matrix: Water
Associated Lab Samples: 92712991001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.025	02/13/24 16:40	

LABORATORY CONTROL SAMPLE: 4299280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.11	109	85-115	

MATRIX SPIKE SAMPLE: 4299873

Parameter	Units	92712989003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.089	0.1	0.19	98	90-110	H1

SAMPLE DUPLICATE: 4299872

Parameter	Units	92712987001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	0.085	0.083	2	20	H1

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

QC Batch: 832624
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712991001

METHOD BLANK: 4302733 Matrix: Water
Associated Lab Samples: 92712991001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	02/17/24 09:28	

LABORATORY CONTROL SAMPLE: 4302734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302735 4302736

Parameter	Units	92712842001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.6	2.6	102	103	75-125	1	25	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

QC Batch: 832303
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712991001

METHOD BLANK: 4301221 Matrix: Water
Associated Lab Samples: 92712991001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	02/20/24 14:54	
Arsenic	ug/L	ND	10.0	2.5	02/20/24 14:54	
Barium	ug/L	ND	5.0	0.79	02/20/24 14:54	
Beryllium	ug/L	ND	1.0	0.16	02/20/24 14:54	
Boron	ug/L	ND	50.0	4.0	02/20/24 14:54	
Cadmium	ug/L	ND	1.0	0.29	02/20/24 14:54	
Calcium	ug/L	ND	100	14.7	02/20/24 14:54	
Chromium	ug/L	ND	5.0	0.63	02/20/24 14:54	
Copper	ug/L	ND	5.0	0.62	02/20/24 14:54	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	02/20/24 14:54	
Molybdenum	ug/L	ND	5.0	2.6	02/20/24 14:54	
Nickel	ug/L	ND	5.0	0.88	02/20/24 14:54	
Selenium	ug/L	ND	10.0	4.1	02/20/24 14:54	
Silver	ug/L	ND	5.0	0.49	02/20/24 14:54	
Vanadium	ug/L	ND	5.0	1.6	02/20/24 14:54	
Zinc	ug/L	ND	10.0	3.0	02/20/24 14:54	

LABORATORY CONTROL SAMPLE: 4301222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	474	95	80-120	
Arsenic	ug/L	500	482	96	80-120	
Barium	ug/L	500	472	94	80-120	
Beryllium	ug/L	500	479	96	80-120	
Boron	ug/L	500	482	96	80-120	
Cadmium	ug/L	500	466	93	80-120	
Calcium	ug/L	5000	4520	90	80-120	
Chromium	ug/L	500	468	94	80-120	
Copper	ug/L	500	471	94	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	30000	91	80-120	
Molybdenum	ug/L	500	478	96	80-120	
Nickel	ug/L	500	473	95	80-120	
Selenium	ug/L	500	480	96	80-120	
Silver	ug/L	250	232	93	80-120	
Vanadium	ug/L	500	467	93	80-120	
Zinc	ug/L	500	478	96	80-120	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301223 4301224

Parameter	Units	92712987001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	501	505	100	101	75-125	1	20	
Arsenic	ug/L	ND	500	500	509	512	102	102	75-125	1	20	
Barium	ug/L	3.3J	500	500	495	510	98	101	75-125	3	20	
Beryllium	ug/L	ND	500	500	506	509	101	102	75-125	1	20	
Boron	ug/L	ND	500	500	509	513	102	103	75-125	1	20	
Cadmium	ug/L	ND	500	500	482	484	96	97	75-125	0	20	
Calcium	ug/L	19900	5000	5000	24800	25200	97	105	75-125	2	20	
Chromium	ug/L	ND	500	500	486	489	97	98	75-125	1	20	
Copper	ug/L	2.5J	500	500	493	495	98	99	75-125	0	20	
Hardness, Total(SM 2340B)	ug/L	103000	33100	33100	138000	139000	106	109	75-125	1	20	
Molybdenum	ug/L	ND	500	500	491	494	98	99	75-125	1	20	
Nickel	ug/L	ND	500	500	484	486	97	97	75-125	0	20	
Selenium	ug/L	ND	500	500	519	525	104	105	75-125	1	20	
Silver	ug/L	ND	250	250	244	245	98	98	75-125	1	20	
Vanadium	ug/L	15.9	500	500	506	506	98	98	75-125	0	20	
Zinc	ug/L	ND	500	500	491	493	98	98	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

QC Batch: 832223
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712991001

METHOD BLANK: 4300574 Matrix: Water
Associated Lab Samples: 92712991001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.050	02/14/24 20:27	
Iron	ug/L	ND	50.0	20.9	02/14/24 20:27	
Lead	ug/L	ND	1.0	0.077	02/14/24 20:27	
Lithium	ug/L	ND	2.5	0.50	02/14/24 20:27	
Manganese	ug/L	ND	2.0	1.0	02/14/24 20:27	
Thallium	ug/L	ND	0.20	0.050	02/14/24 20:27	
Tin	ug/L	ND	1.0	0.43	02/14/24 20:27	

LABORATORY CONTROL SAMPLE: 4300575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	50.6	101	80-120	
Iron	ug/L	1250	1300	104	80-120	
Lead	ug/L	50	50.1	100	80-120	
Lithium	ug/L	50	51.4	103	80-120	
Manganese	ug/L	50	50.9	102	80-120	
Thallium	ug/L	25	25.0	100	80-120	
Tin	ug/L	50	49.6	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300576 4300577

Parameter	Units	92712987001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	0.34J	50	50	51.3	51.9	102	103	75-125	1	20	
Iron	ug/L	313	1250	1250	1740	1760	114	115	75-125	1	20	
Lead	ug/L	ND	50	50	51.2	50.7	102	101	75-125	1	20	
Lithium	ug/L	ND	50	50	48.3	49.0	96	97	75-125	2	20	
Manganese	ug/L	3.0	50	50	55.9	55.5	106	105	75-125	1	20	
Thallium	ug/L	ND	25	25	25.6	25.6	102	102	75-125	0	20	
Tin	ug/L	ND	50	50	50.9	50.6	102	101	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

QC Batch: 833124
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712991001

METHOD BLANK: 4305515 Matrix: Water
Associated Lab Samples: 92712991001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/17/24 01:16	

LABORATORY CONTROL SAMPLE: 4305516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	230	92	80-120	

SAMPLE DUPLICATE: 4305517

Parameter	Units	92712989006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	46.4	43.6	6	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

QC Batch: 834442
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712991001

METHOD BLANK: 4311440 Matrix: Water
Associated Lab Samples: 92712991001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	02/23/24 16:03	

LABORATORY CONTROL SAMPLE: 4311441

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4311442 4311443

Parameter	Units	92714695001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.2	10	10	11.0	11.0	98	98	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4311444 4311445

Parameter	Units	92714695002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.48	10	10	10.6	10.6	101	101	90-110	0	10	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

QC Batch: 832077
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712991001

METHOD BLANK: 4300169 Matrix: Water
Associated Lab Samples: 92712991001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/13/24 21:29	
Fluoride	mg/L	ND	0.10	0.050	02/13/24 21:29	
Nitrate as N	mg/L	ND	0.10	0.060	02/13/24 21:29	
Sulfate	mg/L	ND	1.0	0.50	02/13/24 21:29	

LABORATORY CONTROL SAMPLE: 4300170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Nitrate as N	mg/L	2.5	2.3	94	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300171 4300172

Parameter	Units	92712989001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.1	50	50	60.6	61.7	101	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	4.8	2.0	192	76	90-110	85	10	M1,R1
Nitrate as N	mg/L	0.15	2.5	2.5	2.6	2.7	98	100	90-110	2	10	
Sulfate	mg/L	158	50	50	185	185	54	56	90-110	0	10	M1

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QUALIFIERS

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_1SA2024_CCR&VSWMR_P_H
Pace Project No.: 92712991

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92712991001	**021224NFBBLANK**	EPA 7199	831931		
92712991001	**021224NFBBLANK**	EPA 3010A	832303	EPA 6010D	832444
92712991001	**021224NFBBLANK**	EPA 3010A	832223	EPA 6020B	832433
92712991001	**021224NFBBLANK**	EPA 7470A	832624	EPA 7470A	832681
92712991001	**021224NFBBLANK**	SM 2540C-2015	833124		
92712991001	**021224NFBBLANK**	EPA 350.1 Rev 2.0 1993	834442		
92712991001	**021224NFBBLANK**	EPA 9056A	832077		

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Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project #: **WO# : 92712991**

92712991

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Pace ☐ Other:____

Carrier Tracking Number: VA

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No Date/Initials Person Examining Contents: GLG 2/B

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 92T010 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 1.8 Correction Factor: Add / Subtract (°C) -0.1

Corrected Cooler Temp (°C): 1.7

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

Temp Log: Temp must be maintained at <6 C during login, record temp every 20 minutes.	
Time opened:	Temp:
Time:	put in cooler
Time:	Temp:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Qualtrax Document ID: 70677

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

*****Check all unpreserved Nitrates for chlorine**

Project # **WO#: 92712991**

PM: AMB Due Date: 02/27/24

CLIENT: 92-DomEnergy

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1		1	1															1				B				
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Hexavalent Chromium pH Adjustment

Project #

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
240224VFBBLANK	GMG	9.73	9.44	2/13/24 1056	4 DROPS ACID	224809

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	crystal.shadle@wsp.com
Customer Project #:			
Project Name:	Bremo_1SA2024_CCR&VSWMR_NEWPonds_H	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50156400
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [✓] ET

County / State origin of sample(s): Virginia

Data Deliverables: [✓] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals	7199 Chromium, Hexavalent	9056 - Cl/F/SO4/NO3	Radium 226	Radium 228 & Total Radium	Sample Comment
02[illegible]24NFBBLANK	WT	G			02/11/24	1210	7			X	X	X	X	X	X	X	-All samples preserved on ice -Level II data package requested
					02/12/24												

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 10[illegible] vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Angela Baioni

AcctNum / Client ID:

Table #:

Profile / Template: 13861

Prelog / Bottle Ord. ID: EZ 3059971

Preservation non-conformance identified for sample:

Additional Instructions from Pace®:

Collected By: (Printed Name) Michael Knez

Signature: M. Knez

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature) M. Knez / WSP	Date/Time: 2/12/24 @ 1400	Received by/Company: (Signature) GCG PACE AVL	Date/Time: 2/13/24 1035	Tracking Number:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

March 19, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1706897
Samples Received:	02/17/2024
Project Number:	92712991
Description:	Bremo_1SA2024_CCR&VSWMR_P_H
Site:	001
Report To:	Angela Baioni
	9800 Kincey Avenue, Suite 100
	Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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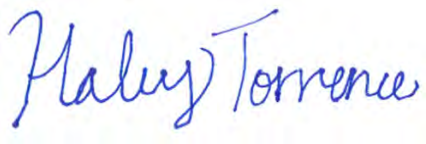
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	Collected by	Collected date/time	Received date/time
021224NFBBLANK L1706897-01 Non-Potable Water		02/12/24 12:40	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2232398	1	02/23/24 16:36	03/01/24 16:17	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238285	1	03/04/24 19:25	03/13/24 17:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2232398	1	02/23/24 16:36	03/13/24 17:03	DDD	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.179	J	0.165		0.186		03/01/2024 16:17	WG2232398
(T) Barium	*102*					*30.0-143*	*03/01/2024 16:17*	WG2232398

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.662		0.262	1.08	0.461	0.240	03/13/2024 17:03	WG2238285
(T) Barium	*124*					*30.0-143*	*03/13/2024 17:03*	WG2238285
(T) Yttrium	*103*					*30.0-136*	*03/13/2024 17:03*	WG2238285

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.841		0.310	0.497	03/13/2024 17:03	WG2232398

Method Blank (MB)

(MB) R4039992-1 02/29/24 11:47

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.102	J	0.115	0.184	
(T) Barium	*102*		*102*		

L1708078-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1708078-04 02/29/24 13:47 • (DUP) R4039992-5 02/29/24 12:47

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.869	0.354	0.212		0.877	0.576	0.580		0.894	0.0115		20	3
(T) Barium	*98.0*				*102*	*102*							

Laboratory Control Sample (LCS)

(LCS) R4039992-2 02/29/24 11:47

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.48	89.7	80.0-120	
(T) Barium			*101*		

L1706881-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706881-01 02/29/24 12:47 • (MS) R4039992-3 02/29/24 11:47 • (MSD) R4039992-4 02/29/24 11:47

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.171	17.9	20.6	88.7	102	1	75.0-125			13.7		20
(T) Barium		*102*			*102*	*103*							

Method Blank (MB)

(MB) R4047078-1 03/13/24 17:03

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.497		0.145	0.251	0.132
(T) Barium	*124*		*124*		
(T) Yttrium	*111*		*111*		

L1707769-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1707769-02 03/13/24 17:03 • (DUP) R4047078-5 03/13/24 17:03

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.92	0.374	0.625	0.328	1.34	0.390	0.676	0.352	35.9	1.08		20	3
(T) Barium	*134*				*109*	*109*							
(T) Yttrium	*100*				*106*	*106*							

Laboratory Control Sample (LCS)

(LCS) R4047078-2 03/13/24 17:03

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.67	113	80.0-120	
(T) Barium			*130*		
(T) Yttrium			*110*		

L1710452-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1710452-01 03/13/24 17:03 • (MS) R4047078-3 03/13/24 17:03 • (MSD) R4047078-4 03/13/24 17:03

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	-0.188	17.5	18.3	104	110	1	70.0-130			4.97		20
(T) Barium		*126*			*124*	*116*							
(T) Yttrium		*99.2*			*119*	*108*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Internal Transfer Chain of Custody

☐ Rush Multiplier_____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: ☒ Yes ☐ No

Workorder: 92712991 **Workorder Name:** Bremo_1SA2024_CCR&VSWMR_P_H **Owner Received Date:** 2/13/2024 **Results Requested By:** 2/27/2024

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

L1706897
A240

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Ra226 903.0	Ra228 904.0/Combined Ra											LAB USE ONLY
1	021224NFBBLANK	PS	2/12/2024 12:40	92712991001	Water	2						X	X											-01
2																								
3																								
4																								
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible]	2/16/24 1800	[illegible]	2/17/24 0900
2				
3				

Comments

Cooler Temperature on Receipt _____ °C | **Custody Seal** (Y) or N | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

2.5+0=2.5 TLA

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres. Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

L1706897

INTER_LABORATORY WORK ORDER # 92712991

(To be completed by sending lab)

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Sending Project No:	92712991
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	02/16/24
REQUESTED COMPLETION DATE:	**2/27/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra226 903.0	BP1N		HNO3	1	SI-38RAD	SUB PASI RAD
Ra228 904.0/Combined Ra	BP1N		HNO3	1	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 28, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on February 15, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: ENV STD DM
Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92713535001	**021424NMW19**	Water	02/14/24 15:25	02/15/24 10:10
92713535002	**021424NMW20S**	Water	02/14/24 16:00	02/15/24 10:10
92713535003	**021424NMW20D**	Water	02/14/24 16:30	02/15/24 10:10
92713535004	**021424NMW21**	Water	02/14/24 13:30	02/15/24 10:10
92713535005	**021424NMW22**	Water	02/14/24 16:10	02/15/24 10:10
92713535006	**021424NMW23**	Water	02/14/24 14:50	02/15/24 10:10
92713535007	**021424NEPFDDUPLICATE**	Water	02/14/24 15:00	02/15/24 10:10

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92713535001	**021424NMW19**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713535002	**021424NMW20S**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713535003	**021424NMW20D**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1, SBW	16	PASI-A
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713535004	**021424NMW21**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1, SBW	16	PASI-A
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713535005	**021424NMW22**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1, SBW	16	PASI-A
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713535006	**021424NMW23**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1, SBW	16	PASI-A

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SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713535007	**021424NEPFDDUPLICATE**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1, SBW	16	PASI-A
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713535001	**021424NMW19**					
EPA 6010D	Barium	101	ug/L	5.0	02/20/24 19:31	
EPA 6010D	Boron	969	ug/L	50.0	02/20/24 19:31	
EPA 6010D	Calcium	50600	ug/L	100	02/21/24 12:12	
EPA 6010D	Molybdenum	12.9	ug/L	5.0	02/20/24 19:31	
EPA 6010D	Hardness, Total(SM 2340B)	196000	ug/L	662	02/21/24 12:12	
EPA 6020B	Cobalt	2.3	ug/L	1.0	02/20/24 06:15	
EPA 6020B	Iron	9810	ug/L	250	02/20/24 15:41	L2
EPA 6020B	Lithium	1.6J	ug/L	2.5	02/20/24 06:15	
EPA 6020B	Manganese	640	ug/L	10.0	02/20/24 15:41	
SM 2540C-2015	Total Dissolved Solids	326	mg/L	10.0	02/20/24 17:00	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.22	mg/L	0.10	03/07/24 00:40	
EPA 9056A	Chloride	8.5	mg/L	1.0	02/16/24 02:36	
EPA 9056A	Fluoride	0.092J	mg/L	0.10	02/16/24 02:36	
EPA 9056A	Sulfate	120	mg/L	3.0	02/16/24 12:18	
92713535002	**021424NMW20S**					
EPA 6010D	Arsenic	4.0J	ug/L	10.0	02/20/24 19:34	
EPA 6010D	Barium	252	ug/L	5.0	02/20/24 19:34	
EPA 6010D	Boron	996	ug/L	50.0	02/20/24 19:34	
EPA 6010D	Calcium	82500	ug/L	100	02/21/24 12:15	
EPA 6010D	Copper	1.5J	ug/L	5.0	02/21/24 12:15	B
EPA 6010D	Molybdenum	60.6	ug/L	5.0	02/20/24 19:34	
EPA 6010D	Nickel	1.8J	ug/L	5.0	02/20/24 19:34	
EPA 6010D	Hardness, Total(SM 2340B)	313000	ug/L	662	02/21/24 12:15	
EPA 6020B	Cobalt	40.8	ug/L	1.0	02/20/24 06:19	
EPA 6020B	Iron	455	ug/L	50.0	02/20/24 06:19	L2
EPA 6020B	Lithium	219	ug/L	5.0	02/20/24 15:45	
EPA 6020B	Manganese	871	ug/L	20.0	02/20/24 15:50	
SM 2540C-2015	Total Dissolved Solids	374	mg/L	10.0	02/20/24 17:02	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.031J	mg/L	0.10	03/07/24 00:44	
EPA 9056A	Chloride	6.4	mg/L	1.0	02/16/24 02:51	
EPA 9056A	Fluoride	0.10	mg/L	0.10	02/16/24 02:51	
EPA 9056A	Nitrate as N	2.8	mg/L	0.10	02/16/24 02:51	M1
EPA 9056A	Sulfate	31.3	mg/L	1.0	02/16/24 02:51	
92713535003	**021424NMW20D**					
EPA 6010D	Arsenic	3.7J	ug/L	10.0	02/20/24 19:37	
EPA 6010D	Barium	96.2	ug/L	5.0	02/20/24 19:37	
EPA 6010D	Boron	819	ug/L	50.0	02/20/24 19:37	
EPA 6010D	Calcium	108000	ug/L	500	02/22/24 15:31	
EPA 6010D	Molybdenum	35.1	ug/L	5.0	02/20/24 19:37	
EPA 6010D	Hardness, Total(SM 2340B)	478000	ug/L	3310	02/22/24 15:31	
EPA 6020B	Cobalt	2.4	ug/L	1.0	02/20/24 06:24	
EPA 6020B	Iron	9980	ug/L	250	02/20/24 16:04	L2
EPA 6020B	Lead	0.13J	ug/L	1.0	02/20/24 06:24	
EPA 6020B	Lithium	32.4	ug/L	2.5	02/20/24 06:24	
EPA 6020B	Manganese	748	ug/L	10.0	02/20/24 16:04	
SM 2540C-2015	Total Dissolved Solids	418	mg/L	10.0	02/20/24 17:03	

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713535003	**021424NMW20D**					
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.22	mg/L	0.10	03/07/24 00:45	
EPA 9056A	Chloride	11.9	mg/L	1.0	02/16/24 03:53	
EPA 9056A	Fluoride	0.075J	mg/L	0.10	02/16/24 03:53	
EPA 9056A	Sulfate	34.0	mg/L	1.0	02/16/24 03:53	
92713535004	**021424NMW21**					
EPA 6010D	Barium	117	ug/L	5.0	02/21/24 12:26	
EPA 6010D	Boron	468	ug/L	50.0	02/20/24 19:51	
EPA 6010D	Calcium	62600	ug/L	100	02/21/24 12:26	M1
EPA 6010D	Nickel	0.97J	ug/L	5.0	02/21/24 12:26	
EPA 6010D	Hardness, Total(SM 2340B)	210000	ug/L	662	02/21/24 12:26	
EPA 6010D	Zinc	3.4J	ug/L	10.0	02/21/24 12:26	
EPA 6020B	Cobalt	6.5	ug/L	1.0	02/20/24 06:29	
EPA 6020B	Iron	10300	ug/L	250	02/20/24 16:09	L2
EPA 6020B	Lithium	1.3J	ug/L	2.5	02/20/24 06:29	
EPA 6020B	Manganese	1540	ug/L	40.0	02/20/24 16:13	
SM 2540C-2015	Total Dissolved Solids	319	mg/L	10.0	02/20/24 17:03	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.21	mg/L	0.10	03/07/24 00:47	
EPA 9056A	Chloride	12.8	mg/L	1.0	02/16/24 00:18	
EPA 9056A	Fluoride	0.077J	mg/L	0.10	02/16/24 00:18	
EPA 9056A	Sulfate	47.2	mg/L	1.0	02/16/24 00:18	
92713535005	**021424NMW22**					
EPA 7199	Chromium, Hexavalent	0.096	ug/L	0.025	02/15/24 16:29	H1
EPA 6010D	Barium	76.5	ug/L	5.0	02/21/24 12:40	
EPA 6010D	Boron	387	ug/L	50.0	02/20/24 20:06	
EPA 6010D	Calcium	33700	ug/L	100	02/21/24 12:40	
EPA 6010D	Chromium	0.90J	ug/L	5.0	02/21/24 12:40	
EPA 6010D	Nickel	8.7	ug/L	5.0	02/21/24 12:40	
EPA 6010D	Hardness, Total(SM 2340B)	139000	ug/L	662	02/21/24 12:40	
EPA 6010D	Zinc	11.4	ug/L	10.0	02/21/24 12:40	
EPA 6020B	Cobalt	3.6	ug/L	1.0	02/20/24 07:01	
EPA 6020B	Iron	76.5	ug/L	50.0	02/20/24 07:01	L2
EPA 6020B	Lithium	1.7J	ug/L	2.5	02/20/24 07:01	
EPA 6020B	Manganese	1090	ug/L	20.0	02/20/24 17:05	
SM 2540C-2015	Total Dissolved Solids	262	mg/L	10.0	02/20/24 17:04	
EPA 9056A	Chloride	15.3	mg/L	1.0	02/16/24 03:37	
EPA 9056A	Fluoride	0.084J	mg/L	0.10	02/16/24 03:37	
EPA 9056A	Nitrate as N	0.067J	mg/L	0.10	02/16/24 03:37	
EPA 9056A	Sulfate	75.5	mg/L	1.0	02/16/24 03:37	
92713535006	**021424NMW23**					
EPA 6010D	Barium	66.6	ug/L	5.0	02/21/24 12:43	
EPA 6010D	Boron	160	ug/L	50.0	02/20/24 20:08	
EPA 6010D	Calcium	33400	ug/L	100	02/21/24 12:43	
EPA 6010D	Nickel	2.3J	ug/L	5.0	02/21/24 12:43	
EPA 6010D	Hardness, Total(SM 2340B)	166000	ug/L	662	02/21/24 12:43	
EPA 6020B	Cobalt	2.9	ug/L	1.0	02/20/24 07:06	
EPA 6020B	Iron	462	ug/L	50.0	02/20/24 07:06	L2

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713535006	**021424NMW23**					
EPA 6020B	Lithium	1.2J	ug/L	2.5	02/20/24 07:06	
EPA 6020B	Manganese	628	ug/L	10.0	02/20/24 17:10	
SM 2540C-2015	Total Dissolved Solids	225	mg/L	10.0	02/20/24 17:05	
EPA 9056A	Chloride	16.1	mg/L	1.0	02/16/24 02:06	
EPA 9056A	Fluoride	0.11	mg/L	0.10	02/16/24 02:06	
EPA 9056A	Sulfate	14.4	mg/L	1.0	02/16/24 02:06	
92713535007	**021424NEPFDDUPLICATE**					
EPA 7199	Chromium, Hexavalent	0.12	ug/L	0.025	02/15/24 13:50	
EPA 6010D	Barium	68.2	ug/L	5.0	02/21/24 12:46	
EPA 6010D	Boron	164	ug/L	50.0	02/20/24 20:11	
EPA 6010D	Calcium	34400	ug/L	100	02/21/24 12:46	
EPA 6010D	Nickel	2.9J	ug/L	5.0	02/21/24 12:46	
EPA 6010D	Hardness, Total(SM 2340B)	171000	ug/L	662	02/21/24 12:46	
EPA 6020B	Cobalt	2.9	ug/L	1.0	02/20/24 07:10	
EPA 6020B	Iron	454	ug/L	50.0	02/20/24 07:10	L2
EPA 6020B	Lithium	1.2J	ug/L	2.5	02/20/24 07:10	
EPA 6020B	Manganese	615	ug/L	10.0	02/20/24 17:14	
SM 2540C-2015	Total Dissolved Solids	232	mg/L	10.0	02/21/24 12:51	
EPA 9056A	Chloride	16.1	mg/L	1.0	02/16/24 02:21	
EPA 9056A	Fluoride	0.11	mg/L	0.10	02/16/24 02:21	
EPA 9056A	Sulfate	14.4	mg/L	1.0	02/16/24 02:21	

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: March 28, 2024

General Information:
7 samples were analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 021424NMW19 (Lab ID: 92713535001)
- 021424NMW20D (Lab ID: 92713535003)
- 021424NMW20S (Lab ID: 92713535002)
- 021424NMW22 (Lab ID: 92713535005)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: March 28, 2024

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 832927

B: Analyte was detected in the associated method blank.

- BLANK for HBN 832927 [MPRP/600 (Lab ID: 4304175)
  - Copper

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 832927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92713535004

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

- MS (Lab ID: 4304177)
  - Calcium
- MSD (Lab ID: 4304178)
  - Calcium

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: March 28, 2024

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 833004

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 4304628)
  - Iron

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: March 28, 2024

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: March 28, 2024

General Information:
7 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: March 28, 2024

General Information:
7 samples were analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: March 28, 2024

General Information:
7 samples were analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 832455

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92713535002,92713535004

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

- MS (Lab ID: 4302024)
  - Nitrate as N
- MSD (Lab ID: 4302025)
  - Nitrate as N

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW19 **Lab ID: 92713535001** Collected: 02/14/24 15:25 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.025	1		02/15/24 15:54	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/16/24 12:55	02/20/24 19:31	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:31	7440-38-2	
Barium	**101**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:31	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:31	7440-41-7	
Boron	**969**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:31	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:12	7440-43-9	
Calcium	**50600**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:12	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:12	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:12	7440-50-8	
Molybdenum	**12.9**	ug/L	5.0	2.6	1	02/16/24 12:55	02/20/24 19:31	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	02/16/24 12:55	02/20/24 19:31	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:31	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:12	7440-22-4	
Hardness, Total(SM 2340B)	**196000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:12		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:12	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/20/24 19:31	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**2.3**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 06:15	7440-48-4	
Iron	**9810**	ug/L	250	105	5	02/16/24 16:20	02/20/24 15:41	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 06:15	7439-92-1	
Lithium	**1.6J**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 06:15	7439-93-2	
Manganese	**640**	ug/L	10.0	5.1	5	02/16/24 16:20	02/20/24 15:41	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 06:15	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 06:15	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 10:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**326**	mg/L	10.0	10.0	1		02/20/24 17:00		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.22**	mg/L	0.10	0.031	1		03/07/24 00:40	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW19 **Lab ID: 92713535001** Collected: 02/14/24 15:25 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**8.5**	mg/L	1.0	0.60	1		02/16/24 02:36	16887-00-6	
Fluoride	**0.092J**	mg/L	0.10	0.050	1		02/16/24 02:36	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/16/24 02:36	14797-55-8	
Sulfate	**120**	mg/L	3.0	1.5	3		02/16/24 12:18	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW20S **Lab ID: 92713535002** Collected: 02/14/24 16:00 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.025	1		02/15/24 16:12	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/16/24 12:55	02/20/24 19:34	7440-36-0	
Arsenic	**4.0J**	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:34	7440-38-2	
Barium	**252**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:34	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:34	7440-41-7	
Boron	**996**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:34	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:15	7440-43-9	
Calcium	**82500**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:15	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:15	7440-47-3	
Copper	**1.5J**	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:15	7440-50-8	B
Molybdenum	**60.6**	ug/L	5.0	2.6	1	02/16/24 12:55	02/20/24 19:34	7439-98-7	
Nickel	**1.8J**	ug/L	5.0	0.88	1	02/16/24 12:55	02/20/24 19:34	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:34	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:15	7440-22-4	
Hardness, Total(SM 2340B)	**313000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:15		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:15	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/20/24 19:34	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**40.8**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 06:19	7440-48-4	
Iron	**455**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 06:19	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 06:19	7439-92-1	
Lithium	**219**	ug/L	5.0	1.0	2	02/16/24 16:20	02/20/24 15:45	7439-93-2	
Manganese	**871**	ug/L	20.0	10.2	10	02/16/24 16:20	02/20/24 15:50	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 06:19	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 06:19	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 10:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**374**	mg/L	10.0	10.0	1		02/20/24 17:02		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.031J**	mg/L	0.10	0.031	1		03/07/24 00:44	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW20S **Lab ID: 92713535002** Collected: 02/14/24 16:00 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**6.4**	mg/L	1.0	0.60	1		02/16/24 02:51	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		02/16/24 02:51	16984-48-8	
Nitrate as N	**2.8**	mg/L	0.10	0.060	1		02/16/24 02:51	14797-55-8	M1
Sulfate	**31.3**	mg/L	1.0	0.50	1		02/16/24 02:51	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW20D **Lab ID: 92713535003** Collected: 02/14/24 16:30 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.025	1		02/15/24 16:47	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/16/24 12:55	02/20/24 19:37	7440-36-0	
Arsenic	**3.7J**	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:37	7440-38-2	
Barium	**96.2**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:37	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:37	7440-41-7	
Boron	**819**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:37	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:18	7440-43-9	
Calcium	**108000**	ug/L	500	73.7	5	02/16/24 12:55	02/22/24 15:31	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:18	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:18	7440-50-8	
Molybdenum	**35.1**	ug/L	5.0	2.6	1	02/16/24 12:55	02/20/24 19:37	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	02/16/24 12:55	02/20/24 19:37	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:37	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:18	7440-22-4	
Hardness, Total(SM 2340B)	**478000**	ug/L	3310	184	5	02/16/24 12:55	02/22/24 15:31		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:18	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/20/24 19:37	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**2.4**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 06:24	7440-48-4	
Iron	**9980**	ug/L	250	105	5	02/16/24 16:20	02/20/24 16:04	7439-89-6	L2
Lead	**0.13J**	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 06:24	7439-92-1	
Lithium	**32.4**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 06:24	7439-93-2	
Manganese	**748**	ug/L	10.0	5.1	5	02/16/24 16:20	02/20/24 16:04	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 06:24	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 06:24	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 10:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**418**	mg/L	10.0	10.0	1		02/20/24 17:03		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.22**	mg/L	0.10	0.031	1		03/07/24 00:45	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW20D **Lab ID: 92713535003** Collected: 02/14/24 16:30 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**11.9**	mg/L	1.0	0.60	1		02/16/24 03:53	16887-00-6	
Fluoride	**0.075J**	mg/L	0.10	0.050	1		02/16/24 03:53	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/16/24 03:53	14797-55-8	
Sulfate	**34.0**	mg/L	1.0	0.50	1		02/16/24 03:53	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW21 **Lab ID: 92713535004** Collected: 02/14/24 13:30 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.0043	1		02/15/24 12:21	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/16/24 12:55	02/21/24 12:26	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:51	7440-38-2	
Barium	**117**	ug/L	5.0	0.79	1	02/16/24 12:55	02/21/24 12:26	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:51	7440-41-7	
Boron	**468**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:51	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:26	7440-43-9	
Calcium	**62600**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:26	7440-70-2	M1
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:26	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:26	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/16/24 12:55	02/22/24 15:34	7439-98-7	
Nickel	**0.97J**	ug/L	5.0	0.88	1	02/16/24 12:55	02/21/24 12:26	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:51	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:26	7440-22-4	
Hardness, Total(SM 2340B)	**210000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:26		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:26	7440-62-2	
Zinc	**3.4J**	ug/L	10.0	3.0	1	02/16/24 12:55	02/21/24 12:26	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**6.5**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 06:29	7440-48-4	
Iron	**10300**	ug/L	250	105	5	02/16/24 16:20	02/20/24 16:09	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 06:29	7439-92-1	
Lithium	**1.3J**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 06:29	7439-93-2	
Manganese	**1540**	ug/L	40.0	20.4	20	02/16/24 16:20	02/20/24 16:13	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 06:29	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 06:29	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 10:49	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**319**	mg/L	10.0	10.0	1		02/20/24 17:03		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.21**	mg/L	0.10	0.031	1		03/07/24 00:47	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW21 **Lab ID: 92713535004** Collected: 02/14/24 13:30 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**12.8**	mg/L	1.0	0.60	1		02/16/24 00:18	16887-00-6	
Fluoride	**0.077J**	mg/L	0.10	0.050	1		02/16/24 00:18	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/16/24 00:18	14797-55-8	
Sulfate	**47.2**	mg/L	1.0	0.50	1		02/16/24 00:18	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW22 **Lab ID: 92713535005** Collected: 02/14/24 16:10 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.096**	ug/L	0.025	0.025	1		02/15/24 16:29	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/16/24 12:55	02/21/24 12:40	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 20:06	7440-38-2	
Barium	**76.5**	ug/L	5.0	0.79	1	02/16/24 12:55	02/21/24 12:40	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 20:06	7440-41-7	
Boron	**387**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 20:06	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:40	7440-43-9	
Calcium	**33700**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:40	7440-70-2	
Chromium	**0.90J**	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:40	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:40	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	03/27/24 05:00	03/27/24 16:02	7439-98-7	
Nickel	**8.7**	ug/L	5.0	0.88	1	02/16/24 12:55	02/21/24 12:40	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 20:06	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:40	7440-22-4	
Hardness, Total(SM 2340B)	**139000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:40		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:40	7440-62-2	
Zinc	**11.4**	ug/L	10.0	3.0	1	02/16/24 12:55	02/21/24 12:40	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**3.6**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 07:01	7440-48-4	
Iron	**76.5**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 07:01	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 07:01	7439-92-1	
Lithium	**1.7J**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 07:01	7439-93-2	
Manganese	**1090**	ug/L	20.0	10.2	10	02/16/24 16:20	02/20/24 17:05	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 07:01	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 07:01	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 10:56	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**262**	mg/L	10.0	10.0	1		02/20/24 17:04		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		03/07/24 00:51	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW22 **Lab ID: 92713535005** Collected: 02/14/24 16:10 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**15.3**	mg/L	1.0	0.60	1		02/16/24 03:37	16887-00-6	
Fluoride	**0.084J**	mg/L	0.10	0.050	1		02/16/24 03:37	16984-48-8	
Nitrate as N	**0.067J**	mg/L	0.10	0.060	1		02/16/24 03:37	14797-55-8	
Sulfate	**75.5**	mg/L	1.0	0.50	1		02/16/24 03:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW23 **Lab ID: 92713535006** Collected: 02/14/24 14:50 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.025	1		02/15/24 13:14	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/16/24 12:55	02/21/24 12:43	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 20:08	7440-38-2	
Barium	**66.6**	ug/L	5.0	0.79	1	02/16/24 12:55	02/21/24 12:43	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 20:08	7440-41-7	
Boron	**160**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 20:08	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:43	7440-43-9	
Calcium	**33400**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:43	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:43	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:43	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	03/27/24 05:00	03/27/24 16:16	7439-98-7	
Nickel	**2.3J**	ug/L	5.0	0.88	1	02/16/24 12:55	02/21/24 12:43	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 20:08	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:43	7440-22-4	
Hardness, Total(SM 2340B)	**166000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:43		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:43	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/21/24 12:43	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**2.9**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 07:06	7440-48-4	
Iron	**462**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 07:06	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 07:06	7439-92-1	
Lithium	**1.2J**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 07:06	7439-93-2	
Manganese	**628**	ug/L	10.0	5.1	5	02/16/24 16:20	02/20/24 17:10	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 07:06	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 07:06	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 10:58	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**225**	mg/L	10.0	10.0	1		02/20/24 17:05		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		03/07/24 00:52	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NMW23 **Lab ID: 92713535006** Collected: 02/14/24 14:50 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**16.1**	mg/L	1.0	0.60	1		02/16/24 02:06	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/16/24 02:06	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/16/24 02:06	14797-55-8	
Sulfate	**14.4**	mg/L	1.0	0.50	1		02/16/24 02:06	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NEPFDDUPLICATE **Lab ID: 92713535007** Collected: 02/14/24 15:00 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.12**	ug/L	0.025	0.025	1		02/15/24 13:50	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/16/24 12:55	02/21/24 12:46	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 20:11	7440-38-2	
Barium	**68.2**	ug/L	5.0	0.79	1	02/16/24 12:55	02/21/24 12:46	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 20:11	7440-41-7	
Boron	**164**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 20:11	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:46	7440-43-9	
Calcium	**34400**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:46	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:46	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:46	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	03/27/24 05:00	03/27/24 16:19	7439-98-7	
Nickel	**2.9J**	ug/L	5.0	0.88	1	02/16/24 12:55	02/21/24 12:46	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 20:11	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:46	7440-22-4	
Hardness, Total(SM 2340B)	**171000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:46		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:46	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/21/24 12:46	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**2.9**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 07:10	7440-48-4	
Iron	**454**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 07:10	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 07:10	7439-92-1	
Lithium	**1.2J**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 07:10	7439-93-2	
Manganese	**615**	ug/L	10.0	5.1	5	02/16/24 16:20	02/20/24 17:14	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 07:10	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 07:10	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 11:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**232**	mg/L	10.0	10.0	1		02/21/24 12:51		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		03/07/24 00:54	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Sample: 021424NEPFDDUPLICATE **Lab ID: 92713535007** Collected: 02/14/24 15:00 Received: 02/15/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**16.1**	mg/L	1.0	0.60	1		02/16/24 02:21	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		02/16/24 02:21	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/16/24 02:21	14797-55-8	
Sulfate	**14.4**	mg/L	1.0	0.50	1		02/16/24 02:21	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 832547 | Analysis Method: EPA 7199
QC Batch Method: EPA 7199 | Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

METHOD BLANK: 4302264 Matrix: Water
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.025	02/15/24 17:11	

LABORATORY CONTROL SAMPLE: 4302265

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.096	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302266 4302267

Parameter	Units	92713535004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	ND	0.1	0.1	0.10	0.098	101	98	90-110	3	20	H1

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 833176 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

METHOD BLANK: 4305625 Matrix: Water
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	02/20/24 10:33	

LABORATORY CONTROL SAMPLE: 4305626

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.4	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4305627 4305628

Parameter	Units	92713535004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.4	2.4	94	95	75-125	1	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 832927
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

METHOD BLANK: 4304175 Matrix: Water
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	02/20/24 19:11	
Arsenic	ug/L	ND	10.0	2.5	02/20/24 19:11	
Barium	ug/L	ND	5.0	0.79	02/20/24 19:11	
Beryllium	ug/L	ND	1.0	0.16	02/20/24 19:11	
Boron	ug/L	ND	50.0	4.0	02/20/24 19:11	
Cadmium	ug/L	ND	1.0	0.29	02/21/24 11:52	
Calcium	ug/L	ND	100	14.7	02/21/24 11:52	
Chromium	ug/L	ND	5.0	0.63	02/21/24 11:52	
Copper	ug/L	2.0J	5.0	0.62	02/21/24 11:52	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	02/21/24 11:52	
Molybdenum	ug/L	ND	5.0	2.6	02/20/24 19:11	
Nickel	ug/L	ND	5.0	0.88	02/20/24 19:11	
Selenium	ug/L	ND	10.0	4.1	02/20/24 19:11	
Silver	ug/L	ND	5.0	0.49	02/21/24 11:52	
Vanadium	ug/L	ND	5.0	1.6	02/21/24 11:52	
Zinc	ug/L	ND	10.0	3.0	02/20/24 19:11	

LABORATORY CONTROL SAMPLE: 4304176

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	460	92	80-120	
Arsenic	ug/L	500	469	94	80-120	
Barium	ug/L	500	475	95	80-120	
Beryllium	ug/L	500	463	93	80-120	
Boron	ug/L	500	463	93	80-120	
Cadmium	ug/L	500	500	100	80-120	
Calcium	ug/L	5000	5130	103	80-120	
Chromium	ug/L	500	503	101	80-120	
Copper	ug/L	500	506	101	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	33000	100	80-120	
Molybdenum	ug/L	500	459	92	80-120	
Nickel	ug/L	500	460	92	80-120	
Selenium	ug/L	500	459	92	80-120	
Silver	ug/L	250	249	100	80-120	
Vanadium	ug/L	500	501	100	80-120	
Zinc	ug/L	500	460	92	80-120	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4304177 4304178

Parameter	Units	92713535004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	517	529	103	106	75-125	2	20	
Arsenic	ug/L	ND	500	500	474	486	95	97	75-125	3	20	
Barium	ug/L	117	500	500	645	630	106	102	75-125	2	20	
Beryllium	ug/L	ND	500	500	467	480	93	96	75-125	3	20	
Boron	ug/L	468	500	500	954	973	97	101	75-125	2	20	
Cadmium	ug/L	ND	500	500	497	508	99	102	75-125	2	20	
Calcium	ug/L	62600	5000	5000	71700	69000	183	128	75-125	4	20	M1
Chromium	ug/L	ND	500	500	511	521	102	104	75-125	2	20	
Copper	ug/L	ND	500	500	519	538	104	108	75-125	3	20	
Hardness, Total(SM 2340B)	ug/L	210000	33100	33100	257000	251000	143	125	75-125	2	20	
Molybdenum	ug/L	ND	500	500	507	520	101	104	75-125	2	20	
Nickel	ug/L	0.97J	500	500	497	509	99	102	75-125	2	20	
Selenium	ug/L	ND	500	500	479	489	96	98	75-125	2	20	
Silver	ug/L	ND	250	250	258	264	103	106	75-125	2	20	
Vanadium	ug/L	ND	500	500	510	522	102	104	75-125	2	20	
Zinc	ug/L	3.4J	500	500	501	512	100	102	75-125	2	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 842029
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535005, 92713535006, 92713535007

METHOD BLANK: 4348849 Matrix: Water
Associated Lab Samples: 92713535005, 92713535006, 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Molybdenum	ug/L	ND	5.0	2.6	03/27/24 15:56	

LABORATORY CONTROL SAMPLE: 4348850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Molybdenum	ug/L	500	516	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4348851 4348852

Parameter	Units	92713535005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Molybdenum	ug/L	ND	500	500	475	455	95	91	75-125	4	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 833004
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

METHOD BLANK: 4304627 Matrix: Water
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.050	02/20/24 05:28	
Iron	ug/L	ND	50.0	20.9	02/20/24 05:28	
Lead	ug/L	ND	1.0	0.077	02/20/24 05:28	
Lithium	ug/L	ND	2.5	0.50	02/20/24 05:28	
Manganese	ug/L	ND	2.0	1.0	02/20/24 05:28	
Thallium	ug/L	ND	0.20	0.050	02/20/24 05:28	
Tin	ug/L	ND	1.0	0.43	02/20/24 05:28	

LABORATORY CONTROL SAMPLE: 4304628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	50.8	102	80-120	
Iron	ug/L	1250	1290	103	80-120	L2
Lead	ug/L	50	51.8	104	80-120	
Lithium	ug/L	50	52.8	106	80-120	
Manganese	ug/L	50	51.0	102	80-120	
Thallium	ug/L	25	25.3	101	80-120	
Tin	ug/L	50	52.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4304629 4304630

Parameter	Units	92713535004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	6.5	50	50	57.5	57.0	102	101	75-125	1	20	
Iron	ug/L	10300	1250	1250	11400	11600	83	102	75-125	2	20	
Lead	ug/L	ND	50	50	52.0	52.1	104	104	75-125	0	20	
Lithium	ug/L	1.3J	50	50	47.9	47.9	93	93	75-125	0	20	
Manganese	ug/L	1540	50	50	1590	1600	84	114	75-125	1	20	
Thallium	ug/L	ND	25	25	25.7	25.7	103	103	75-125	0	20	
Tin	ug/L	ND	50	50	52.0	52.0	104	104	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 833597
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006

METHOD BLANK: 4307410 Matrix: Water
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/20/24 16:56	

LABORATORY CONTROL SAMPLE: 4307411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	226	90	80-120	

SAMPLE DUPLICATE: 4307412

Parameter	Units	92713535004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	319	318	0	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 833861
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535007

METHOD BLANK: 4308590 Matrix: Water
Associated Lab Samples: 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	02/23/24 16:08	

LABORATORY CONTROL SAMPLE: 4308591

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	274	110	80-120	

SAMPLE DUPLICATE: 4308592

Parameter	Units	92713535007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	232	232	0	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 837085
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

METHOD BLANK: 4323807 Matrix: Water
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	03/07/24 00:18	

LABORATORY CONTROL SAMPLE: 4323808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	4.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4323809 4323810

Parameter	Units	92715121002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	5.1	5.1	101	101	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4323811 4323812

Parameter	Units	92713535004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.21	5	5	5.2	5.2	99	100	90-110	1	10	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

QC Batch: 832455
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

METHOD BLANK: 4302020 Matrix: Water
Associated Lab Samples: 92713535001, 92713535002, 92713535003, 92713535004, 92713535005, 92713535006, 92713535007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/16/24 04:08	
Fluoride	mg/L	ND	0.10	0.050	02/16/24 04:08	
Nitrate as N	mg/L	ND	0.10	0.060	02/16/24 04:08	
Sulfate	mg/L	ND	1.0	0.50	02/16/24 04:08	

LABORATORY CONTROL SAMPLE: 4302021

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.2	104	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Nitrate as N	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	52.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302022 4302023

Parameter	Units	92713535004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.8	50	50	63.1	64.6	101	103	90-110	2	10	
Fluoride	mg/L	0.077J	2.5	2.5	2.5	2.6	96	100	90-110	3	10	
Nitrate as N	mg/L	ND	2.5	2.5	2.4	2.5	94	97	90-110	3	10	
Sulfate	mg/L	47.2	50	50	97.4	98.9	100	103	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302024 4302025

Parameter	Units	92713535002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.4	50	50	58.7	59.1	105	105	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.5	2.5	96	97	90-110	1	10	
Nitrate as N	mg/L	2.8	2.5	2.5	4.7	4.8	79	80	90-110	0	10	M1
Sulfate	mg/L	31.3	50	50	83.7	84.2	105	106	90-110	1	10	

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QUALIFIERS

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the EPA method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713535001	**021424NMW19**	EPA 7199	832547		
92713535002	**021424NMW20S**	EPA 7199	832547		
92713535003	**021424NMW20D**	EPA 7199	832547		
92713535004	**021424NMW21**	EPA 7199	832547		
92713535005	**021424NMW22**	EPA 7199	832547		
92713535006	**021424NMW23**	EPA 7199	832547		
92713535007	**021424NEPFDDUPLICATE**	EPA 7199	832547		
92713535001	**021424NMW19**	EPA 3010A	832927	EPA 6010D	833059
92713535002	**021424NMW20S**	EPA 3010A	832927	EPA 6010D	833059
92713535003	**021424NMW20D**	EPA 3010A	832927	EPA 6010D	833059
92713535004	**021424NMW21**	EPA 3010A	832927	EPA 6010D	833059
92713535005	**021424NMW22**	EPA 3010A	832927	EPA 6010D	833059
92713535005	**021424NMW22**	EPA 3010A	842029	EPA 6010D	842032
92713535006	**021424NMW23**	EPA 3010A	832927	EPA 6010D	833059
92713535006	**021424NMW23**	EPA 3010A	842029	EPA 6010D	842032
92713535007	**021424NEPFDDUPLICATE**	EPA 3010A	832927	EPA 6010D	833059
92713535007	**021424NEPFDDUPLICATE**	EPA 3010A	842029	EPA 6010D	842032
92713535001	**021424NMW19**	EPA 3010A	833004	EPA 6020B	833104
92713535002	**021424NMW20S**	EPA 3010A	833004	EPA 6020B	833104
92713535003	**021424NMW20D**	EPA 3010A	833004	EPA 6020B	833104
92713535004	**021424NMW21**	EPA 3010A	833004	EPA 6020B	833104
92713535005	**021424NMW22**	EPA 3010A	833004	EPA 6020B	833104
92713535006	**021424NMW23**	EPA 3010A	833004	EPA 6020B	833104
92713535007	**021424NEPFDDUPLICATE**	EPA 3010A	833004	EPA 6020B	833104
92713535001	**021424NMW19**	EPA 7470A	833176	EPA 7470A	833217
92713535002	**021424NMW20S**	EPA 7470A	833176	EPA 7470A	833217
92713535003	**021424NMW20D**	EPA 7470A	833176	EPA 7470A	833217
92713535004	**021424NMW21**	EPA 7470A	833176	EPA 7470A	833217
92713535005	**021424NMW22**	EPA 7470A	833176	EPA 7470A	833217
92713535006	**021424NMW23**	EPA 7470A	833176	EPA 7470A	833217
92713535007	**021424NEPFDDUPLICATE**	EPA 7470A	833176	EPA 7470A	833217
92713535001	**021424NMW19**	SM 2540C-2015	833597		
92713535002	**021424NMW20S**	SM 2540C-2015	833597		
92713535003	**021424NMW20D**	SM 2540C-2015	833597		
92713535004	**021424NMW21**	SM 2540C-2015	833597		
92713535005	**021424NMW22**	SM 2540C-2015	833597		
92713535006	**021424NMW23**	SM 2540C-2015	833597		
92713535007	**021424NEPFDDUPLICATE**	SM 2540C-2015	833861		
92713535001	**021424NMW19**	EPA 350.1 Rev 2.0 1993	837085		
92713535002	**021424NMW20S**	EPA 350.1 Rev 2.0 1993	837085		
92713535003	**021424NMW20D**	EPA 350.1 Rev 2.0 1993	837085		
92713535004	**021424NMW21**	EPA 350.1 Rev 2.0 1993	837085		
92713535005	**021424NMW22**	EPA 350.1 Rev 2.0 1993	837085		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_1SA2024_CCR&VSWMR_P_E
Pace Project No.: 92713535

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713535006	**021424NMW23**	EPA 350.1 Rev 2.0 1993	837085		
92713535007	**021424NEPFDDUPLICATE**	EPA 350.1 Rev 2.0 1993	837085		
92713535001	**021424NMW19**	EPA 9056A	832455		
92713535002	**021424NMW20S**	EPA 9056A	832455		
92713535003	**021424NMW20D**	EPA 9056A	832455		
92713535004	**021424NMW21**	EPA 9056A	832455		
92713535005	**021424NMW22**	EPA 9056A	832455		
92713535006	**021424NMW23**	EPA 9056A	832455		
92713535007	**021424NEPFDDUPLICATE**	EPA 9056A	832455		

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Pace	DC#_Title: ENV-FRM-HUN1-0084 v02_Tech Spec Sample Condition Upon Receipt
	Effective Date:

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project #: WO# : 92713535

92713535

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other:____ ☑ Client

Carrier Tracking Number: _____

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No Date/Initials Person Examining Contents: AHC 2-15-24

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92T070 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 0.7, 2.8, 0.6, 3.9 Correction Factor: Add / Subtract (°C) -0.1

Corrected Cooler Temp (°C): 0.8, 2.7, 0.5, 3.2

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

Temp Log: Temp must be maintained at <6 C during login, record temp every 20 minutes.
Time opened: 1005 Temp: 0.7, 2.8, 0.6, 3.9
Time: put in cooler
Time: Temp:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Qualtrax Document ID: 70677

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project # WO#:92713535

PM: AMB Due Date: 02/29/24

CLIENT: 92-DomEnergy

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1		1	1																			2	1			
2		1	1		1	1																			2	1			
3		1	1		1	1																			2	1			
4		3	3		3	3																			6	3			
5		1	1		1	1																			2	1			
6		1	1		1	1																			2	1			
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	Crystal.Shadle@wsp.com
Customer Project #:			
Project Name:	Bremo_1SA2024_CCR&VSWMR_NEWPonds_E	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50156400
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [✓] ET		County / State origin of sample(s):	Virginia

Data Deliverables: [✓] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Angela Baioni
AcctNum / Client ID:
Table #:
Profile / Template: 13861
Prelog / Bottle Ord. ID: EZ 3059949

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals	7199 Chromium, Hexavalent	9056 - Cl/Fl/SO4/NO3	Radium 226	Radium 228 & Total Radium	Sample Comment	Preservation non-conformance identified for sample
0214 24NMW19	WT	G			2/14/24	1525	7			X	X	X	X	X	X	X	-MS/MSD	
0214 24NMW20S	WT	G			2/14/24	1600	7			X	X	X	X	X	X	X	taken from MW-21	
0214 24NMW20D	WT	G			2/14/24	1630	7			X	X	X	X	X	X	X	-All samples	
0214 24NMW21	WT	G			2/14/24	1330	21			X	X	X	X	X	X	X	preserved on ice	
0214 24NMW22	WT	G			2/14/24	1610	7			X	X	X	X	X	X	X		
0214 24NMW23	WT	G			2/14/24	1450	7			X	X	X	X	X	X	X		
~~0214 24NMW255~~ 02142 4NFDDuplicate	WT	G			2/14/24	1500	7			X	X	X	X	X	X	X		
02 24 MS	WT									X	X	X	X	X	X	X		
02 24 MSD	WT									X	X	X	X	X	X	X		

Additional Instructions from Pace®:

Collected By: (Printed Name) M. Knez, T. Davis, Z. Mondshine

Signature: M. Knez, T. Davis, Z. Mondshine

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
M. Knez / WSP	2/14/24 @ 1900	GMN Pace ttn	2/15/24 1010	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Hexavalent Chromium pH Adjustment

Project # 9271535

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
021424 NE FB DUPLICATE	APL	9.54	9.45	2-15-24 1130	9 drops	H2SO4 224809
〃	APL	〃	〃	〃	1 drop	NaOH 225312
~~021424 NE FB~~						
021424 NMW19	APL	9.62	9.42	〃	9 drops	H2SO4 224809
021424 NMW205	APL	9.56	9.39	〃	8 drops	〃
021424 NMW22	APL	9.63	9.42	〃	10 drops	〃
021424 NMW20D	APL	9.60	9.43	〃	〃	〃
021424 NMW23	APL	9.71	9.46	〃	〃	〃

ANALYTICAL REPORT

March 19, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1706883
Samples Received:	02/17/2024
Project Number:	92713535
Description:	Bremo_1SA2024_CCR&VSWMR_P_E
Site:	001
Report To:	Angela Baioni
	9800 Kincey Avenue, Suite 100
	Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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021424NMW19 L1706883-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 15:25	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 20:42	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2236199	1	02/28/24 18:35	03/06/24 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/14/24 20:42	SNR	Mt. Juliet, TN

021424NMW20S L1706883-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 16:00	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 21:13	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/14/24 21:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/14/24 21:13	DDD	Mt. Juliet, TN

021424NMW20D L1706883-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 16:30	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 21:13	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/14/24 21:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/14/24 21:13	DDD	Mt. Juliet, TN

021424NMW21 L1706883-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 13:30	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 21:13	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2240336	1	03/06/24 17:31	03/15/24 19:25	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/15/24 19:25	SNR	Mt. Juliet, TN

021424NMW22 L1706883-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 16:10	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 21:13	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/14/24 21:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/14/24 21:13	DDD	Mt. Juliet, TN

021424NMW23 L1706883-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 14:50	02/17/24 09:00

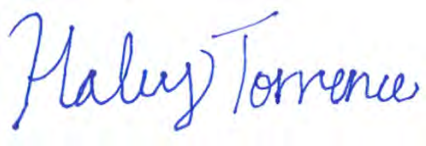
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 21:43	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/14/24 21:03	SNR	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/14/24 21:43	SNR	Mt. Juliet, TN

021424NEPFDDUPLICATE L1706883-07 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 15:00	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 21:43	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/14/24 21:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2236782	1	03/04/24 12:03	03/14/24 21:43	DDD	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.502		0.325		0.347		03/14/2024 20:42	WG2236782
(T) Barium	*100*					*30.0-143*	*03/14/2024 20:42*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.670		0.262	1.18	0.214	0.111	03/06/2024 21:23	WG2236199
(T) Barium	*121*					*30.0-143*	*03/06/2024 21:23*	WG2236199
(T) Yttrium	*100*					*30.0-136*	*03/06/2024 21:23*	WG2236199

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.17		0.417	0.408	03/14/2024 20:42	WG2236782

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.589		0.325		0.237		03/14/2024 21:13	WG2236782
(T) Barium	*105*					*30.0-143*	*03/14/2024 21:13*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.0345	U	0.320	5.78	0.280	0.144	03/14/2024 21:03	WG2238282
(T) Barium	*142*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*111*					*30.0-136*	*03/14/2024 21:03*	WG2238282

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.589		0.456	0.367	03/14/2024 21:13	WG2236782

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	1.09		0.472		0.413		03/14/2024 21:13	WG2236782
(T) Barium	*104*					*30.0-143*	*03/14/2024 21:13*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.695		0.317	1.26	0.267	0.138	03/14/2024 21:03	WG2238282
(T) Barium	*138*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*106*					*30.0-136*	*03/14/2024 21:03*	WG2238282

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.78		0.569	0.492	03/14/2024 21:13	WG2236782

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.630		0.356		0.338		03/14/2024 21:13	WG2236782
(T) Barium	*104*					*30.0-143*	*03/14/2024 21:13*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.264	J	0.189	1.47	0.345	0.183	03/15/2024 19:25	WG2240336
(T) Barium	*113*					*30.0-143*	*03/15/2024 19:25*	WG2240336
(T) Yttrium	*100*					*30.0-136*	*03/15/2024 19:25*	WG2240336

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.894		0.403	0.483	03/15/2024 19:25	WG2236782

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.283	J	0.263		0.345		03/14/2024 21:13	WG2236782
(T) Barium	*101*					*30.0-143*	*03/14/2024 21:13*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0333	U	0.248	4.81	0.447	0.234	03/14/2024 21:03	WG2238282
(T) Barium	*137*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*101*					*30.0-136*	*03/14/2024 21:03*	WG2238282

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.317	J	0.361	0.565	03/14/2024 21:13	WG2236782

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.501		0.302		0.242		03/14/2024 21:43	WG2236782
(T) Barium	*101*					*30.0-143*	*03/14/2024 21:43*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.608		0.193	0.997	0.329	0.175	03/14/2024 21:03	WG2238282
(T) Barium	*143*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*115*					*30.0-136*	*03/14/2024 21:03*	WG2238282

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.11		0.358	0.408	03/14/2024 21:43	WG2236782

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.199	J	0.268		0.418		03/14/2024 21:43	WG2236782
(T) Barium	*102*					*30.0-143*	*03/14/2024 21:43*	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.251	J	0.242	1.75	0.430	0.226	03/14/2024 21:03	WG2238282
(T) Barium	*138*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*110*					*30.0-136*	*03/14/2024 21:03*	WG2238282

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.451	J	0.361	0.600	03/14/2024 21:43	WG2236782

Method Blank (MB)

(MB) R4046646-1 03/14/24 20:12

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.142	J	0.117	0.170	
(T) Barium	*103*		*103*		

Laboratory Control Sample (LCS)

(LCS) R4046646-2 03/14/24 20:12

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.54	111	80.0-120	
(T) Barium			*102*		

L1706883-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706883-04 03/14/24 21:13 • (MS) R4046646-3 03/14/24 20:12 • (MSD) R4046646-5 03/14/24 20:42

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.630	23.2	20.5	113	99.2	1	75.0-125			12.5		20
(T) Barium		*104*			*102*	*103*							

L1706901-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706901-06 03/14/24 22:43 • (MS) R4046646-4 03/14/24 20:12 • (MSD) R4046646-6 03/14/24 20:42

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.152	21.5	22.1	107	110	1	75.0-125			2.89		20
(T) Barium		*104*			*103*	*104*							

Method Blank (MB)

(MB) R4044189-1 03/06/24 21:23

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.290		0.229	0.192	0.0994
(T) Barium	*119*		*119*		
(T) Yttrium	*92.8*		*92.8*		

L1706791-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1706791-02 03/06/24 21:23 • (DUP) R4044189-5 03/06/24 21:23

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.589	0.377	0.650	0.339	0.185	0.348	0.611	0.320	104	0.788	U	20	3
(T) Barium	*130*				*121*	*121*							
(T) Yttrium	*108*				*107*	*107*							

Laboratory Control Sample (LCS)

(LCS) R4044189-2 03/06/24 21:23

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.36	107	80.0-120	
(T) Barium			*125*		
(T) Yttrium			*105*		

L1706881-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706881-01 03/06/24 21:23 • (MS) R4044189-3 03/06/24 21:23 • (MSD) R4044189-4 03/06/24 21:23

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	-0.521	19.3	18.5	115	111	1	70.0-130			4.19		20
(T) Barium		*128*			*132*	*125*							
(T) Yttrium		*100*			*96.2*	*106*							

Method Blank (MB)

(MB) R4047052-1 03/14/24 21:03

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.807		0.248	0.205	
(T) Barium	*122*		*122*		
(T) Yttrium	*109*		*109*		

L1707772-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1707772-01 03/14/24 21:03 • (DUP) R4047052-5 03/14/24 21:03

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	0.816	0.277	0.474	0.252	0.0313	0.364	0.655		185	1.71	U	20	3
(T) Barium	*133*				*138*	*138*							
(T) Yttrium	*115*				*106*	*106*							

Laboratory Control Sample (LCS)

(LCS) R4047052-2 03/14/24 21:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.69	93.8	80.0-120	
(T) Barium			*137*		
(T) Yttrium			*103*		

L1705781-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705781-01 03/14/24 21:03 • (MS) R4047052-3 03/14/24 21:03 • (MSD) R4047052-4 03/14/24 21:03

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	1.26	16.8	20.1	92.8	113	1	70.0-130			18.2		20
(T) Barium		*141*			*137*	*133*							
(T) Yttrium		*109*			*103*	*101*							

Method Blank (MB)

(MB) R4047058-1 03/15/24 19:25

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.201	J	0.172	0.315	0.165
(T) Barium	*129*		*129*		
(T) Yttrium	*128*		*128*		

L1707848-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1707848-04 03/15/24 19:25 • (DUP) R4047058-5 03/15/24 19:25

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.565	0.365	0.659	0.344	0.0925	0.243	0.455	0.242	144	1.08	U	20	3
(T) Barium	*133*				*115*	*115*							
(T) Yttrium	*108*				*106*	*106*							

Laboratory Control Sample (LCS)

(LCS) R4047058-2 03/15/24 19:25

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.41	88.1	80.0-120	
(T) Barium			*118*		
(T) Yttrium			*116*		

L1706883-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706883-04 03/15/24 19:25 • (MS) R4047058-3 03/15/24 19:25 • (MSD) R4047058-4 03/15/24 19:25

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.264	17.2	16.0	101	94.2	1	70.0-130			18.2		20
(T) Barium		*113*			*119*	*140*							
(T) Yttrium		*100*			*105*	*103*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier_____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: [X] Yes ☐ No

Workorder: 92713535 **Workorder Name:** Bremo_1SA2024_CCR&VSWMR_P_E **Owner Received Date:** 2/14/2024 **Results Requested By:** 2/29/2024

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3						Requested Analysis: Ra226 903.0	Ra228 904.0/Combined Ra											LAB USE ONLY
1	021424NMW19	PS	2/14/2024 15:25	92713535001	Water	2						X	X											-01
2	021424NMW20S	PS	2/14/2024 16:00	92713535002	Water	2						X	X											-02
3	021424NMW20D	PS	2/14/2024 16:30	92713535003	Water	2						X	X											-03
4	021424NMW21	RQS	2/14/2024 13:30	92713535004	Water	6						X	X											-04
5	021424NMW22	PS	2/14/2024 16:10	92713535005	Water	2						X	X											-05
6	021424NMW23	PS	2/14/2024 14:50	92713535006	Water	2						X	X											-06
7	021424NEPFDDUPLICATE	PS	2/14/2024 15:00	92713535007	Water	2						X	X											-07

A236

4704883

LAB USE ONLY

Transfers	Released By	Date/Time	Received By	Date/Time
1	[illegible]	2/16/24 18[illegible]	[illegible]	2/17/24 08[illegible]
2				
3				

Comments

Cooler Temperature on Receipt _____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

2.3+0=2.3 TUA

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y/N	VOA Zero Headspace:	Y/N
COC Signed/Accurate:	Y/N	Pres. Correct/Check:	Y/N
Bottles arrive intact:	Y/N		
Correct bottles used:	Y/N		
Sufficient volume sent:	Y/N		
RA Screen <0.5 mR/hr:	Y/N		

L1701883

INTER_LABORATORY WORK ORDER # 92713535

(To be completed by sending lab)

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Sending Project No:	92713535
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	02/16/24
REQUESTED COMPLETION DATE:	**2/29/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra226 903.0	BP1N		HNO3	7	SI-38RAD	SUB PASI RAD
Ra228 904.0/Combined Ra	BP1N		HNO3	7	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

April 01, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on February 13, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: ENV STD DM
Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92712988001	**021224NMW29S**	Water	02/12/24 13:15	02/13/24 10:35
92712988002	**021224NMW29D**	Water	02/12/24 13:00	02/13/24 10:35

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92712988001	**021224NMW29S**	EPA 7199	IRC	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JMH1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92712988002	**021224NMW29D**	EPA 7199	IRC	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW, KRL	7	PASI-A
		EPA 7470A	BM	1	PASI-A
		SM 2540C-2015	JMH1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92712988001	**021224NMW29S**					
EPA 7199	Chromium, Hexavalent	0.50	ug/L	0.10	02/13/24 12:14	
EPA 6010D	Barium	16.5	ug/L	5.0	02/20/24 15:14	
EPA 6010D	Calcium	7310	ug/L	100	02/20/24 15:14	
EPA 6010D	Chromium	1.1J	ug/L	5.0	02/20/24 15:14	
EPA 6010D	Hardness, Total(SM 2340B)	24200	ug/L	662	02/20/24 15:14	
EPA 6020B	Cobalt	0.070J	ug/L	1.0	02/14/24 21:38	
EPA 6020B	Iron	84.1	ug/L	50.0	02/14/24 21:38	
EPA 6020B	Manganese	4.9	ug/L	2.0	02/14/24 21:38	
SM 2540C-2015	Total Dissolved Solids	124	mg/L	10.0	02/15/24 10:31	
EPA 9056A	Chloride	10.9	mg/L	1.0	02/13/24 22:55	
EPA 9056A	Nitrate as N	1.3	mg/L	0.10	02/13/24 22:55	
EPA 9056A	Sulfate	7.5	mg/L	1.0	02/13/24 22:55	
92712988002	**021224NMW29D**					
EPA 6010D	Barium	33.7	ug/L	5.0	02/20/24 15:22	
EPA 6010D	Boron	40.9J	ug/L	50.0	02/20/24 15:22	
EPA 6010D	Calcium	42200	ug/L	100	02/20/24 15:22	
EPA 6010D	Copper	1.4J	ug/L	5.0	02/20/24 15:22	
EPA 6010D	Nickel	2.6J	ug/L	5.0	02/20/24 15:22	
EPA 6010D	Hardness, Total(SM 2340B)	147000	ug/L	662	02/20/24 15:22	
EPA 6010D	Zinc	5.8J	ug/L	10.0	02/20/24 15:22	
EPA 6020B	Cobalt	0.43J	ug/L	1.0	02/14/24 21:42	
EPA 6020B	Iron	418	ug/L	50.0	02/14/24 21:42	
EPA 6020B	Lithium	1.3J	ug/L	2.5	02/14/24 21:42	
EPA 6020B	Manganese	913	ug/L	20.0	02/15/24 17:38	
SM 2540C-2015	Total Dissolved Solids	467	mg/L	10.0	02/15/24 10:32	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.21	mg/L	0.10	03/06/24 23:42	
EPA 9056A	Chloride	42.1	mg/L	1.0	02/13/24 22:41	
EPA 9056A	Fluoride	0.12	mg/L	0.10	02/13/24 22:41	
EPA 9056A	Sulfate	26.4	mg/L	1.0	02/13/24 22:41	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: April 01, 2024

General Information:
2 samples were analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: April 01, 2024

General Information:
2 samples were analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: April 01, 2024

General Information:
2 samples were analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: April 01, 2024

General Information:
2 samples were analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: April 01, 2024

General Information:
2 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: April 01, 2024

General Information:
2 samples were analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: April 01, 2024

General Information:
2 samples were analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 832077

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92712989001

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

- MS (Lab ID: 4300171)
  - Fluoride
  - Sulfate
- MSD (Lab ID: 4300172)
  - Fluoride
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 4300172)
  - Fluoride

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Sample: 021224NMW29S **Lab ID: 92712988001** Collected: 02/12/24 13:15 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.50**	ug/L	0.10	0.10	4		02/13/24 12:14	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/14/24 16:02	02/20/24 15:14	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/14/24 16:02	02/20/24 15:14	7440-38-2	
Barium	**16.5**	ug/L	5.0	0.79	1	02/14/24 16:02	02/20/24 15:14	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/14/24 16:02	02/20/24 15:14	7440-41-7	
Boron	ND	ug/L	50.0	4.0	1	02/14/24 16:02	02/20/24 15:14	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/14/24 16:02	02/20/24 15:14	7440-43-9	
Calcium	**7310**	ug/L	100	14.7	1	02/14/24 16:02	02/20/24 15:14	7440-70-2	
Chromium	**1.1J**	ug/L	5.0	0.63	1	02/14/24 16:02	02/20/24 15:14	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/14/24 16:02	02/20/24 15:14	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/14/24 16:02	02/20/24 15:14	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	02/14/24 16:02	02/20/24 15:14	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/14/24 16:02	02/20/24 15:14	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/14/24 16:02	02/20/24 15:14	7440-22-4	
Hardness, Total(SM 2340B)	**24200**	ug/L	662	36.8	1	02/14/24 16:02	02/20/24 15:14		
Vanadium	ND	ug/L	5.0	1.6	1	02/14/24 16:02	02/20/24 15:14	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/14/24 16:02	02/20/24 15:14	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.070J**	ug/L	1.0	0.050	1	02/14/24 13:35	02/14/24 21:38	7440-48-4	
Iron	**84.1**	ug/L	50.0	20.9	1	02/14/24 13:35	02/14/24 21:38	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/14/24 13:35	02/14/24 21:38	7439-92-1	
Lithium	ND	ug/L	2.5	0.50	1	02/14/24 13:35	02/14/24 21:38	7439-93-2	
Manganese	**4.9**	ug/L	2.0	1.0	1	02/14/24 13:35	02/14/24 21:38	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/14/24 13:35	02/14/24 21:38	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/14/24 13:35	02/14/24 21:38	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/14/24 13:59	02/15/24 14:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**124**	mg/L	10.0	10.0	1		02/15/24 10:31		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		03/06/24 23:41	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Sample: 021224NMW29S **Lab ID: 92712988001** Collected: 02/12/24 13:15 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**10.9**	mg/L	1.0	0.60	1		02/13/24 22:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/13/24 22:55	16984-48-8	
Nitrate as N	**1.3**	mg/L	0.10	0.060	1		02/13/24 22:55	14797-55-8	
Sulfate	**7.5**	mg/L	1.0	0.50	1		02/13/24 22:55	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Sample: 021224NMW29D **Lab ID: 92712988002** Collected: 02/12/24 13:00 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.025	1		02/13/24 11:18	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	02/14/24 16:02	02/20/24 15:22	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/14/24 16:02	02/20/24 15:22	7440-38-2	
Barium	**33.7**	ug/L	5.0	0.79	1	02/14/24 16:02	02/20/24 15:22	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/14/24 16:02	02/20/24 15:22	7440-41-7	
Boron	**40.9J**	ug/L	50.0	4.0	1	02/14/24 16:02	02/20/24 15:22	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/14/24 16:02	02/20/24 15:22	7440-43-9	
Calcium	**42200**	ug/L	100	14.7	1	02/14/24 16:02	02/20/24 15:22	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/14/24 16:02	02/20/24 15:22	7440-47-3	
Copper	**1.4J**	ug/L	5.0	0.62	1	02/14/24 16:02	02/20/24 15:22	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/14/24 16:02	02/20/24 15:22	7439-98-7	
Nickel	**2.6J**	ug/L	5.0	0.88	1	02/14/24 16:02	02/20/24 15:22	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/14/24 16:02	02/20/24 15:22	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/14/24 16:02	02/20/24 15:22	7440-22-4	
Hardness, Total(SM 2340B)	**147000**	ug/L	662	36.8	1	02/14/24 16:02	02/20/24 15:22		
Vanadium	ND	ug/L	5.0	1.6	1	02/14/24 16:02	02/20/24 15:22	7440-62-2	
Zinc	**5.8J**	ug/L	10.0	3.0	1	02/14/24 16:02	02/20/24 15:22	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.43J**	ug/L	1.0	0.050	1	02/14/24 13:35	02/14/24 21:42	7440-48-4	
Iron	**418**	ug/L	50.0	20.9	1	02/14/24 13:35	02/14/24 21:42	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/14/24 13:35	02/14/24 21:42	7439-92-1	
Lithium	**1.3J**	ug/L	2.5	0.50	1	02/14/24 13:35	02/14/24 21:42	7439-93-2	
Manganese	**913**	ug/L	20.0	10.2	10	02/14/24 13:35	02/15/24 17:38	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/14/24 13:35	02/14/24 21:42	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/14/24 13:35	02/14/24 21:42	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	02/14/24 13:59	02/15/24 14:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**467**	mg/L	10.0	10.0	1		02/15/24 10:32		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.21**	mg/L	0.10	0.031	1		03/06/24 23:42	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Sample: 021224NMW29D **Lab ID: 92712988002** Collected: 02/12/24 13:00 Received: 02/13/24 10:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**42.1**	mg/L	1.0	0.60	1		02/13/24 22:41	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		02/13/24 22:41	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/13/24 22:41	14797-55-8	
Sulfate	**26.4**	mg/L	1.0	0.50	1		02/13/24 22:41	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

QC Batch: 831931
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92712988001, 92712988002

METHOD BLANK: 4299279 Matrix: Water
Associated Lab Samples: 92712988001, 92712988002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.025	02/13/24 16:40	

LABORATORY CONTROL SAMPLE: 4299280

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.11	109	85-115	

MATRIX SPIKE SAMPLE: 4299873

Parameter	Units	92712989003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.089	0.1	0.19	98	90-110	H1

SAMPLE DUPLICATE: 4299872

Parameter	Units	92712987001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	0.085	0.083	2	20	H1

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(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

QC Batch: 832174
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712988001, 92712988002

METHOD BLANK: 4300426 Matrix: Water
Associated Lab Samples: 92712988001, 92712988002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	02/15/24 13:19	

LABORATORY CONTROL SAMPLE: 4300427

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.4	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300428 4300429

Parameter	Units	92712623001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.4	2.5	97	99	75-125	3	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

QC Batch: 832303
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712988001, 92712988002

METHOD BLANK: 4301221 Matrix: Water
Associated Lab Samples: 92712988001, 92712988002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	02/20/24 14:54	
Arsenic	ug/L	ND	10.0	2.5	02/20/24 14:54	
Barium	ug/L	ND	5.0	0.79	02/20/24 14:54	
Beryllium	ug/L	ND	1.0	0.16	02/20/24 14:54	
Boron	ug/L	ND	50.0	4.0	02/20/24 14:54	
Cadmium	ug/L	ND	1.0	0.29	02/20/24 14:54	
Calcium	ug/L	ND	100	14.7	02/20/24 14:54	
Chromium	ug/L	ND	5.0	0.63	02/20/24 14:54	
Copper	ug/L	ND	5.0	0.62	02/20/24 14:54	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	02/20/24 14:54	
Molybdenum	ug/L	ND	5.0	2.6	02/20/24 14:54	
Nickel	ug/L	ND	5.0	0.88	02/20/24 14:54	
Selenium	ug/L	ND	10.0	4.1	02/20/24 14:54	
Silver	ug/L	ND	5.0	0.49	02/20/24 14:54	
Vanadium	ug/L	ND	5.0	1.6	02/20/24 14:54	
Zinc	ug/L	ND	10.0	3.0	02/20/24 14:54	

LABORATORY CONTROL SAMPLE: 4301222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	474	95	80-120	
Arsenic	ug/L	500	482	96	80-120	
Barium	ug/L	500	472	94	80-120	
Beryllium	ug/L	500	479	96	80-120	
Boron	ug/L	500	482	96	80-120	
Cadmium	ug/L	500	466	93	80-120	
Calcium	ug/L	5000	4520	90	80-120	
Chromium	ug/L	500	468	94	80-120	
Copper	ug/L	500	471	94	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	30000	91	80-120	
Molybdenum	ug/L	500	478	96	80-120	
Nickel	ug/L	500	473	95	80-120	
Selenium	ug/L	500	480	96	80-120	
Silver	ug/L	250	232	93	80-120	
Vanadium	ug/L	500	467	93	80-120	
Zinc	ug/L	500	478	96	80-120	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301223 4301224

Parameter	Units	92712987001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	501	505	100	101	75-125	1	20	
Arsenic	ug/L	ND	500	500	509	512	102	102	75-125	1	20	
Barium	ug/L	3.3J	500	500	495	510	98	101	75-125	3	20	
Beryllium	ug/L	ND	500	500	506	509	101	102	75-125	1	20	
Boron	ug/L	ND	500	500	509	513	102	103	75-125	1	20	
Cadmium	ug/L	ND	500	500	482	484	96	97	75-125	0	20	
Calcium	ug/L	19900	5000	5000	24800	25200	97	105	75-125	2	20	
Chromium	ug/L	ND	500	500	486	489	97	98	75-125	1	20	
Copper	ug/L	2.5J	500	500	493	495	98	99	75-125	0	20	
Hardness, Total(SM 2340B)	ug/L	103000	33100	33100	138000	139000	106	109	75-125	1	20	
Molybdenum	ug/L	ND	500	500	491	494	98	99	75-125	1	20	
Nickel	ug/L	ND	500	500	484	486	97	97	75-125	0	20	
Selenium	ug/L	ND	500	500	519	525	104	105	75-125	1	20	
Silver	ug/L	ND	250	250	244	245	98	98	75-125	1	20	
Vanadium	ug/L	15.9	500	500	506	506	98	98	75-125	0	20	
Zinc	ug/L	ND	500	500	491	493	98	98	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

QC Batch: 832223
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712988001, 92712988002

METHOD BLANK: 4300574 Matrix: Water
Associated Lab Samples: 92712988001, 92712988002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.050	02/14/24 20:27	
Iron	ug/L	ND	50.0	20.9	02/14/24 20:27	
Lead	ug/L	ND	1.0	0.077	02/14/24 20:27	
Lithium	ug/L	ND	2.5	0.50	02/14/24 20:27	
Manganese	ug/L	ND	2.0	1.0	02/14/24 20:27	
Thallium	ug/L	ND	0.20	0.050	02/14/24 20:27	
Tin	ug/L	ND	1.0	0.43	02/14/24 20:27	

LABORATORY CONTROL SAMPLE: 4300575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	50.6	101	80-120	
Iron	ug/L	1250	1300	104	80-120	
Lead	ug/L	50	50.1	100	80-120	
Lithium	ug/L	50	51.4	103	80-120	
Manganese	ug/L	50	50.9	102	80-120	
Thallium	ug/L	25	25.0	100	80-120	
Tin	ug/L	50	49.6	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300576 4300577

Parameter	Units	92712987001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	0.34J	50	50	51.3	51.9	102	103	75-125	1	20	
Iron	ug/L	313	1250	1250	1740	1760	114	115	75-125	1	20	
Lead	ug/L	ND	50	50	51.2	50.7	102	101	75-125	1	20	
Lithium	ug/L	ND	50	50	48.3	49.0	96	97	75-125	2	20	
Manganese	ug/L	3.0	50	50	55.9	55.5	106	105	75-125	1	20	
Thallium	ug/L	ND	25	25	25.6	25.6	102	102	75-125	0	20	
Tin	ug/L	ND	50	50	50.9	50.6	102	101	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

QC Batch: 832204
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712988001, 92712988002

METHOD BLANK: 4300531 Matrix: Water
Associated Lab Samples: 92712988001, 92712988002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/15/24 10:09	

LABORATORY CONTROL SAMPLE: 4300532

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	274	110	80-120	

SAMPLE DUPLICATE: 4300533

Parameter	Units	92712623001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	126	125	1	25	

SAMPLE DUPLICATE: 4300534

Parameter	Units	92713208011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	84.0	85.2	1	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

QC Batch: 837078
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712988001, 92712988002

METHOD BLANK: 4323787 Matrix: Water
Associated Lab Samples: 92712988001, 92712988002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	03/06/24 23:35	

LABORATORY CONTROL SAMPLE: 4323788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	4.9	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4323789 4323790

Parameter	Units	92712989006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	5.2	5.2	104	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4323791 4323792

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.045J	5	5	5.1	5.1	100	100	90-110	0	10	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

QC Batch: 832077
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92712988001, 92712988002

METHOD BLANK: 4300169 Matrix: Water
Associated Lab Samples: 92712988001, 92712988002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/13/24 21:29	
Fluoride	mg/L	ND	0.10	0.050	02/13/24 21:29	
Nitrate as N	mg/L	ND	0.10	0.060	02/13/24 21:29	
Sulfate	mg/L	ND	1.0	0.50	02/13/24 21:29	

LABORATORY CONTROL SAMPLE: 4300170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.7	97	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Nitrate as N	mg/L	2.5	2.3	94	90-110	
Sulfate	mg/L	50	49.2	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300171 4300172

Parameter	Units	92712989001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.1	50	50	60.6	61.7	101	103	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	4.8	2.0	192	76	90-110	85	10	M1,R1
Nitrate as N	mg/L	0.15	2.5	2.5	2.6	2.7	98	100	90-110	2	10	
Sulfate	mg/L	158	50	50	185	185	54	56	90-110	0	10	M1

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QUALIFIERS

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_1SA2024_CCR&VSWMR_P_B
Pace Project No.: 92712988

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92712988001	**021224NMW29S**	EPA 7199	831931		
92712988002	**021224NMW29D**	EPA 7199	831931		
92712988001	**021224NMW29S**	EPA 3010A	832303	EPA 6010D	832444
92712988002	**021224NMW29D**	EPA 3010A	832303	EPA 6010D	832444
92712988001	**021224NMW29S**	EPA 3010A	832223	EPA 6020B	832433
92712988002	**021224NMW29D**	EPA 3010A	832223	EPA 6020B	832433
92712988001	**021224NMW29S**	EPA 7470A	832174	EPA 7470A	832402
92712988002	**021224NMW29D**	EPA 7470A	832174	EPA 7470A	832402
92712988001	**021224NMW29S**	SM 2540C-2015	832204		
92712988002	**021224NMW29D**	SM 2540C-2015	832204		
92712988001	**021224NMW29S**	EPA 350.1 Rev 2.0 1993	837078		
92712988002	**021224NMW29D**	EPA 350.1 Rev 2.0 1993	837078		
92712988001	**021224NMW29S**	EPA 9056A	832077		
92712988002	**021224NMW29D**	EPA 9056A	832077		

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Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion

Project #: **WO# : 92712988**

92712988

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other:____

Carrier Tracking Number: NA

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No Date/Initials Person Examining Contents: [illegible]

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 42016 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 1.9 Correction Factor: Add / Subtract (°C) -0.1

Corrected Cooler Temp (°C): 1.7

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☑ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

UCA

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

Temp Log: Temp must be maintained at <6 C during login, record temp every 20 minutes.	
Time opened:	Temp:
Time:	put in cooler
Time:	Temp:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project # WO#:92712988

PM: AMB Due Date: 02/27/24

CLIENT: 92-DomEnergy

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BTLN	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1		1	1															1				2				
2		1	1		1	1															1				2				
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Hexavalent Chromium pH Adjustment

Project #

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
02124NMW24D	GCG	9.60	9.46	2/13/24 1107	8 Drops Acid	224509
021224NMW24S	GCG	9.67	9.47	2/13/24 1114	11 Drops Acid	224504

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	crystal.shadle@wsp-c.com
Customer Project #:			
Project Name:	Bremo_1SA2024_CCR&VSWMR_NEWPonds_B	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50156400
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [V] ET

County / State origin of sample(s): Virginia

Data Deliverables: [V] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [V] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals	7199 Chromium, Hexavalent	9056 - Cl/Fl/SO4/NO3	Radium 226	Radium 228 & Total Radium				Sample Comment	Preservation non-conformance identified for sample
02[13] 24NMW29S	WT	G			2/12/24	1315	7			X	X	X	X	X	X	X				-All samples	
02[13] 24NMW29D	WT	G			2/12/24	1300	7			X	X	X	X	X	X	X				preserved on ice	

Lab Use Only

Proj. Mgr: Angela Baioni

AcctNum / Client ID:

Table #:

Profile / Template: 13861

Prelog / Bottle Ord. ID: EZ 3059937

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Additional Instructions from Pace®:

Collected By: Z. Mowbray / J. DAVIS (Printed Name)

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
Mx Max / WSP	2/13/24 @ 1400	GEG Pace HVL	2/13/24 1035	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

March 26, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1706891
Samples Received:	02/17/2024
Project Number:	92712988
Description:	Bremo_1SA2024_CCR&VSWMR_P_B
Site:	001
Report To:	Angela Baioni
	9800 Kincey Avenue, Suite 100
	Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence

Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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021224NMW29S L1706891-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/12/24 13:15	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2232398	1	02/23/24 16:36	03/01/24 15:17	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/18/24 20:16	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2232398	1	02/23/24 16:36	03/18/24 20:16	DDD	Mt. Juliet, TN

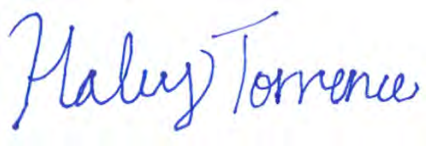
021224NMW29D L1706891-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/12/24 13:00	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2232398	1	02/23/24 16:36	03/01/24 15:17	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/14/24 21:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2232398	1	02/23/24 16:36	03/14/24 21:03	DDD	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.383		0.252		0.275		03/01/2024 15:17	WG2232398
(T) Barium	*105*					*30.0-143*	*03/01/2024 15:17*	WG2232398

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.252	J	0.268	1.88	0.468	0.245	03/18/2024 20:16	WG2238282
(T) Barium	*96.4*					*30.0-143*	*03/18/2024 20:16*	WG2238282
(T) Yttrium	*117*					*30.0-136*	*03/18/2024 20:16*	WG2238282

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.635		0.368	0.543	03/18/2024 20:16	WG2232398

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	1.12		0.372		0.191		03/01/2024 15:17	WG2232398
(T) Barium	*98.5*					*30.0-143*	*03/01/2024 15:17*	WG2232398

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.319	J	0.287	1.99	0.511	0.270	03/14/2024 21:03	WG2238282
(T) Barium	*136*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*109*					*30.0-136*	*03/14/2024 21:03*	WG2238282

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.44		0.470	0.546	03/14/2024 21:03	WG2232398

Method Blank (MB)

(MB) R4039992-1 02/29/24 11:47

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.102	J	0.115	0.184	
(T) Barium	*102*		*102*		

L1708078-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1708078-04 02/29/24 13:47 • (DUP) R4039992-5 02/29/24 12:47

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.869	0.354	0.212		0.877	0.576	0.580		0.894	0.0115		20	3
(T) Barium	*98.0*				*102*	*102*							

Laboratory Control Sample (LCS)

(LCS) R4039992-2 02/29/24 11:47

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	4.48	89.7	80.0-120	
(T) Barium			*101*		

L1706881-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706881-01 02/29/24 12:47 • (MS) R4039992-3 02/29/24 11:47 • (MSD) R4039992-4 02/29/24 11:47

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.171	17.9	20.6	88.7	102	1	75.0-125			13.7		20
(T) Barium		*102*			*102*	*103*							

Method Blank (MB)

(MB) R4047052-1 03/14/24 21:03

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.807		0.248	0.205	
(T) Barium	*122*		*122*		
(T) Yttrium	*109*		*109*		

L1707772-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1707772-01 03/14/24 21:03 • (DUP) R4047052-5 03/14/24 21:03

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	0.816	0.277	0.474	0.252	0.0313	0.364	0.655		185	1.71	U	20	3
(T) Barium	*133*				*138*	*138*							
(T) Yttrium	*115*				*106*	*106*							

Laboratory Control Sample (LCS)

(LCS) R4047052-2 03/14/24 21:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.69	93.8	80.0-120	
(T) Barium			*137*		
(T) Yttrium			*103*		

L1705781-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705781-01 03/14/24 21:03 • (MS) R4047052-3 03/14/24 21:03 • (MSD) R4047052-4 03/14/24 21:03

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	1.26	16.8	20.1	92.8	113	1	70.0-130			18.2		20
(T) Barium		*141*			*137*	*133*							
(T) Yttrium		*109*			*103*	*101*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier_____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: ☒ Yes ☐ No

Workorder: 92712988 **Workorder Name:** Bremo_1SA2024_CCR&VSWMR_P_B **Owner Received Date:** 2/13/2024 **Results Requested By:** 2/27/2024

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis: Ra 226 903.0	Ra 228 904.0/Combined Ra											A238 L1706891 LAB USE ONLY
1	021224NMW29S	PS	2/12/2024 13:15	92712988001	Water	2						X	X											-01
2	021224NMW29D	PS	2/12/2024 13:00	92712988002	Water	2						X	X											-02
3																								
4																								
5																								

Transfers	Released By	Date/Time	Received By	Date/Time
1	Angie Baioni	2/16/24 1800	M. Smith	2/17/24 0900
2				
3				

Comments

Cooler Temperature on Receipt _____ °C | **Custody Seal** Y or N | **Received on Ice** (Y) or N | **Samples Intact** (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

2.5+0=2.5 TLA 8

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y N	VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N	Pres. Correct/Check:	Y N
Bottles arrive intact:	Y N		
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RA Screen <0.5 mR/hr:	Y N		

LT01691

INTER_LABORATORY WORK ORDER # 92712988

(To be completed by sending lab)

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Sending Project No:	92712988
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	02/16/24
REQUESTED COMPLETION DATE:	**2/27/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra 226 903.0	BP1N		HNO3	2	SI-38RAD	SUB PASI RAD
Ra 228 904.0/Combined Ra	BP1N		HNO3	2	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

APPENDIX E.2
LABORATORY ANALYTICAL RESULTS
SECOND SEMI-ANNUAL GROUNDWATER MONITORING EVENT

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 13, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on August 27, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: ENV STD DM
Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

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CERTIFICATIONS

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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SAMPLE SUMMARY

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92749755001	**082624NFBBLANK**	Water	08/26/24 12:30	08/27/24 10:10

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SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92749755001	**082624NFBBLANK**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

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SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92749755001	**082624NFBBLANK**					
EPA 7199	Chromium, Hexavalent	0.025	ug/L	0.025	08/27/24 12:22	

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 878479

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749754004

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

- MS (Lab ID: 4524622)
  - Chromium, Hexavalent
- MSD (Lab ID: 4524675)
  - Chromium, Hexavalent

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 879094

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749361003

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

- MSD (Lab ID: 4527744)
  - Calcium

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 879095

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749361003

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

- MS (Lab ID: 4527747)
  - Manganese
- MSD (Lab ID: 4527748)
  - Manganese

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 880526

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750377007

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

- MS (Lab ID: 4534644)
  - Mercury
- MSD (Lab ID: 4534645)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 082624NFBBLANK (Lab ID: 92749755001)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 878974

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749754004,92750091004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4527136)
  - Nitrate as N
- MS (Lab ID: 4527567)
  - Sulfate
- MSD (Lab ID: 4527137)
  - Nitrate as N
- MSD (Lab ID: 4527568)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Sample: 082624NFBBLANK **Lab ID: 92749755001** Collected: 08/26/24 12:30 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.025**	ug/L	0.025	0.0043	1		08/27/24 12:22	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	08/29/24 11:40	09/05/24 00:02	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/05/24 00:02	7440-38-2	
Barium	ND	ug/L	5.0	0.79	1	08/29/24 11:40	09/05/24 00:02	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/05/24 00:02	7440-41-7	
Boron	ND	ug/L	50.0	4.0	1	08/29/24 11:40	09/05/24 00:02	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/05/24 00:02	7440-43-9	
Calcium	ND	ug/L	100	14.7	1	08/29/24 11:40	09/05/24 00:02	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/29/24 11:40	09/05/24 00:02	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/29/24 11:40	09/05/24 00:02	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/29/24 11:40	09/05/24 00:02	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/29/24 11:40	09/05/24 00:02	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/05/24 00:02	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/29/24 11:40	09/05/24 00:02	7440-22-4	
Hardness, Total(SM 2340B)	ND	ug/L	662	36.8	1	08/29/24 11:40	09/05/24 00:02		
Vanadium	ND	ug/L	5.0	1.6	1	08/29/24 11:40	09/05/24 00:02	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/29/24 11:40	09/05/24 00:02	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:47	7440-48-4	
Iron	ND	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:47	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:47	7439-92-1	
Lithium	ND	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:47	7439-93-2	
Manganese	ND	ug/L	2.0	0.24	1	08/29/24 12:00	09/04/24 02:47	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:47	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:47	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/05/24 19:56	09/12/24 10:10	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	ND	mg/L	25.0	25.0	1		08/30/24 15:22		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		09/05/24 16:10	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Sample: 082624NFBBLANK **Lab ID: 92749755001** Collected: 08/26/24 12:30 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		08/29/24 04:02	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 04:02	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 04:02	14797-55-8	H1
Sulfate	ND	mg/L	1.0	0.50	1		08/29/24 04:02	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

QC Batch: 878479
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92749755001

METHOD BLANK: 4524620 Matrix: Water
Associated Lab Samples: 92749755001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.0043	08/27/24 10:16	

LABORATORY CONTROL SAMPLE: 4524621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.097	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4524622 4524675

Parameter	Units	92749754004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	0.25	0.1	0.1	1.1	1.1	870	840	90-110	3	20	H1,M1

SAMPLE DUPLICATE: 4524623

Parameter	Units	92749754001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	0.0080J	0.012J		20	H1

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

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

QC Batch: 880526
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749755001

METHOD BLANK: 4534642 Matrix: Water
Associated Lab Samples: 92749755001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	09/12/24 09:34	

LABORATORY CONTROL SAMPLE: 4534643

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534644 4534645

Parameter	Units	92750377007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	1.8	1.8	70	70	75-125	0	25	M1

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

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

QC Batch: 879094
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749755001

METHOD BLANK: 4527741 Matrix: Water
Associated Lab Samples: 92749755001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	09/04/24 23:08	
Arsenic	ug/L	ND	10.0	2.5	09/04/24 23:08	
Barium	ug/L	ND	5.0	0.79	09/04/24 23:08	
Beryllium	ug/L	ND	1.0	0.16	09/04/24 23:08	
Boron	ug/L	ND	50.0	4.0	09/04/24 23:08	
Cadmium	ug/L	ND	1.0	0.29	09/04/24 23:08	
Calcium	ug/L	15.2J	100	14.7	09/04/24 23:08	
Chromium	ug/L	ND	5.0	0.63	09/04/24 23:08	
Copper	ug/L	ND	5.0	0.62	09/04/24 23:08	
Hardness, Total(SM 2340B)	ug/L	61.4J	662	36.8	09/04/24 23:08	
Molybdenum	ug/L	ND	5.0	2.6	09/04/24 23:08	
Nickel	ug/L	ND	5.0	0.88	09/04/24 23:08	
Selenium	ug/L	ND	10.0	4.1	09/04/24 23:08	
Silver	ug/L	ND	5.0	0.49	09/04/24 23:08	
Vanadium	ug/L	ND	5.0	1.6	09/04/24 23:08	
Zinc	ug/L	ND	10.0	3.0	09/04/24 23:08	

LABORATORY CONTROL SAMPLE: 4527742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	446	89	80-120	
Arsenic	ug/L	500	447	89	80-120	
Barium	ug/L	500	450	90	80-120	
Beryllium	ug/L	500	435	87	80-120	
Boron	ug/L	500	460	92	80-120	
Cadmium	ug/L	500	457	91	80-120	
Calcium	ug/L	5000	4490	90	80-120	
Chromium	ug/L	500	436	87	80-120	
Copper	ug/L	500	443	89	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	28600	86	80-120	
Molybdenum	ug/L	500	447	89	80-120	
Nickel	ug/L	500	440	88	80-120	
Selenium	ug/L	500	448	90	80-120	
Silver	ug/L	250	238	95	80-120	
Vanadium	ug/L	500	441	88	80-120	
Zinc	ug/L	500	451	90	80-120	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527743 4527744

Parameter	Units	92749361003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	511	474	102	95	75-125	8	20	
Arsenic	ug/L	ND	500	500	502	471	100	94	75-125	6	20	
Barium	ug/L	105	500	500	608	553	101	90	75-125	10	20	
Beryllium	ug/L	0.40J	500	500	497	459	99	92	75-125	8	20	
Boron	ug/L	94.0	500	500	610	575	103	96	75-125	6	20	
Cadmium	ug/L	ND	500	500	492	461	98	92	75-125	7	20	
Calcium	ug/L	14400	5000	5000	19900	18000	110	72	75-125	10	20	M1
Chromium	ug/L	0.67J	500	500	491	451	98	90	75-125	9	20	
Copper	ug/L	ND	500	500	503	463	100	92	75-125	8	20	
Hardness, Total(SM 2340B)	ug/L	71100	33100	33100	107000	97600	109	80	75-125	9	20	
Molybdenum	ug/L	ND	500	500	497	462	99	92	75-125	7	20	
Nickel	ug/L	14.0	500	500	503	464	98	90	75-125	8	20	
Selenium	ug/L	ND	500	500	513	486	103	97	75-125	6	20	
Silver	ug/L	ND	250	250	255	245	102	98	75-125	4	20	
Vanadium	ug/L	ND	500	500	497	460	99	92	75-125	8	20	
Zinc	ug/L	25.5	500	500	520	482	99	91	75-125	8	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

QC Batch: 879095
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749755001

METHOD BLANK: 4527745 Matrix: Water
Associated Lab Samples: 92749755001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.14	09/04/24 01:36	
Iron	ug/L	4.8J	20.0	3.0	09/04/24 01:36	
Lead	ug/L	ND	1.0	0.18	09/04/24 01:36	
Lithium	ug/L	ND	2.5	0.33	09/04/24 01:36	
Manganese	ug/L	ND	2.0	0.24	09/04/24 01:36	
Thallium	ug/L	ND	0.20	0.028	09/04/24 01:36	
Tin	ug/L	ND	1.0	0.14	09/04/24 01:36	

LABORATORY CONTROL SAMPLE: 4527746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	53.0	106	80-120	
Iron	ug/L	1250	1350	108	80-120	
Lead	ug/L	50	50.5	101	80-120	
Lithium	ug/L	50	52.6	105	80-120	
Manganese	ug/L	50	52.6	105	80-120	
Thallium	ug/L	25	25.8	103	80-120	
Tin	ug/L	50	51.2	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527747 4527748

Parameter	Units	92749361003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	21.7	50	50	73.7	74.3	104	105	75-125	1	20	
Iron	ug/L	8650	1250	1250	9910	9810	101	93	75-125	1	20	
Lead	ug/L	ND	50	50	51.1	51.6	102	103	75-125	1	20	
Lithium	ug/L	28.6	50	50	79.1	79.7	101	102	75-125	1	20	
Manganese	ug/L	754	50	50	843	779	177	51	75-125	8	20	M1
Thallium	ug/L	ND	25	25	25.9	26.3	103	105	75-125	2	20	
Tin	ug/L	ND	50	50	51.5	47.7	103	95	75-125	8	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

QC Batch: 879383
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749755001

METHOD BLANK: 4529543 Matrix: Water
Associated Lab Samples: 92749755001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/30/24 15:22	

LABORATORY CONTROL SAMPLE: 4529544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	234	93	80-120	

SAMPLE DUPLICATE: 4529545

Parameter	Units	92749752001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	152	157	3	25	

SAMPLE DUPLICATE: 4529546

Parameter	Units	92750043002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	694	679	2	25	

SAMPLE DUPLICATE: 4530479

Parameter	Units	92750043003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	328	332	1	25	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

QC Batch: 880535
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749755001

METHOD BLANK: 4534692 Matrix: Water
Associated Lab Samples: 92749755001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	09/05/24 16:15	

LABORATORY CONTROL SAMPLE: 4534693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534694 4534695

Parameter	Units	92749653007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	5.0	5.0	100	100	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534696 4534697

Parameter	Units	92749754004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	4.8	4.8	97	97	90-110	0	10	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

QC Batch: 878974
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749755001

METHOD BLANK: 4527134 Matrix: Water
Associated Lab Samples: 92749755001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/28/24 18:30	
Fluoride	mg/L	ND	0.10	0.050	08/28/24 18:30	
Nitrate as N	mg/L	ND	0.10	0.060	08/28/24 18:30	
Sulfate	mg/L	ND	1.0	0.50	08/28/24 18:30	

LABORATORY CONTROL SAMPLE: 4527135

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.4	105	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Nitrate as N	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	53.3	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527136 4527137

Parameter	Units	92750091004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	50.9	52.5	100	103	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	97	100	90-110	2	10	
Nitrate as N	mg/L	3.5	2.5	2.5	4.9	4.7	56	51	90-110	3	10	M1
Sulfate	mg/L	18.1	50	50	69.1	70.7	102	105	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527567 4527568

Parameter	Units	92749754004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.6	50	50	59.6	60.7	100	102	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	95	97	90-110	2	10	
Nitrate as N	mg/L	0.26	2.5	2.5	2.7	2.8	98	100	90-110	2	10	H1
Sulfate	mg/L	93.6	50	50	138	138	88	88	90-110	0	10	M1

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QUALIFIERS

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_2SA2024_CCR&VSWMR_H
Pace Project No.: 92749755

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92749755001	**082624NFBBLANK**	EPA 7199	878479		
92749755001	**082624NFBBLANK**	EPA 3010A	879094	EPA 6010D	879275
92749755001	**082624NFBBLANK**	EPA 3010A	879095	EPA 6020B	879262
92749755001	**082624NFBBLANK**	EPA 7470A	880526	EPA 7470A	880793
92749755001	**082624NFBBLANK**	SM 2540C-2015	879383		
92749755001	**082624NFBBLANK**	EPA 350.1 Rev 2.0 1993	880535		
92749755001	**082624NFBBLANK**	EPA 9056A	878974		

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Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project # WO#: 92749755

92749755

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

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: GMH 8/27/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92T076

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.3 Correction Factor: Add/Subtract (°C) 0

Cooler Temp Corrected (°C): 1.3

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project #

WO#: 92749755

PM: AMB Due Date: 09/11/24

CLIENT: 92-DomEnergy

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client_____ Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP1N	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC							✓																							
1		1	1		2	1	1																				1	✓		
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Hexavalent Chromium pH Adjustment

Project #

WO#: 92749755
PM: AMB Due Date: 09/11/24
CLIENT: 92-DomEnergy

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
FBBLANK	GMH	9.2				

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	crystal.shidle@wsp.com
Customer Project #:			
Project Name:	Bremo_2SA2024_CCR&VSWMR_H	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50149081
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): Virginia

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested: Standard TAT

Field Filtered (if applicable): [ ] Yes [X] No

Analysis:

Specify Container Size **: 2 4 3 7 3 1

Identify Container Preservative Type***: 1 3 2 1 1 2

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: **Angela Baioni**

AcctNum / Client ID:

Table #:

Profile / Template: **13861**

Prelog / Bottle Ord. ID: **EZ 3146518**

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals + Hardness	7199 Chromium, Hexavalent	9056 IC - Cl/Fl/SO4/NO3	RADS 226/228	Sample Comment	Preservation non-conformance identified for sample.
08[X]24NFBBLANK	WT	G			08/24/24	1230	7			X	X	X	X	X	X	*ALL SAMPLES PRESERVED ON ICE *	
																Taken near MW-11 with Lab DI water -Tracking ID #'s 8184 0816 3139 8184 0816 3139	

Additional Instructions from Pace®:

COC ID: Bremo_2SA2024_CCR&VSWMR_H_1_1

Collected By: (Printed Name) Zoey Mondshine

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

Coolers: | Thermometer ID: | Correction Factor (°C): | Obs. Temp. (°C) | Corrected Temp. (°C) | On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
WSP	08/24/24 1755		8/27/24 1010	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier [ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

October 04, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1773945
Samples Received:	09/04/2024
Project Number:	92749755
Description:	Bremo_2SA2024_CCR&CCR&VSWMR_H
Site:	001
Report To:	Angela Baioni 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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082624NFBBLANK L1773945-01 5

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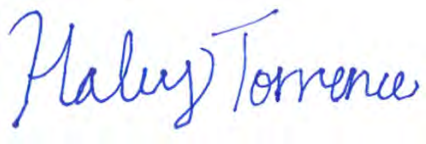
Sc: Sample Chain of Custody 10

082624NFBBLANK L1773945-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/26/24 12:30	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/27/24 09:00	10/03/24 13:40	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356942	1	09/11/24 18:43	09/20/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/27/24 09:00	10/03/24 13:40	ASN	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.285	J	0.242	0.387	0.341	0.118	10/03/2024 13:40	WG2357325
(T) Barium	*96.6*					*30.0-143*	*10/03/2024 13:40*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	-0.0109	U	0.226	0.425	0.418	0.219	09/20/2024 16:03	WG2356942
(T) Barium	*114*					*30.0-143*	*09/20/2024 16:03*	WG2356942
(T) Yttrium	*101*					*30.0-136*	*09/20/2024 16:03*	WG2356942

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.285	J	0.331	0.539	10/03/2024 13:40	WG2357325

Method Blank (MB)

(MB) R4128124-1 09/16/24 20:23

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.000	U	0.0621	0.138	0.0523
(T) Barium	*109*		*109*		

L1773945-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1773945-01 10/03/24 13:40 • (DUP) R4128124-7 10/03/24 13:40

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.285	0.242	0.341	0.118	0.281	0.477	0.864	0.328	1.45	0.00767	U	20	3
(T) Barium	*96.6*				*97.6*	*97.6*							

Laboratory Control Sample (LCS)

(LCS) R4128124-2 09/16/24 20:23

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.39	108	75.0-125	
(T) Barium			*108*		

L1773936-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773936-06 09/16/24 22:24 • (MS) R4128124-3 09/16/24 20:23 • (MSD) R4128124-4 09/16/24 20:23

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.202	21.4	19.3	106	95.6	1	75.0-125			10.3		20
(T) Barium		*102*			*109*	*111*							

Method Blank (MB)

(MB) R4125059-1 09/20/24 16:03

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.430	U	0.181	0.346	0.181
(T) Barium	*122*		*122*		
(T) Yttrium	*93.1*		*93.1*		

L1775404-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1775404-08 09/20/24 16:03 • (DUP) R4125059-5 09/20/24 16:03

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.460	0.343	0.615	0.322	0.664	0.291	0.516	0.272	36.4	0.455		20	3
(T) Barium	*122*				*109*	*109*							
(T) Yttrium	*107*				*103*	*103*							

Laboratory Control Sample (LCS)

(LCS) R4125059-2 09/20/24 16:03

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.18	83.5	80.0-120	
(T) Barium			*123*		
(T) Yttrium			*113*		

L1773936-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773936-06 09/20/24 16:03 • (MS) R4125059-3 09/20/24 16:03 • (MSD) R4125059-4 09/20/24 16:03

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.0260	15.1	12.5	90.4	74.8	1	70.0-130			18.9		20
(T) Barium		*124*			*124*	*98.3*							
(T) Yttrium		*114*			*113*	*110*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

F039

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: [X] Yes ☐ No

Workorder: 92749755 Workorder Name: Bremo_2SA2024_CCR&VSWMR_H

Owner Received Date: 8/27/2024 Results Requested By: 9/11/2024

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Ra 226/903.0	Ra 228/904.0 + Combined Ra	LAB USE ONLY
1	082624NFBBLANK	PS	8/26/2024 12:30	92749755001	Water	2	X	X	-01
2									
3									
4									
5									

L1773045

Transfers	Released By	Date/Time	Received By	Date/Time
1	HHB/Pace MCL	9/3/24		
2				
3			Christopher Sellers	9/4/24 0920

Comments

Cooler Temperature on Receipt ____°C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	
Bottles arrive intact:	Y N	Pres. Correct/Check:	Z
Correct bottles used:	Y N		
Sufficient volume sent:	Y N	2 TOTAL	
RA Screen <0.5 mR/hr:	Y N		

Pace

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

INTER_LABORATORY WORK ORDER # 92749755
(To be completed by sending lab)

Sending Project No:	92749755
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	09/01/24
REQUESTED COMPLETION DATE:	**9/11/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra 226/903.0	BP1N		HNO3	1	SI-38RAD	SUB PASI RAD
Ra 228/904.0 + Combined Ra	BP1N		HNO3	1	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 13, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on August 27, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: ENV STD DM
Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92749752001	**082624NMW11**	Water	08/26/24 12:05	08/27/24 10:10

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92749752001	**082624NMW11**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	EGC	1	PASI-A
		EPA 9056A	CDC	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92749752001	**082624NMW11**					
EPA 7199	Chromium, Hexavalent	1.1	ug/L	0.50	08/27/24 19:10	H1
EPA 6010D	Barium	3.0J	ug/L	5.0	09/04/24 23:42	
EPA 6010D	Calcium	20300	ug/L	100	09/04/24 23:42	
EPA 6010D	Copper	0.76J	ug/L	5.0	09/04/24 23:42	
EPA 6010D	Hardness, Total(SM 2340B)	103000	ug/L	662	09/04/24 23:42	
EPA 6010D	Vanadium	11.2	ug/L	5.0	09/04/24 23:42	
EPA 6020B	Cobalt	0.39J	ug/L	1.0	09/04/24 02:21	
EPA 6020B	Iron	393	ug/L	20.0	09/04/24 02:21	
EPA 6020B	Lithium	0.44J	ug/L	2.5	09/04/24 02:21	
EPA 6020B	Manganese	3.7	ug/L	2.0	09/04/24 02:21	
SM 2540C-2015	Total Dissolved Solids	152	mg/L	25.0	08/30/24 15:22	
EPA 9056A	Chloride	11.2	mg/L	1.0	08/29/24 02:31	
EPA 9056A	Sulfate	5.0	mg/L	1.0	08/29/24 02:31	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 082624NMW11 (Lab ID: 92749752001)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 878479

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749754004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4524622)
  - Chromium, Hexavalent
- MSD (Lab ID: 4524675)
  - Chromium, Hexavalent

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 879094

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749361003

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

- MSD (Lab ID: 4527744)
  - Calcium

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 879095

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749361003

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

- MS (Lab ID: 4527747)
  - Manganese
- MSD (Lab ID: 4527748)
  - Manganese

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 880526

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750377007

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

- MS (Lab ID: 4534644)
  - Mercury
- MSD (Lab ID: 4534645)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 880438

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92748945002,92748945003

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

- MS (Lab ID: 4534313)
  - Nitrogen, Ammonia
- MS (Lab ID: 4534315)
  - Nitrogen, Ammonia
- MSD (Lab ID: 4534314)
  - Nitrogen, Ammonia
- MSD (Lab ID: 4534316)
  - Nitrogen, Ammonia

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
1 sample was analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 082624NMW11 (Lab ID: 92749752001)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 878974

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749754004,92750091004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4527136)
  - Nitrate as N
- MS (Lab ID: 4527567)
  - Sulfate
- MSD (Lab ID: 4527137)
  - Nitrate as N
- MSD (Lab ID: 4527568)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Sample: 082624NMW11 **Lab ID: 92749752001** Collected: 08/26/24 12:05 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**1.1**	ug/L	0.50	0.086	20		08/27/24 19:10	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	08/29/24 11:40	09/04/24 23:42	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/04/24 23:42	7440-38-2	
Barium	**3.0J**	ug/L	5.0	0.79	1	08/29/24 11:40	09/04/24 23:42	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/04/24 23:42	7440-41-7	
Boron	ND	ug/L	50.0	4.0	1	08/29/24 11:40	09/04/24 23:42	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/04/24 23:42	7440-43-9	
Calcium	**20300**	ug/L	100	14.7	1	08/29/24 11:40	09/04/24 23:42	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/29/24 11:40	09/04/24 23:42	7440-47-3	
Copper	**0.76J**	ug/L	5.0	0.62	1	08/29/24 11:40	09/04/24 23:42	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/29/24 11:40	09/04/24 23:42	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/29/24 11:40	09/04/24 23:42	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/04/24 23:42	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/29/24 11:40	09/04/24 23:42	7440-22-4	
Hardness, Total(SM 2340B)	**103000**	ug/L	662	36.8	1	08/29/24 11:40	09/04/24 23:42		
Vanadium	**11.2**	ug/L	5.0	1.6	1	08/29/24 11:40	09/04/24 23:42	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/29/24 11:40	09/04/24 23:42	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.39J**	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:21	7440-48-4	
Iron	**393**	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:21	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:21	7439-92-1	
Lithium	**0.44J**	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:21	7439-93-2	
Manganese	**3.7**	ug/L	2.0	0.24	1	08/29/24 12:00	09/04/24 02:21	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:21	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:21	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/05/24 19:56	09/12/24 09:51	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**152**	mg/L	25.0	25.0	1		08/30/24 15:22		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		09/05/24 13:59	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Sample: 082624NMW11 **Lab ID: 92749752001** Collected: 08/26/24 12:05 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**11.2**	mg/L	1.0	0.60	1		08/29/24 02:31	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 02:31	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 02:31	14797-55-8	H1
Sulfate	**5.0**	mg/L	1.0	0.50	1		08/29/24 02:31	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

QC Batch: 878479
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92749752001

METHOD BLANK: 4524620 Matrix: Water
Associated Lab Samples: 92749752001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.0043	08/27/24 10:16	

LABORATORY CONTROL SAMPLE: 4524621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.097	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4524622 4524675

Parameter	Units	92749754004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	0.25	0.1	0.1	1.1	1.1	870	840	90-110	3	20	H1,M1

SAMPLE DUPLICATE: 4524623

Parameter	Units	92749754001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	0.0080J	0.012J		20	H1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

QC Batch: 880526
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749752001

METHOD BLANK: 4534642 Matrix: Water
Associated Lab Samples: 92749752001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	09/12/24 09:34	

LABORATORY CONTROL SAMPLE: 4534643

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534644 4534645

Parameter	Units	92750377007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	1.8	1.8	70	70	75-125	0	25	M1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

QC Batch: 879094
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92749752001

METHOD BLANK: 4527741 Matrix: Water
Associated Lab Samples: 92749752001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	09/04/24 23:08	
Arsenic	ug/L	ND	10.0	2.5	09/04/24 23:08	
Barium	ug/L	ND	5.0	0.79	09/04/24 23:08	
Beryllium	ug/L	ND	1.0	0.16	09/04/24 23:08	
Boron	ug/L	ND	50.0	4.0	09/04/24 23:08	
Cadmium	ug/L	ND	1.0	0.29	09/04/24 23:08	
Calcium	ug/L	15.2J	100	14.7	09/04/24 23:08	
Chromium	ug/L	ND	5.0	0.63	09/04/24 23:08	
Copper	ug/L	ND	5.0	0.62	09/04/24 23:08	
Hardness, Total(SM 2340B)	ug/L	61.4J	662	36.8	09/04/24 23:08	
Molybdenum	ug/L	ND	5.0	2.6	09/04/24 23:08	
Nickel	ug/L	ND	5.0	0.88	09/04/24 23:08	
Selenium	ug/L	ND	10.0	4.1	09/04/24 23:08	
Silver	ug/L	ND	5.0	0.49	09/04/24 23:08	
Vanadium	ug/L	ND	5.0	1.6	09/04/24 23:08	
Zinc	ug/L	ND	10.0	3.0	09/04/24 23:08	

LABORATORY CONTROL SAMPLE: 4527742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	446	89	80-120	
Arsenic	ug/L	500	447	89	80-120	
Barium	ug/L	500	450	90	80-120	
Beryllium	ug/L	500	435	87	80-120	
Boron	ug/L	500	460	92	80-120	
Cadmium	ug/L	500	457	91	80-120	
Calcium	ug/L	5000	4490	90	80-120	
Chromium	ug/L	500	436	87	80-120	
Copper	ug/L	500	443	89	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	28600	86	80-120	
Molybdenum	ug/L	500	447	89	80-120	
Nickel	ug/L	500	440	88	80-120	
Selenium	ug/L	500	448	90	80-120	
Silver	ug/L	250	238	95	80-120	
Vanadium	ug/L	500	441	88	80-120	
Zinc	ug/L	500	451	90	80-120	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527743 4527744

Parameter	Units	92749361003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	511	474	102	95	75-125	8	20	
Arsenic	ug/L	ND	500	500	502	471	100	94	75-125	6	20	
Barium	ug/L	105	500	500	608	553	101	90	75-125	10	20	
Beryllium	ug/L	0.40J	500	500	497	459	99	92	75-125	8	20	
Boron	ug/L	94.0	500	500	610	575	103	96	75-125	6	20	
Cadmium	ug/L	ND	500	500	492	461	98	92	75-125	7	20	
Calcium	ug/L	14400	5000	5000	19900	18000	110	72	75-125	10	20	M1
Chromium	ug/L	0.67J	500	500	491	451	98	90	75-125	9	20	
Copper	ug/L	ND	500	500	503	463	100	92	75-125	8	20	
Hardness, Total(SM 2340B)	ug/L	71100	33100	33100	107000	97600	109	80	75-125	9	20	
Molybdenum	ug/L	ND	500	500	497	462	99	92	75-125	7	20	
Nickel	ug/L	14.0	500	500	503	464	98	90	75-125	8	20	
Selenium	ug/L	ND	500	500	513	486	103	97	75-125	6	20	
Silver	ug/L	ND	250	250	255	245	102	98	75-125	4	20	
Vanadium	ug/L	ND	500	500	497	460	99	92	75-125	8	20	
Zinc	ug/L	25.5	500	500	520	482	99	91	75-125	8	20	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

QC Batch: 879095
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749752001

METHOD BLANK: 4527745 Matrix: Water
Associated Lab Samples: 92749752001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.14	09/04/24 01:36	
Iron	ug/L	4.8J	20.0	3.0	09/04/24 01:36	
Lead	ug/L	ND	1.0	0.18	09/04/24 01:36	
Lithium	ug/L	ND	2.5	0.33	09/04/24 01:36	
Manganese	ug/L	ND	2.0	0.24	09/04/24 01:36	
Thallium	ug/L	ND	0.20	0.028	09/04/24 01:36	
Tin	ug/L	ND	1.0	0.14	09/04/24 01:36	

LABORATORY CONTROL SAMPLE: 4527746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	53.0	106	80-120	
Iron	ug/L	1250	1350	108	80-120	
Lead	ug/L	50	50.5	101	80-120	
Lithium	ug/L	50	52.6	105	80-120	
Manganese	ug/L	50	52.6	105	80-120	
Thallium	ug/L	25	25.8	103	80-120	
Tin	ug/L	50	51.2	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527747 4527748

Parameter	Units	92749361003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	21.7	50	50	73.7	74.3	104	105	75-125	1	20	
Iron	ug/L	8650	1250	1250	9910	9810	101	93	75-125	1	20	
Lead	ug/L	ND	50	50	51.1	51.6	102	103	75-125	1	20	
Lithium	ug/L	28.6	50	50	79.1	79.7	101	102	75-125	1	20	
Manganese	ug/L	754	50	50	843	779	177	51	75-125	8	20	M1
Thallium	ug/L	ND	25	25	25.9	26.3	103	105	75-125	2	20	
Tin	ug/L	ND	50	50	51.5	47.7	103	95	75-125	8	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

QC Batch: 879383
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749752001

METHOD BLANK: 4529543 Matrix: Water
Associated Lab Samples: 92749752001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/30/24 15:22	

LABORATORY CONTROL SAMPLE: 4529544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	234	93	80-120	

SAMPLE DUPLICATE: 4529545

Parameter	Units	92749752001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	152	157	3	25	

SAMPLE DUPLICATE: 4529546

Parameter	Units	92750043002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	694	679	2	25	

SAMPLE DUPLICATE: 4530479

Parameter	Units	92750043003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	328	332	1	25	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

QC Batch: 880438
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749752001

METHOD BLANK: 4534311 Matrix: Water
Associated Lab Samples: 92749752001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	09/05/24 13:34	

LABORATORY CONTROL SAMPLE: 4534312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534313 4534314

Parameter	Units	92748945002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	441	5	5	448	455	123	267	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534315 4534316

Parameter	Units	92748945003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	472	5	5	447	428	-489	-870	90-110	4	10	M1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

QC Batch: 878974
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749752001

METHOD BLANK: 4527134 Matrix: Water
Associated Lab Samples: 92749752001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/28/24 18:30	
Fluoride	mg/L	ND	0.10	0.050	08/28/24 18:30	
Nitrate as N	mg/L	ND	0.10	0.060	08/28/24 18:30	
Sulfate	mg/L	ND	1.0	0.50	08/28/24 18:30	

LABORATORY CONTROL SAMPLE: 4527135

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.4	105	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Nitrate as N	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	53.3	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527136 4527137

Parameter	Units	92750091004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	50.9	52.5	100	103	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	97	100	90-110	2	10	
Nitrate as N	mg/L	3.5	2.5	2.5	4.9	4.7	56	51	90-110	3	10	M1
Sulfate	mg/L	18.1	50	50	69.1	70.7	102	105	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527567 4527568

Parameter	Units	92749754004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.6	50	50	59.6	60.7	100	102	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	95	97	90-110	2	10	
Nitrate as N	mg/L	0.26	2.5	2.5	2.7	2.8	98	100	90-110	2	10	H1
Sulfate	mg/L	93.6	50	50	138	138	88	88	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_2SA2024_CCR&VSWMR_A
Pace Project No.: 92749752

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92749752001	**082624NMW11**	EPA 7199	878479		
92749752001	**082624NMW11**	EPA 3010A	879094	EPA 6010D	879275
92749752001	**082624NMW11**	EPA 3010A	879095	EPA 6020B	879262
92749752001	**082624NMW11**	EPA 7470A	880526	EPA 7470A	880793
92749752001	**082624NMW11**	SM 2540C-2015	879383		
92749752001	**082624NMW11**	EPA 350.1 Rev 2.0 1993	880438		
92749752001	**082624NMW11**	EPA 9056A	878974		

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Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project #: WO#: 92749752



Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: CSH 8/27/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92707b

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 1.1 Correction Factor: Add/Subtract (°C) 0

Cooler Temp Corrected (°C): 1.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project # WO#:92749752

PM: AMB Due Date: 09/11/24

CLIENT: 92-DomEnergy

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client_____ Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP1N	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																														
1		1	1		2	1	1																				1			
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Hexavalent Chromium pH Adjustment

Project #

WO#: 92749752

PM: AMB Due Date: 09/11/24
CLIENT: 92-DomEnergy

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
11	bmh	6.8	9.5	8/27/24 10:39	10 base	

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	crystal.shadle@wsp.com
Customer Project #:			
Project Name:	Bremo_2SA2024_CCR&VSWMR_A	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50149081
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): Virginia

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested: Standard TAT

Field Filtered (if applicable): [ ] Yes [X] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 2 4 3 10 3 1

Identify Container Preservative Type***: 1 3 2 5 1 2

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals + Hardness	7199 Chromium, Hexavalent	9056 IC - Cl/Fl/SO4/NO3	RADS 226/228	Sample Comment
08[2]24NMW11	WT	G			08/26/24	1205	7			X	X	X	X	X	X	* ALL SAMPLES PRESERVED ON ICE *
																Tracking #'s: 8184 0816 3134 8184 0816 3070 8184 0816 3069

Lab Use Only: Proj. Mgr: Angela Baioni; AcctNum / Client ID:; Table #:; Profile / Template: 13861; Prelog / Bottle Ord. ID: EZ 3146511

Preservation non-conformance identified for sample:

Additional Instructions from Pace®:

COCID: Bremo_2SA2024_CCR&VSWMR_A_1_1

Collected By: (Printed Name) Zoey Mondshine

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
WSP	08/26/24 1755	GMH Pace	8/27/24 1010	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

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ANALYTICAL REPORT

October 04, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1773939
Samples Received:	09/04/2024
Project Number:	92749752
Description:	Bremo_2SA2024_CCR&CCR&VSWMR_A
Site:	001
Report To:	Angela Baioni 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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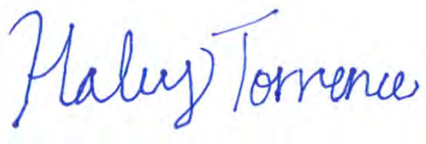
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	Collected by	Collected date/time	Received date/time
082624NMW11 L1773939-01 Non-Potable Water		08/26/24 12:05	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 23:24	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.201	J	0.180	0.323	0.275	0.104	09/16/2024 23:24	WG2357325
(T) Barium	*111*					*30.0-143*	*09/16/2024 23:24*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.389	J	0.227	0.425	0.426	0.223	09/18/2024 21:00	WG2356242
(T) Barium	*130*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*109*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.590		0.290	0.507	09/18/2024 21:00	WG2357325

Method Blank (MB)

(MB) R4128124-1 09/16/24 20:23

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.000	U	0.0621	0.138	0.0523
(T) Barium	*109*		*109*		

L1773945-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1773945-01 10/03/24 13:40 • (DUP) R4128124-7 10/03/24 13:40

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.285	0.242	0.341	0.118	0.281	0.477	0.864	0.328	1.45	0.00767	U	20	3
(T) Barium	*96.6*				*97.6*	*97.6*							

Laboratory Control Sample (LCS)

(LCS) R4128124-2 09/16/24 20:23

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.39	108	75.0-125	
(T) Barium			*108*		

L1773936-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773936-06 09/16/24 22:24 • (MS) R4128124-3 09/16/24 20:23 • (MSD) R4128124-4 09/16/24 20:23

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.202	21.4	19.3	106	95.6	1	75.0-125			10.3		20
(T) Barium		*102*			*109*	*111*							

Method Blank (MB)

(MB) R4125044-1 09/18/24 17:12

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.290		0.139	0.253	0.133
(T) Barium	*129*		*129*		
(T) Yttrium	*101*		*101*		

L1773940-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1773940-02 09/18/24 21:00 • (DUP) R4125044-5 09/18/24 17:12

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	1.38	0.394	0.719	0.375	1.27	0.337	0.594	0.311	8.17	0.208		20	3
(T) Barium	*127*				*125*	*125*							
(T) Yttrium	*95.7*				*107*	*107*							

Laboratory Control Sample (LCS)

(LCS) R4125044-2 09/18/24 17:12

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.04	80.7	80.0-120	
(T) Barium			*127*		
(T) Yttrium			*118*		

L1773902-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773902-06 09/18/24 17:12 • (MS) R4125044-3 09/18/24 17:12 • (MSD) R4125044-4 09/18/24 17:12

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	-0.444	15.8	13.5	94.4	80.5	1	70.0-130			15.8		20
(T) Barium		*122*			*125*	*129*							
(T) Yttrium		*109*			*115*	*107*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: [X] Yes ☐ No
Owner Received Date: 8/27/2024 Results Requested By: 9/11/2024

Workorder: 92749752 Workorder Name: Bremo_2SA2024_CCR&VSWMR_A

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Ra 226/903.0	Ra 228/904.0 + Combined Ra	LAB USE ONLY
1	082624NMW11	PS	8/26/2024 12:05	92749752001	Water	2	X	X	01
2									
3									
4									
5									

L1773939

Transfers	Released By	Date/Time	Received By	Date/Time
1	HHA/PDA HUL	9/3/24 1800		
2				
3			Christopher R. Sullivan	9/4/24 0900

Comments

Cooler Temperature on Receipt _____ °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

2.9+.3=3.2

Sample Receipt Checklist

COC Seal Present/Intact:	Y__N	If Applicable	
COC Signed/Accurate:	Y__N	VOA Zero Headspace:	Y__N
Bottles arrive intact:	Y__N	Pres. Correct/Check:	Y__N
Correct bottles used:	Y__N	2 TOTAL	
Sufficient volume sent:	Y__N		
RA Screen <0.5 mR/hr:	Y__N		

L1729239

Pace

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

INTER_LABORATORY WORK ORDER # 92749752
(To be completed by sending lab)

Sending Project No:	92749752
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	09/01/24
REQUESTED COMPLETION DATE:	**9/11/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra 226/903.0	BP1N		HNO3	1	SI-38RAD	SUB PASI RAD
Ra 228/904.0 + Combined Ra	BP1N		HNO3	1	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 13, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on August 27, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: ENV STD DM
Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92749753001	**082624NMW29S**	Water	08/26/24 12:25	08/27/24 10:10
92749753002	**082624NMW29D**	Water	08/26/24 13:35	08/27/24 10:10

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Huntersville, NC 28078
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SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92749753001	**082624NMW29S**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	EGC	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92749753002	**082624NMW29D**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	EGC	1	PASI-A
		EPA 9056A	CDC	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92749753001	**082624NMW29S**					
EPA 7199	Chromium, Hexavalent	1.0	ug/L	0.50	08/27/24 19:27	H1
EPA 6010D	Barium	16.6	ug/L	5.0	09/04/24 23:45	
EPA 6010D	Calcium	7650	ug/L	100	09/04/24 23:45	
EPA 6010D	Chromium	0.99J	ug/L	5.0	09/04/24 23:45	
EPA 6010D	Hardness, Total(SM 2340B)	25300	ug/L	662	09/04/24 23:45	
EPA 6020B	Iron	201	ug/L	20.0	09/04/24 02:24	
EPA 6020B	Lithium	0.53J	ug/L	2.5	09/04/24 02:24	
EPA 6020B	Manganese	4.6	ug/L	2.0	09/04/24 02:24	
SM 2540C-2015	Total Dissolved Solids	119	mg/L	25.0	08/30/24 15:22	
EPA 9056A	Chloride	10.1	mg/L	1.0	08/29/24 04:17	
EPA 9056A	Nitrate as N	1.2	mg/L	0.10	08/29/24 04:17	H1
EPA 9056A	Sulfate	9.3	mg/L	1.0	08/29/24 04:17	
92749753002	**082624NMW29D**					
EPA 7199	Chromium, Hexavalent	0.38	ug/L	0.050	08/27/24 19:45	H1
EPA 6010D	Barium	33.8	ug/L	5.0	09/04/24 23:47	
EPA 6010D	Boron	47.0J	ug/L	50.0	09/04/24 23:47	
EPA 6010D	Calcium	40600	ug/L	100	09/04/24 23:47	
EPA 6010D	Copper	0.81J	ug/L	5.0	09/04/24 23:47	
EPA 6010D	Nickel	1.5J	ug/L	5.0	09/04/24 23:47	
EPA 6010D	Hardness, Total(SM 2340B)	143000	ug/L	662	09/04/24 23:47	
EPA 6010D	Zinc	4.8J	ug/L	10.0	09/04/24 23:47	
EPA 6020B	Cobalt	0.21J	ug/L	1.0	09/04/24 02:28	
EPA 6020B	Iron	471	ug/L	20.0	09/04/24 02:28	
EPA 6020B	Lithium	1.2J	ug/L	2.5	09/04/24 02:28	
EPA 6020B	Manganese	918	ug/L	20.0	09/04/24 17:02	
EPA 6020B	Tin	0.24J	ug/L	1.0	09/04/24 02:28	
SM 2540C-2015	Total Dissolved Solids	448	mg/L	25.0	08/30/24 15:22	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.25	mg/L	0.10	09/05/24 14:02	
EPA 9056A	Chloride	42.9	mg/L	1.0	08/29/24 02:45	
EPA 9056A	Fluoride	0.13	mg/L	0.10	08/29/24 02:45	
EPA 9056A	Nitrate as N	0.093J	mg/L	0.10	08/29/24 02:45	H1
EPA 9056A	Sulfate	27.3	mg/L	1.0	08/29/24 02:45	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
2 samples were analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 082624NMW29D (Lab ID: 92749753002)
- 082624NMW29S (Lab ID: 92749753001)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 878479

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749754004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4524622)
  - Chromium, Hexavalent
- MSD (Lab ID: 4524675)
  - Chromium, Hexavalent

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
2 samples were analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 879094

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749361003

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

- MSD (Lab ID: 4527744)
  - Calcium

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
2 samples were analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 879095

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749361003

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

- MS (Lab ID: 4527747)
  - Manganese
- MSD (Lab ID: 4527748)
  - Manganese

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
2 samples were analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 880526

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750377007

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

- MS (Lab ID: 4534644)
  - Mercury
- MSD (Lab ID: 4534645)
  - Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
2 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
2 samples were analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 880438

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92748945002,92748945003

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

- MS (Lab ID: 4534313)
  - Nitrogen, Ammonia
- MS (Lab ID: 4534315)
  - Nitrogen, Ammonia
- MSD (Lab ID: 4534314)
  - Nitrogen, Ammonia
- MSD (Lab ID: 4534316)
  - Nitrogen, Ammonia

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
2 samples were analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 082624NMW29D (Lab ID: 92749753002)
- 082624NMW29S (Lab ID: 92749753001)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 878974

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749754004,92750091004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4527136)
  - Nitrate as N
- MS (Lab ID: 4527567)
  - Sulfate
- MSD (Lab ID: 4527137)
  - Nitrate as N
- MSD (Lab ID: 4527568)
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Sample: 082624NMW29S **Lab ID: 92749753001** Collected: 08/26/24 12:25 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**1.0**	ug/L	0.50	0.086	20		08/27/24 19:27	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	08/29/24 11:40	09/04/24 23:45	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/04/24 23:45	7440-38-2	
Barium	**16.6**	ug/L	5.0	0.79	1	08/29/24 11:40	09/04/24 23:45	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/04/24 23:45	7440-41-7	
Boron	ND	ug/L	50.0	4.0	1	08/29/24 11:40	09/04/24 23:45	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/04/24 23:45	7440-43-9	
Calcium	**7650**	ug/L	100	14.7	1	08/29/24 11:40	09/04/24 23:45	7440-70-2	
Chromium	**0.99J**	ug/L	5.0	0.63	1	08/29/24 11:40	09/04/24 23:45	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/29/24 11:40	09/04/24 23:45	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/29/24 11:40	09/04/24 23:45	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/29/24 11:40	09/04/24 23:45	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/04/24 23:45	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/29/24 11:40	09/04/24 23:45	7440-22-4	
Hardness, Total(SM 2340B)	**25300**	ug/L	662	36.8	1	08/29/24 11:40	09/04/24 23:45		
Vanadium	ND	ug/L	5.0	1.6	1	08/29/24 11:40	09/04/24 23:45	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/29/24 11:40	09/04/24 23:45	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:24	7440-48-4	
Iron	**201**	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:24	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:24	7439-92-1	
Lithium	**0.53J**	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:24	7439-93-2	
Manganese	**4.6**	ug/L	2.0	0.24	1	08/29/24 12:00	09/04/24 02:24	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:24	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:24	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/05/24 19:56	09/12/24 09:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**119**	mg/L	25.0	25.0	1		08/30/24 15:22		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		09/05/24 14:00	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Sample: 082624NMW29S **Lab ID: 92749753001** Collected: 08/26/24 12:25 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**10.1**	mg/L	1.0	0.60	1		08/29/24 04:17	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 04:17	16984-48-8	
Nitrate as N	**1.2**	mg/L	0.10	0.060	1		08/29/24 04:17	14797-55-8	H1
Sulfate	**9.3**	mg/L	1.0	0.50	1		08/29/24 04:17	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Sample: 082624NMW29D **Lab ID: 92749753002** Collected: 08/26/24 13:35 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.38**	ug/L	0.050	0.0086	2		08/27/24 19:45	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	08/29/24 11:40	09/04/24 23:47	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/04/24 23:47	7440-38-2	
Barium	**33.8**	ug/L	5.0	0.79	1	08/29/24 11:40	09/04/24 23:47	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/04/24 23:47	7440-41-7	
Boron	**47.0J**	ug/L	50.0	4.0	1	08/29/24 11:40	09/04/24 23:47	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/04/24 23:47	7440-43-9	
Calcium	**40600**	ug/L	100	14.7	1	08/29/24 11:40	09/04/24 23:47	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/29/24 11:40	09/04/24 23:47	7440-47-3	
Copper	**0.81J**	ug/L	5.0	0.62	1	08/29/24 11:40	09/04/24 23:47	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/29/24 11:40	09/04/24 23:47	7439-98-7	
Nickel	**1.5J**	ug/L	5.0	0.88	1	08/29/24 11:40	09/04/24 23:47	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/04/24 23:47	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/29/24 11:40	09/04/24 23:47	7440-22-4	
Hardness, Total(SM 2340B)	**143000**	ug/L	662	36.8	1	08/29/24 11:40	09/04/24 23:47		
Vanadium	ND	ug/L	5.0	1.6	1	08/29/24 11:40	09/04/24 23:47	7440-62-2	
Zinc	**4.8J**	ug/L	10.0	3.0	1	08/29/24 11:40	09/04/24 23:47	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.21J**	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:28	7440-48-4	
Iron	**471**	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:28	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:28	7439-92-1	
Lithium	**1.2J**	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:28	7439-93-2	
Manganese	**918**	ug/L	20.0	2.4	10	08/29/24 12:00	09/04/24 17:02	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:28	7440-28-0	
Tin	**0.24J**	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:28	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/05/24 19:56	09/12/24 09:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**448**	mg/L	25.0	25.0	1		08/30/24 15:22		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.25**	mg/L	0.10	0.031	1		09/05/24 14:02	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Sample: 082624NMW29D **Lab ID: 92749753002** Collected: 08/26/24 13:35 Received: 08/27/24 10:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**42.9**	mg/L	1.0	0.60	1		08/29/24 02:45	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	0.050	1		08/29/24 02:45	16984-48-8	
Nitrate as N	**0.093J**	mg/L	0.10	0.060	1		08/29/24 02:45	14797-55-8	H1
Sulfate	**27.3**	mg/L	1.0	0.50	1		08/29/24 02:45	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

QC Batch: 878479
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92749753001, 92749753002

METHOD BLANK: 4524620 Matrix: Water
Associated Lab Samples: 92749753001, 92749753002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.0043	08/27/24 10:16	

LABORATORY CONTROL SAMPLE: 4524621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.097	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4524622 4524675

Parameter	Units	92749754004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	0.25	0.1	0.1	1.1	1.1	870	840	90-110	3	20	H1,M1

SAMPLE DUPLICATE: 4524623

Parameter	Units	92749754001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	0.0080J	0.012J		20	H1

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

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

QC Batch: 880526
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749753001, 92749753002

METHOD BLANK: 4534642 Matrix: Water
Associated Lab Samples: 92749753001, 92749753002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	09/12/24 09:34	

LABORATORY CONTROL SAMPLE: 4534643

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534644 4534645

Parameter	Units	92750377007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	1.8	1.8	70	70	75-125	0	25	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

QC Batch: 879094
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749753001, 92749753002

METHOD BLANK: 4527741 Matrix: Water
Associated Lab Samples: 92749753001, 92749753002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	09/04/24 23:08	
Arsenic	ug/L	ND	10.0	2.5	09/04/24 23:08	
Barium	ug/L	ND	5.0	0.79	09/04/24 23:08	
Beryllium	ug/L	ND	1.0	0.16	09/04/24 23:08	
Boron	ug/L	ND	50.0	4.0	09/04/24 23:08	
Cadmium	ug/L	ND	1.0	0.29	09/04/24 23:08	
Calcium	ug/L	15.2J	100	14.7	09/04/24 23:08	
Chromium	ug/L	ND	5.0	0.63	09/04/24 23:08	
Copper	ug/L	ND	5.0	0.62	09/04/24 23:08	
Hardness, Total(SM 2340B)	ug/L	61.4J	662	36.8	09/04/24 23:08	
Molybdenum	ug/L	ND	5.0	2.6	09/04/24 23:08	
Nickel	ug/L	ND	5.0	0.88	09/04/24 23:08	
Selenium	ug/L	ND	10.0	4.1	09/04/24 23:08	
Silver	ug/L	ND	5.0	0.49	09/04/24 23:08	
Vanadium	ug/L	ND	5.0	1.6	09/04/24 23:08	
Zinc	ug/L	ND	10.0	3.0	09/04/24 23:08	

LABORATORY CONTROL SAMPLE: 4527742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	446	89	80-120	
Arsenic	ug/L	500	447	89	80-120	
Barium	ug/L	500	450	90	80-120	
Beryllium	ug/L	500	435	87	80-120	
Boron	ug/L	500	460	92	80-120	
Cadmium	ug/L	500	457	91	80-120	
Calcium	ug/L	5000	4490	90	80-120	
Chromium	ug/L	500	436	87	80-120	
Copper	ug/L	500	443	89	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	28600	86	80-120	
Molybdenum	ug/L	500	447	89	80-120	
Nickel	ug/L	500	440	88	80-120	
Selenium	ug/L	500	448	90	80-120	
Silver	ug/L	250	238	95	80-120	
Vanadium	ug/L	500	441	88	80-120	
Zinc	ug/L	500	451	90	80-120	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527743 4527744

Parameter	Units	92749361003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	511	474	102	95	75-125	8	20	
Arsenic	ug/L	ND	500	500	502	471	100	94	75-125	6	20	
Barium	ug/L	105	500	500	608	553	101	90	75-125	10	20	
Beryllium	ug/L	0.40J	500	500	497	459	99	92	75-125	8	20	
Boron	ug/L	94.0	500	500	610	575	103	96	75-125	6	20	
Cadmium	ug/L	ND	500	500	492	461	98	92	75-125	7	20	
Calcium	ug/L	14400	5000	5000	19900	18000	110	72	75-125	10	20	M1
Chromium	ug/L	0.67J	500	500	491	451	98	90	75-125	9	20	
Copper	ug/L	ND	500	500	503	463	100	92	75-125	8	20	
Hardness, Total(SM 2340B)	ug/L	71100	33100	33100	107000	97600	109	80	75-125	9	20	
Molybdenum	ug/L	ND	500	500	497	462	99	92	75-125	7	20	
Nickel	ug/L	14.0	500	500	503	464	98	90	75-125	8	20	
Selenium	ug/L	ND	500	500	513	486	103	97	75-125	6	20	
Silver	ug/L	ND	250	250	255	245	102	98	75-125	4	20	
Vanadium	ug/L	ND	500	500	497	460	99	92	75-125	8	20	
Zinc	ug/L	25.5	500	500	520	482	99	91	75-125	8	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

QC Batch: 879095
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749753001, 92749753002

METHOD BLANK: 4527745 Matrix: Water
Associated Lab Samples: 92749753001, 92749753002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.14	09/04/24 01:36	
Iron	ug/L	4.8J	20.0	3.0	09/04/24 01:36	
Lead	ug/L	ND	1.0	0.18	09/04/24 01:36	
Lithium	ug/L	ND	2.5	0.33	09/04/24 01:36	
Manganese	ug/L	ND	2.0	0.24	09/04/24 01:36	
Thallium	ug/L	ND	0.20	0.028	09/04/24 01:36	
Tin	ug/L	ND	1.0	0.14	09/04/24 01:36	

LABORATORY CONTROL SAMPLE: 4527746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	53.0	106	80-120	
Iron	ug/L	1250	1350	108	80-120	
Lead	ug/L	50	50.5	101	80-120	
Lithium	ug/L	50	52.6	105	80-120	
Manganese	ug/L	50	52.6	105	80-120	
Thallium	ug/L	25	25.8	103	80-120	
Tin	ug/L	50	51.2	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527747 4527748

Parameter	Units	92749361003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	21.7	50	50	73.7	74.3	104	105	75-125	1	20	
Iron	ug/L	8650	1250	1250	9910	9810	101	93	75-125	1	20	
Lead	ug/L	ND	50	50	51.1	51.6	102	103	75-125	1	20	
Lithium	ug/L	28.6	50	50	79.1	79.7	101	102	75-125	1	20	
Manganese	ug/L	754	50	50	843	779	177	51	75-125	8	20	M1
Thallium	ug/L	ND	25	25	25.9	26.3	103	105	75-125	2	20	
Tin	ug/L	ND	50	50	51.5	47.7	103	95	75-125	8	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

QC Batch: 879383
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749753001, 92749753002

METHOD BLANK: 4529543 Matrix: Water
Associated Lab Samples: 92749753001, 92749753002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/30/24 15:22	

LABORATORY CONTROL SAMPLE: 4529544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	234	93	80-120	

SAMPLE DUPLICATE: 4529545

Parameter	Units	92749752001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	152	157	3	25	

SAMPLE DUPLICATE: 4529546

Parameter	Units	92750043002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	694	679	2	25	

SAMPLE DUPLICATE: 4530479

Parameter	Units	92750043003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	328	332	1	25	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

QC Batch: 880438
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749753001, 92749753002

METHOD BLANK: 4534311 Matrix: Water
Associated Lab Samples: 92749753001, 92749753002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	09/05/24 13:34	

LABORATORY CONTROL SAMPLE: 4534312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534313 4534314

Parameter	Units	92748945002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	441	5	5	448	455	123	267	90-110	2	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534315 4534316

Parameter	Units	92748945003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	472	5	5	447	428	-489	-870	90-110	4	10	M1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

QC Batch: 878974
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749753001, 92749753002

METHOD BLANK: 4527134 Matrix: Water
Associated Lab Samples: 92749753001, 92749753002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/28/24 18:30	
Fluoride	mg/L	ND	0.10	0.050	08/28/24 18:30	
Nitrate as N	mg/L	ND	0.10	0.060	08/28/24 18:30	
Sulfate	mg/L	ND	1.0	0.50	08/28/24 18:30	

LABORATORY CONTROL SAMPLE: 4527135

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.4	105	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Nitrate as N	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	53.3	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527136 4527137

Parameter	Units	92750091004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	50.9	52.5	100	103	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	97	100	90-110	2	10	
Nitrate as N	mg/L	3.5	2.5	2.5	4.9	4.7	56	51	90-110	3	10	M1
Sulfate	mg/L	18.1	50	50	69.1	70.7	102	105	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527567 4527568

Parameter	Units	92749754004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.6	50	50	59.6	60.7	100	102	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.4	2.4	95	97	90-110	2	10	
Nitrate as N	mg/L	0.26	2.5	2.5	2.7	2.8	98	100	90-110	2	10	H1
Sulfate	mg/L	93.6	50	50	138	138	88	88	90-110	0	10	M1

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QUALIFIERS

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_2SA2024_CCR&VSWMR_B
Pace Project No.: 92749753

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92749753001	**082624NMW29S**	EPA 7199	878479		
92749753002	**082624NMW29D**	EPA 7199	878479		
92749753001	**082624NMW29S**	EPA 3010A	879094	EPA 6010D	879275
92749753002	**082624NMW29D**	EPA 3010A	879094	EPA 6010D	879275
92749753001	**082624NMW29S**	EPA 3010A	879095	EPA 6020B	879262
92749753002	**082624NMW29D**	EPA 3010A	879095	EPA 6020B	879262
92749753001	**082624NMW29S**	EPA 7470A	880526	EPA 7470A	880793
92749753002	**082624NMW29D**	EPA 7470A	880526	EPA 7470A	880793
92749753001	**082624NMW29S**	SM 2540C-2015	879383		
92749753002	**082624NMW29D**	SM 2540C-2015	879383		
92749753001	**082624NMW29S**	EPA 350.1 Rev 2.0 1993	880438		
92749753002	**082624NMW29D**	EPA 350.1 Rev 2.0 1993	880438		
92749753001	**082624NMW29S**	EPA 9056A	878974		
92749753002	**082624NMW29D**	EPA 9056A	878974		

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Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project #: **WO# : 92749753**

92749753

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other: ____ 8/27/24

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No ☐ N/A

Date/Initials Person Examining Contents: GML 8/27/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 97076

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 23, 0.8, 1.1, 1.3, 3.1 Correction Factor: Add/Subtract (°C) 0

Cooler Temp Corrected (°C): 23, 0.8, 1.1, 1.3, 3.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project # WO#: 92749753

PM: AMB Due Date: 09/11/24

CLIENT: 92-DomEnergy

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client_____ Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP1N	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																														
1		1	1		2																						1			
2		1	1		2																						1			
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Hexavalent Chromium pH Adjustment

Project #

WO#: 92749753
PM: AMB Due Date: 09/11/24
CLIENT: 92-DomEnergy

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
295	GMH	9.2				
295D	GMH	9.0				

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	crystal.sysalle@wsp.com
Customer Project #:			
Project Name:	Bremo_2SA2024_CCR&VSWMR_B	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50149081
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): Virginia

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested: Standard TAT

Field Filtered (if applicable): [ ] Yes [X] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 24 | 3 | 10 | 3 | 1

Identify Container Preservative Type***: 1 | 3 | 2 | 1 | 1 | 2

Analysis Requested

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals + Hardness	7199 Chromium, Hexavalent	9056 IC - Cl/Fl/SO4/NO3	RADS 226/228	Sample Comment
08_26_24NMW29S	WT	G			08/26/24	1225	7			X	X	X	X	X	X	*ALL SAMPLES
08_26_24NMW29D	WT	G			08/26/24	1335	7			X	X	X	X	X	X	PRESERVED
																ON ICE *
																Tracking #'s:
																818408163139
																818408163070
																818408163069

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Angela Baioni

AcctNum / Client ID:

Table #:

Profile / Template: 13861

Prelog / Bottle Ord. ID: EZ 3146512

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:

COC ID: Bremo_2SA2024_CCR+VSWMR_B_1_1

Collected By: (Printed Name) JAMES DAVIS

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
/WSP	08/26/24 1755	GMU Pace HM	8/27/24 1010	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	[ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

October 04, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1773940
Samples Received:	09/04/2024
Project Number:	92749753
Description:	Bremo_2SA2024_CCR&CCR&VSWMR_B
Site:	001
Report To:	Angela Baioni 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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082624NMW29S L1773940-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/26/24 12:25	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 23:24	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

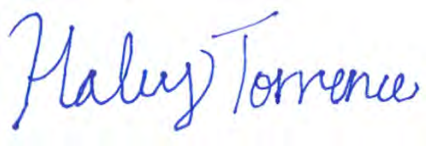
082624NMW29D L1773940-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/26/24 13:35	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 23:24	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.207	J	0.162	0.307	0.220	0.0758	09/16/2024 23:24	WG2357325
(T) Barium	*97.5*					*30.0-143*	*09/16/2024 23:24*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.860		0.251	0.449	0.458	0.239	09/18/2024 21:00	WG2356242
(T) Barium	*132*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*116*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.07		0.299	0.508	09/18/2024 21:00	WG2357325

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	1.08		0.322	0.465	0.248	0.0905	09/16/2024 23:24	WG2357325
(T) Barium	*102*					*30.0-143*	*09/16/2024 23:24*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.38		0.394	0.678	0.719	0.375	09/18/2024 21:00	WG2356242
(T) Barium	*127*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*95.7*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.45		0.509	0.761	09/18/2024 21:00	WG2357325

Method Blank (MB)

(MB) R4128124-1 09/16/24 20:23

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.000	U	0.0621	0.138	0.0523
(T) Barium	*109*		*109*		

L1773945-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1773945-01 10/03/24 13:40 • (DUP) R4128124-7 10/03/24 13:40

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-226	0.285	0.242	0.341	0.118	0.281	0.477	0.864	0.328	1.45	0.00767	U	20	3
(T) Barium	*96.6*				*97.6*	*97.6*							

Laboratory Control Sample (LCS)

(LCS) R4128124-2 09/16/24 20:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.39	108	75.0-125	
(T) Barium			*108*		

L1773936-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773936-06 09/16/24 22:24 • (MS) R4128124-3 09/16/24 20:23 • (MSD) R4128124-4 09/16/24 20:23

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.202	21.4	19.3	106	95.6	1	75.0-125			10.3		20
(T) Barium		*102*			*109*	*111*							

Method Blank (MB)

(MB) R4125044-1 09/18/24 17:12

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.290		0.139	0.253	0.133
(T) Barium	*129*		*129*		
(T) Yttrium	*101*		*101*		

L1773940-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1773940-02 09/18/24 21:00 • (DUP) R4125044-5 09/18/24 17:12

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	1.38	0.394	0.719	0.375	1.27	0.337	0.594	0.311	8.17	0.208		20	3
(T) Barium	*127*				*125*	*125*							
(T) Yttrium	*95.7*				*107*	*107*							

Laboratory Control Sample (LCS)

(LCS) R4125044-2 09/18/24 17:12

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.04	80.7	80.0-120	
(T) Barium			*127*		
(T) Yttrium			*118*		

L1773902-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773902-06 09/18/24 17:12 • (MS) R4125044-3 09/18/24 17:12 • (MSD) R4125044-4 09/18/24 17:12

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	-0.444	15.8	13.5	94.4	80.5	1	70.0-130			15.8		20
(T) Barium		*122*			*125*	*129*							
(T) Yttrium		*109*			*115*	*107*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier_____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: [X] Yes ☐ No

Workorder: 92749753 Workorder Name: Bremo_2SA2024_CCR&VSWMR_B

Owner Received Date: 8/27/2024 Results Requested By: 9/11/2024

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3	Ra 226/903.0	Ra 228/904.0 + Combined Ra	LAB USE ONLY
1	082624NMW29S	PS	8/26/2024 12:25	92749753001	Water	2	X	X	-01
2	082624NMW29D	PS	8/26/2024 13:35	92749753002	Water	2	X	X	-02
3									
4									
5									

L1773940

Transfers	Released By	Date/Time	Received By	Date/Time
1	HHB/Pace HVL	9/3/24 8:00		
2				
3			Christopher L. Gallin	9/4/24 0900

Comments

Cooler Temperature on Receipt _____°C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

3.0+.3=3.3

Sample Receipt Checklist

COC Seal Present/Intact:	Y__N	If Applicable	
COC Signed/Accurate:	Y__N	VOA Zero Headspace:	Y__N
Bottles arrive intact:	Y__N	Pres. Correct/Check:	Y__N
Correct bottles used:	Y__N	4 TOTAL	
Sufficient volume sent:	Y__N		
RA Screen <0.5 mR/hr:	Y__N		

U123940

INTER_LABORATORY WORK ORDER # 92749753

(To be completed by sending lab)

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

Sending Project No:	92749753
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	09/01/24
REQUESTED COMPLETION DATE:	**9/11/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra 226/903.0	BP1N		HNO3	2	SI-38RAD	SUB PASI RAD
Ra 228/904.0 + Combined Ra	BP1N		HNO3	2	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.

When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 14, 2024

Kelly Hicks
Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, VA 23219

RE: Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory between August 28, 2024 and August 29, 2024. 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 - Asheville
- Pace Analytical Services - Charlotte

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

Sincerely,

Stephanie Knott

Stephanie Knott for
Angela Baioni
angela.baioni@pacelabs.com
612-473-6801
Project Manager

Enclosures

cc: ENV STD DM
Michael Knez, WSP
Rashida Marlowe, Dominion Energy Services, Inc.
Catherine Pezzaro, WSP USA, Inc.
Crystal Shadle, Golder Associates Inc.
Environmental Standards, Inc., Environmental Standards, Inc.

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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SAMPLE SUMMARY

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92750045001	**082724NMW21**	Water	08/27/24 16:15	08/28/24 10:09
92750045002	**082824NMW19**	Water	08/28/24 12:00	08/29/24 10:05
92750045003	**082824NMW20S**	Water	08/28/24 12:00	08/29/24 10:05
92750045004	**082824NMW20D**	Water	08/28/24 12:55	08/29/24 10:05
92750045005	**082824NMW22**	Water	08/28/24 13:50	08/29/24 10:05
92750045006	**082824NMW23**	Water	08/28/24 13:10	08/29/24 10:05
92750045007	**082824NEPFDDUPLICATE**	Water	08/28/24 14:00	08/29/24 10:05

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SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92750045001	**082724NMW21**	EPA 7199	SMS1	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	CMW1	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92750045002	**082824NMW19**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	AA	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92750045003	**082824NMW20S**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	AA	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92750045004	**082824NMW20D**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	AA	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92750045005	**082824NMW22**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	CRW	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	AA	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92750045006	**082824NMW23**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CRW	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	AA	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92750045007	**082824NEPFDDUPLICATE**	EPA 7199	VJM	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A
		EPA 6020B	KRL	7	PASI-A
		EPA 7470A	KML	1	PASI-A
		SM 2540C-2015	AA	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte

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SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92750045001	**082724NMW21**					
EPA 6010D	Barium	125	ug/L	5.0	09/05/24 03:21	
EPA 6010D	Boron	659	ug/L	50.0	09/05/24 03:21	
EPA 6010D	Calcium	70800	ug/L	100	09/05/24 03:21	
EPA 6010D	Nickel	1.1J	ug/L	5.0	09/05/24 03:21	
EPA 6010D	Hardness, Total(SM 2340B)	229000	ug/L	662	09/05/24 03:21	
EPA 6020B	Cobalt	5.7	ug/L	1.0	09/04/24 00:54	
EPA 6020B	Iron	10300	ug/L	60.0	09/04/24 22:12	
EPA 6020B	Lithium	1.3J	ug/L	2.5	09/04/24 00:54	
EPA 6020B	Manganese	1550	ug/L	20.0	09/04/24 22:16	
SM 2540C-2015	Total Dissolved Solids	329	mg/L	25.0	08/30/24 15:25	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.20	mg/L	0.10	09/09/24 18:13	
EPA 9056A	Chloride	11.3	mg/L	1.0	08/29/24 11:10	
EPA 9056A	Fluoride	0.061J	mg/L	0.10	08/29/24 11:10	
EPA 9056A	Nitrate as N	0.10	mg/L	0.10	08/29/24 11:10	
EPA 9056A	Sulfate	41.2	mg/L	1.0	08/29/24 11:10	
92750045002	**082824NMW19**					
EPA 7199	Chromium, Hexavalent	0.10	ug/L	0.025	08/29/24 12:14	H1
EPA 6010D	Barium	133	ug/L	5.0	09/09/24 14:34	
EPA 6010D	Boron	987	ug/L	50.0	09/09/24 14:34	
EPA 6010D	Calcium	59600	ug/L	100	09/09/24 14:34	
EPA 6010D	Molybdenum	14.4	ug/L	5.0	09/09/24 14:34	
EPA 6010D	Nickel	1.3J	ug/L	5.0	09/09/24 14:34	
EPA 6010D	Hardness, Total(SM 2340B)	222000	ug/L	662	09/09/24 14:34	
EPA 6020B	Cobalt	3.7	ug/L	1.0	09/03/24 15:50	
EPA 6020B	Iron	11400	ug/L	100	09/03/24 17:05	
EPA 6020B	Lithium	2.2J	ug/L	2.5	09/03/24 15:50	
EPA 6020B	Manganese	707	ug/L	10.0	09/03/24 17:05	
SM 2540C-2015	Total Dissolved Solids	374	mg/L	25.0	09/03/24 15:27	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.24	mg/L	0.10	09/10/24 19:02	
EPA 9056A	Chloride	8.8	mg/L	1.0	08/31/24 16:29	
EPA 9056A	Fluoride	0.059J	mg/L	0.10	08/31/24 16:29	
EPA 9056A	Sulfate	121	mg/L	3.0	08/31/24 17:27	
92750045003	**082824NMW20S**					
EPA 7199	Chromium, Hexavalent	0.010J	ug/L	0.025	08/29/24 12:32	H1
EPA 6010D	Arsenic	9.4J	ug/L	10.0	09/09/24 14:43	
EPA 6010D	Barium	252	ug/L	5.0	09/09/24 14:43	
EPA 6010D	Boron	1490	ug/L	50.0	09/09/24 14:43	
EPA 6010D	Calcium	84400	ug/L	100	09/09/24 14:43	
EPA 6010D	Molybdenum	69.0	ug/L	5.0	09/09/24 14:43	
EPA 6010D	Nickel	2.2J	ug/L	5.0	09/09/24 14:43	
EPA 6010D	Hardness, Total(SM 2340B)	305000	ug/L	662	09/09/24 14:43	
EPA 6020B	Cobalt	49.7	ug/L	1.0	09/03/24 15:53	
EPA 6020B	Iron	1180	ug/L	20.0	09/03/24 15:53	
EPA 6020B	Lithium	165	ug/L	2.5	09/03/24 15:53	
EPA 6020B	Manganese	827	ug/L	10.0	09/03/24 17:09	
SM 2540C-2015	Total Dissolved Solids	375	mg/L	25.0	09/03/24 15:28	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92750045003	**082824NMW20S**					
EPA 9056A	Chloride	7.2	mg/L	1.0	08/31/24 16:43	
EPA 9056A	Fluoride	0.10	mg/L	0.10	08/31/24 16:43	
EPA 9056A	Nitrate as N	0.84	mg/L	0.10	08/31/24 16:43	H1
EPA 9056A	Sulfate	44.4	mg/L	1.0	08/31/24 16:43	
92750045004	**082824NMW20D**					
EPA 7199	Chromium, Hexavalent	0.13	ug/L	0.025	08/29/24 12:50	
EPA 6010D	Arsenic	4.1J	ug/L	10.0	09/09/24 14:45	
EPA 6010D	Barium	113	ug/L	5.0	09/09/24 14:45	
EPA 6010D	Boron	924	ug/L	50.0	09/09/24 14:45	
EPA 6010D	Calcium	99900	ug/L	100	09/09/24 14:45	
EPA 6010D	Chromium	0.74J	ug/L	5.0	09/09/24 14:45	
EPA 6010D	Molybdenum	41.7	ug/L	5.0	09/09/24 14:45	
EPA 6010D	Hardness, Total(SM 2340B)	331000	ug/L	662	09/09/24 14:45	
EPA 6020B	Cobalt	2.4	ug/L	1.0	09/03/24 15:57	
EPA 6020B	Iron	9870	ug/L	20.0	09/03/24 15:57	
EPA 6020B	Lithium	37.7	ug/L	2.5	09/03/24 15:57	
EPA 6020B	Manganese	697	ug/L	10.0	09/03/24 17:13	
SM 2540C-2015	Total Dissolved Solids	402	mg/L	25.0	09/03/24 15:28	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.14	mg/L	0.10	09/10/24 19:05	
EPA 9056A	Chloride	11.8	mg/L	1.0	08/31/24 12:49	
EPA 9056A	Fluoride	0.098J	mg/L	0.10	08/31/24 12:49	
EPA 9056A	Sulfate	31.0	mg/L	1.0	08/31/24 12:49	
92750045005	**082824NMW22**					
EPA 7199	Chromium, Hexavalent	0.42	ug/L	0.12	08/29/24 22:17	H1
EPA 6010D	Barium	79.3	ug/L	5.0	09/09/24 14:48	
EPA 6010D	Boron	505	ug/L	50.0	09/09/24 14:48	
EPA 6010D	Calcium	36000	ug/L	100	09/09/24 14:48	
EPA 6010D	Nickel	9.8	ug/L	5.0	09/09/24 14:48	
EPA 6010D	Hardness, Total(SM 2340B)	146000	ug/L	662	09/09/24 14:48	
EPA 6010D	Zinc	10.7	ug/L	10.0	09/09/24 14:48	
EPA 6020B	Cobalt	3.4	ug/L	1.0	09/03/24 16:01	
EPA 6020B	Iron	63.2	ug/L	20.0	09/03/24 16:01	
EPA 6020B	Lithium	1.8J	ug/L	2.5	09/03/24 16:01	
EPA 6020B	Manganese	1020	ug/L	20.0	09/03/24 17:17	
SM 2540C-2015	Total Dissolved Solids	261	mg/L	25.0	09/03/24 15:30	
EPA 9056A	Chloride	15.6	mg/L	1.0	08/31/24 13:50	
EPA 9056A	Fluoride	0.10	mg/L	0.10	08/31/24 13:50	
EPA 9056A	Sulfate	80.3	mg/L	1.0	08/31/24 13:50	
92750045006	**082824NMW23**					
EPA 7199	Chromium, Hexavalent	0.14	ug/L	0.025	08/29/24 13:08	M1
EPA 6010D	Barium	55.8	ug/L	5.0	09/05/24 03:35	
EPA 6010D	Boron	141	ug/L	50.0	09/05/24 03:35	
EPA 6010D	Calcium	33300	ug/L	100	09/05/24 03:35	
EPA 6010D	Nickel	2.6J	ug/L	5.0	09/05/24 03:35	
EPA 6010D	Hardness, Total(SM 2340B)	160000	ug/L	662	09/05/24 03:35	
EPA 6020B	Cobalt	2.1	ug/L	1.0	09/03/24 16:12	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92750045006	**082824NMW23**					
EPA 6020B	Iron	342	ug/L	20.0	09/03/24 16:12	
EPA 6020B	Lithium	1.2J	ug/L	2.5	09/03/24 16:12	
EPA 6020B	Manganese	578	ug/L	10.0	09/03/24 17:28	
SM 2540C-2015	Total Dissolved Solids	217	mg/L	25.0	09/03/24 15:30	
EPA 9056A	Chloride	15.9	mg/L	1.0	08/31/24 13:04	
EPA 9056A	Fluoride	0.14	mg/L	0.10	08/31/24 13:04	M1
EPA 9056A	Sulfate	16.3	mg/L	1.0	08/31/24 13:04	
92750045007	**082824NEPFDDUPLICATE**					
EPA 7199	Chromium, Hexavalent	0.35	ug/L	0.050	08/29/24 22:35	H1
EPA 6010D	Barium	78.6	ug/L	5.0	09/09/24 14:51	
EPA 6010D	Boron	512	ug/L	50.0	09/09/24 14:51	
EPA 6010D	Calcium	35500	ug/L	100	09/09/24 14:51	
EPA 6010D	Chromium	0.72J	ug/L	5.0	09/09/24 14:51	
EPA 6010D	Nickel	10.2	ug/L	5.0	09/09/24 14:51	
EPA 6010D	Hardness, Total(SM 2340B)	145000	ug/L	662	09/09/24 14:51	
EPA 6010D	Zinc	11.7	ug/L	10.0	09/09/24 14:51	
EPA 6020B	Cobalt	3.5	ug/L	1.0	09/04/24 04:39	
EPA 6020B	Iron	69.9	ug/L	20.0	09/04/24 04:39	
EPA 6020B	Lithium	1.8J	ug/L	2.5	09/04/24 04:39	
EPA 6020B	Manganese	1030	ug/L	20.0	09/04/24 17:55	
SM 2540C-2015	Total Dissolved Solids	265	mg/L	25.0	09/03/24 15:30	
EPA 9056A	Chloride	15.3	mg/L	1.0	08/31/24 14:05	
EPA 9056A	Fluoride	0.095J	mg/L	0.10	08/31/24 14:05	
EPA 9056A	Sulfate	79.5	mg/L	1.0	08/31/24 14:05	

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: October 14, 2024

General Information:
7 samples were analyzed for EPA 7199 by Pace Analytical Services Charlotte. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 082724NMW21 (Lab ID: 92750045001)
- 082824NEPFDDUPLICATE (Lab ID: 92750045007)
- 082824NMW19 (Lab ID: 92750045002)
- 082824NMW20S (Lab ID: 92750045003)
- 082824NMW22 (Lab ID: 92750045005)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 878793

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750043002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MSD (Lab ID: 4526183)
  - Chromium, Hexavalent

QC Batch: 879155

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750045006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4527879)
  - Chromium, Hexavalent

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: October 14, 2024

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 879155

- 082824NMW23 (Lab ID: 92750045006)
  - Chromium, Hexavalent

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: October 14, 2024

General Information:
7 samples were analyzed for EPA 6010D by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: October 14, 2024

General Information:
7 samples were analyzed for EPA 6020B by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: October 14, 2024

General Information:
7 samples were analyzed for EPA 7470A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: October 14, 2024

General Information:
7 samples were analyzed for SM 2540C-2015 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: October 14, 2024

General Information:
7 samples were analyzed for EPA 350.1 Rev 2.0 1993 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 881333

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750045006,92750276002

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

- MSD (Lab ID: 4538745)
  - Nitrogen, Ammonia

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: October 14, 2024

General Information:
7 samples were analyzed for EPA 9056A by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- 082824NEPFDDUPLICATE (Lab ID: 92750045007)
- 082824NMW19 (Lab ID: 92750045002)
- 082824NMW20D (Lab ID: 92750045004)
- 082824NMW20S (Lab ID: 92750045003)
- 082824NMW22 (Lab ID: 92750045005)
- 082824NMW23 (Lab ID: 92750045006)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 879107

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750043002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MSD (Lab ID: 4527766)
  - Sulfate

QC Batch: 879691

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750325006,92750325007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MSD (Lab ID: 4531038)
  - Sulfate

R1: RPD value was outside control limits.
- MSD (Lab ID: 4531038)
  - Sulfate

QC Batch: 879692

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750045006,92750325005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4531043)
  - Fluoride

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: October 14, 2024

QC Batch: 879692

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92750045006,92750325005

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

- MS (Lab ID: 4531045)
  - Fluoride
- MSD (Lab ID: 4531044)
  - Fluoride
- MSD (Lab ID: 4531046)
  - Fluoride
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 4531046)
  - Fluoride
  - Sulfate

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082724NMW21 **Lab ID: 92750045001** Collected: 08/27/24 16:15 Received: 08/28/24 10:09 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	ND	ug/L	0.025	0.0043	1		08/28/24 20:37	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	08/30/24 12:05	09/05/24 03:21	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:21	7440-38-2	
Barium	**125**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:21	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:21	7440-41-7	
Boron	**659**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:21	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:21	7440-43-9	
Calcium	**70800**	ug/L	100	14.7	1	08/30/24 12:05	09/05/24 03:21	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:21	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:21	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:21	7439-98-7	
Nickel	**1.1J**	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:21	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:21	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:21	7440-22-4	
Hardness, Total(SM 2340B)	**229000**	ug/L	662	36.8	1	08/30/24 12:05	09/05/24 03:21		
Vanadium	ND	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:21	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:21	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**5.7**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:54	7440-48-4	
Iron	**10300**	ug/L	60.0	9.0	3	08/30/24 12:00	09/04/24 22:12	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:54	7439-92-1	
Lithium	**1.3J**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:54	7439-93-2	
Manganese	**1550**	ug/L	20.0	2.4	10	08/30/24 12:00	09/04/24 22:16	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:54	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:54	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 12:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**329**	mg/L	25.0	25.0	1		08/30/24 15:25		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.20**	mg/L	0.10	0.031	1		09/09/24 18:13	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082724NMW21 **Lab ID: 92750045001** Collected: 08/27/24 16:15 Received: 08/28/24 10:09 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**11.3**	mg/L	1.0	0.60	1		08/29/24 11:10	16887-00-6	
Fluoride	**0.061J**	mg/L	0.10	0.050	1		08/29/24 11:10	16984-48-8	
Nitrate as N	**0.10**	mg/L	0.10	0.060	1		08/29/24 11:10	14797-55-8	
Sulfate	**41.2**	mg/L	1.0	0.50	1		08/29/24 11:10	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW19 **Lab ID: 92750045002** Collected: 08/28/24 12:00 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.10**	ug/L	0.025	0.0043	1		08/29/24 12:14	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	09/05/24 11:50	09/09/24 14:34	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	09/05/24 11:50	09/09/24 14:34	7440-38-2	
Barium	**133**	ug/L	5.0	0.79	1	09/05/24 11:50	09/09/24 14:34	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	09/05/24 11:50	09/09/24 14:34	7440-41-7	
Boron	**987**	ug/L	50.0	4.0	1	09/05/24 11:50	09/09/24 14:34	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	09/05/24 11:50	09/09/24 14:34	7440-43-9	
Calcium	**59600**	ug/L	100	14.7	1	09/05/24 11:50	09/09/24 14:34	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	09/05/24 11:50	09/09/24 14:34	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	09/05/24 11:50	09/09/24 14:34	7440-50-8	
Molybdenum	**14.4**	ug/L	5.0	2.6	1	09/05/24 11:50	09/09/24 14:34	7439-98-7	
Nickel	**1.3J**	ug/L	5.0	0.88	1	09/05/24 11:50	09/09/24 14:34	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	09/05/24 11:50	09/09/24 14:34	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	09/05/24 11:50	09/09/24 14:34	7440-22-4	
Hardness, Total(SM 2340B)	**222000**	ug/L	662	36.8	1	09/05/24 11:50	09/09/24 14:34		
Vanadium	ND	ug/L	5.0	1.6	1	09/05/24 11:50	09/09/24 14:34	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	09/05/24 11:50	09/09/24 14:34	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**3.7**	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 15:50	7440-48-4	
Iron	**11400**	ug/L	100	14.9	5	09/01/24 12:35	09/03/24 17:05	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	09/01/24 12:35	09/03/24 15:50	7439-92-1	
Lithium	**2.2J**	ug/L	2.5	0.33	1	09/01/24 12:35	09/03/24 15:50	7439-93-2	
Manganese	**707**	ug/L	10.0	1.2	5	09/01/24 12:35	09/03/24 17:05	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	09/01/24 12:35	09/03/24 15:50	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 15:50	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 13:02	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**374**	mg/L	25.0	25.0	1		09/03/24 15:27		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.24**	mg/L	0.10	0.031	1		09/10/24 19:02	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW19 **Lab ID: 92750045002** Collected: 08/28/24 12:00 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**8.8**	mg/L	1.0	0.60	1		08/31/24 16:29	16887-00-6	
Fluoride	**0.059J**	mg/L	0.10	0.050	1		08/31/24 16:29	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/31/24 16:29	14797-55-8	H1
Sulfate	**121**	mg/L	3.0	1.5	3		08/31/24 17:27	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW20S **Lab ID: 92750045003** Collected: 08/28/24 12:00 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.010J**	ug/L	0.025	0.0043	1		08/29/24 12:32	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	09/05/24 11:50	09/09/24 14:43	7440-36-0	
Arsenic	**9.4J**	ug/L	10.0	2.5	1	09/05/24 11:50	09/09/24 14:43	7440-38-2	
Barium	**252**	ug/L	5.0	0.79	1	09/05/24 11:50	09/09/24 14:43	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	09/05/24 11:50	09/09/24 14:43	7440-41-7	
Boron	**1490**	ug/L	50.0	4.0	1	09/05/24 11:50	09/09/24 14:43	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	09/05/24 11:50	09/09/24 14:43	7440-43-9	
Calcium	**84400**	ug/L	100	14.7	1	09/05/24 11:50	09/09/24 14:43	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	09/05/24 11:50	09/09/24 14:43	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	09/05/24 11:50	09/09/24 14:43	7440-50-8	
Molybdenum	**69.0**	ug/L	5.0	2.6	1	09/05/24 11:50	09/09/24 14:43	7439-98-7	
Nickel	**2.2J**	ug/L	5.0	0.88	1	09/05/24 11:50	09/09/24 14:43	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	09/05/24 11:50	09/09/24 14:43	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	09/05/24 11:50	09/09/24 14:43	7440-22-4	
Hardness, Total(SM 2340B)	**305000**	ug/L	662	36.8	1	09/05/24 11:50	09/09/24 14:43		
Vanadium	ND	ug/L	5.0	1.6	1	09/05/24 11:50	09/09/24 14:43	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	09/05/24 11:50	09/09/24 14:43	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**49.7**	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 15:53	7440-48-4	
Iron	**1180**	ug/L	20.0	3.0	1	09/01/24 12:35	09/03/24 15:53	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	09/01/24 12:35	09/03/24 15:53	7439-92-1	
Lithium	**165**	ug/L	2.5	0.33	1	09/01/24 12:35	09/03/24 15:53	7439-93-2	
Manganese	**827**	ug/L	10.0	1.2	5	09/01/24 12:35	09/03/24 17:09	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	09/01/24 12:35	09/03/24 15:53	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 15:53	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 13:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**375**	mg/L	25.0	25.0	1		09/03/24 15:28		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		09/10/24 19:03	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW20S **Lab ID: 92750045003** Collected: 08/28/24 12:00 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**7.2**	mg/L	1.0	0.60	1		08/31/24 16:43	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		08/31/24 16:43	16984-48-8	
Nitrate as N	**0.84**	mg/L	0.10	0.060	1		08/31/24 16:43	14797-55-8	H1
Sulfate	**44.4**	mg/L	1.0	0.50	1		08/31/24 16:43	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW20D **Lab ID: 92750045004** Collected: 08/28/24 12:55 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.13**	ug/L	0.025	0.0043	1		08/29/24 12:50	18540-29-9	
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	09/05/24 11:50	09/09/24 14:45	7440-36-0	
Arsenic	**4.1J**	ug/L	10.0	2.5	1	09/05/24 11:50	09/09/24 14:45	7440-38-2	
Barium	**113**	ug/L	5.0	0.79	1	09/05/24 11:50	09/09/24 14:45	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	09/05/24 11:50	09/09/24 14:45	7440-41-7	
Boron	**924**	ug/L	50.0	4.0	1	09/05/24 11:50	09/09/24 14:45	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	09/05/24 11:50	09/09/24 14:45	7440-43-9	
Calcium	**99900**	ug/L	100	14.7	1	09/05/24 11:50	09/09/24 14:45	7440-70-2	
Chromium	**0.74J**	ug/L	5.0	0.63	1	09/05/24 11:50	09/09/24 14:45	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	09/05/24 11:50	09/09/24 14:45	7440-50-8	
Molybdenum	**41.7**	ug/L	5.0	2.6	1	09/05/24 11:50	09/09/24 14:45	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	09/05/24 11:50	09/09/24 14:45	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	09/05/24 11:50	09/09/24 14:45	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	09/05/24 11:50	09/09/24 14:45	7440-22-4	
Hardness, Total(SM 2340B)	**331000**	ug/L	662	36.8	1	09/05/24 11:50	09/09/24 14:45		
Vanadium	ND	ug/L	5.0	1.6	1	09/05/24 11:50	09/09/24 14:45	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	09/05/24 11:50	09/09/24 14:45	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**2.4**	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 15:57	7440-48-4	
Iron	**9870**	ug/L	20.0	3.0	1	09/01/24 12:35	09/03/24 15:57	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	09/01/24 12:35	09/03/24 15:57	7439-92-1	
Lithium	**37.7**	ug/L	2.5	0.33	1	09/01/24 12:35	09/03/24 15:57	7439-93-2	
Manganese	**697**	ug/L	10.0	1.2	5	09/01/24 12:35	09/03/24 17:13	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	09/01/24 12:35	09/03/24 15:57	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 15:57	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 13:06	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**402**	mg/L	25.0	25.0	1		09/03/24 15:28		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.14**	mg/L	0.10	0.031	1		09/10/24 19:05	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW20D **Lab ID: 92750045004** Collected: 08/28/24 12:55 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**11.8**	mg/L	1.0	0.60	1		08/31/24 12:49	16887-00-6	
Fluoride	**0.098J**	mg/L	0.10	0.050	1		08/31/24 12:49	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/31/24 12:49	14797-55-8	H1
Sulfate	**31.0**	mg/L	1.0	0.50	1		08/31/24 12:49	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW22 **Lab ID: 92750045005** Collected: 08/28/24 13:50 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.42**	ug/L	0.12	0.022	5		08/29/24 22:17	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	09/05/24 11:50	09/09/24 14:48	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	09/05/24 11:50	09/09/24 14:48	7440-38-2	
Barium	**79.3**	ug/L	5.0	0.79	1	09/05/24 11:50	09/09/24 14:48	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	09/05/24 11:50	09/09/24 14:48	7440-41-7	
Boron	**505**	ug/L	50.0	4.0	1	09/05/24 11:50	09/09/24 14:48	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	09/05/24 11:50	09/09/24 14:48	7440-43-9	
Calcium	**36000**	ug/L	100	14.7	1	09/05/24 11:50	09/09/24 14:48	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	09/05/24 11:50	09/09/24 14:48	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	09/05/24 11:50	09/09/24 14:48	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	09/05/24 11:50	09/09/24 14:48	7439-98-7	
Nickel	**9.8**	ug/L	5.0	0.88	1	09/05/24 11:50	09/09/24 14:48	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	09/05/24 11:50	09/09/24 14:48	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	09/05/24 11:50	09/09/24 14:48	7440-22-4	
Hardness, Total(SM 2340B)	**146000**	ug/L	662	36.8	1	09/05/24 11:50	09/09/24 14:48		
Vanadium	ND	ug/L	5.0	1.6	1	09/05/24 11:50	09/09/24 14:48	7440-62-2	
Zinc	**10.7**	ug/L	10.0	3.0	1	09/05/24 11:50	09/09/24 14:48	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**3.4**	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 16:01	7440-48-4	
Iron	**63.2**	ug/L	20.0	3.0	1	09/01/24 12:35	09/03/24 16:01	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	09/01/24 12:35	09/03/24 16:01	7439-92-1	
Lithium	**1.8J**	ug/L	2.5	0.33	1	09/01/24 12:35	09/03/24 16:01	7439-93-2	
Manganese	**1020**	ug/L	20.0	2.4	10	09/01/24 12:35	09/03/24 17:17	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	09/01/24 12:35	09/03/24 16:01	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 16:01	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 13:08	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**261**	mg/L	25.0	25.0	1		09/03/24 15:30		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		09/10/24 19:06	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW22 **Lab ID: 92750045005** Collected: 08/28/24 13:50 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**15.6**	mg/L	1.0	0.60	1		08/31/24 13:50	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		08/31/24 13:50	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/31/24 13:50	14797-55-8	H1
Sulfate	**80.3**	mg/L	1.0	0.50	1		08/31/24 13:50	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW23 **Lab ID: 92750045006** Collected: 08/28/24 13:10 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.14**	ug/L	0.025	0.0043	1		08/29/24 13:08	18540-29-9	M1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	09/03/24 12:25	09/05/24 03:35	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	09/03/24 12:25	09/05/24 03:35	7440-38-2	
Barium	**55.8**	ug/L	5.0	0.79	1	09/03/24 12:25	09/05/24 03:35	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	09/03/24 12:25	09/05/24 03:35	7440-41-7	
Boron	**141**	ug/L	50.0	4.0	1	09/03/24 12:25	09/05/24 03:35	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	09/03/24 12:25	09/05/24 03:35	7440-43-9	
Calcium	**33300**	ug/L	100	14.7	1	09/03/24 12:25	09/05/24 03:35	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	09/03/24 12:25	09/05/24 03:35	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	09/03/24 12:25	09/05/24 03:35	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	09/03/24 12:25	09/05/24 03:35	7439-98-7	
Nickel	**2.6J**	ug/L	5.0	0.88	1	09/03/24 12:25	09/05/24 03:35	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	09/03/24 12:25	09/05/24 03:35	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	09/03/24 12:25	09/05/24 03:35	7440-22-4	
Hardness, Total(SM 2340B)	**160000**	ug/L	662	36.8	1	09/03/24 12:25	09/05/24 03:35		
Vanadium	ND	ug/L	5.0	1.6	1	09/03/24 12:25	09/05/24 03:35	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	09/03/24 12:25	09/05/24 03:35	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**2.1**	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 16:12	7440-48-4	
Iron	**342**	ug/L	20.0	3.0	1	09/01/24 12:35	09/03/24 16:12	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	09/01/24 12:35	09/03/24 16:12	7439-92-1	
Lithium	**1.2J**	ug/L	2.5	0.33	1	09/01/24 12:35	09/03/24 16:12	7439-93-2	
Manganese	**578**	ug/L	10.0	1.2	5	09/01/24 12:35	09/03/24 17:28	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	09/01/24 12:35	09/03/24 16:12	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	09/01/24 12:35	09/03/24 16:12	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 13:10	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**217**	mg/L	25.0	25.0	1		09/03/24 15:30		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		09/10/24 19:08	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NMW23 **Lab ID: 92750045006** Collected: 08/28/24 13:10 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**15.9**	mg/L	1.0	0.60	1		08/31/24 13:04	16887-00-6	
Fluoride	**0.14**	mg/L	0.10	0.050	1		08/31/24 13:04	16984-48-8	M1
Nitrate as N	ND	mg/L	0.10	0.060	1		08/31/24 13:04	14797-55-8	H1
Sulfate	**16.3**	mg/L	1.0	0.50	1		08/31/24 13:04	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NEPFDDUPLICATE **Lab ID: 92750045007** Collected: 08/28/24 14:00 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
7199 Chromium, Hexavalent	Analytical Method: EPA 7199 Pace Analytical Services - Charlotte								
Chromium, Hexavalent	**0.35**	ug/L	0.050	0.0086	2		08/29/24 22:35	18540-29-9	H1
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Antimony	ND	ug/L	5.0	3.6	1	09/05/24 11:50	09/09/24 14:51	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	09/05/24 11:50	09/09/24 14:51	7440-38-2	
Barium	**78.6**	ug/L	5.0	0.79	1	09/05/24 11:50	09/09/24 14:51	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	09/05/24 11:50	09/09/24 14:51	7440-41-7	
Boron	**512**	ug/L	50.0	4.0	1	09/05/24 11:50	09/09/24 14:51	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	09/05/24 11:50	09/09/24 14:51	7440-43-9	
Calcium	**35500**	ug/L	100	14.7	1	09/05/24 11:50	09/09/24 14:51	7440-70-2	
Chromium	**0.72J**	ug/L	5.0	0.63	1	09/05/24 11:50	09/09/24 14:51	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	09/05/24 11:50	09/09/24 14:51	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	09/05/24 11:50	09/09/24 14:51	7439-98-7	
Nickel	**10.2**	ug/L	5.0	0.88	1	09/05/24 11:50	09/09/24 14:51	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	09/05/24 11:50	09/09/24 14:51	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	09/05/24 11:50	09/09/24 14:51	7440-22-4	
Hardness, Total(SM 2340B)	**145000**	ug/L	662	36.8	1	09/05/24 11:50	09/09/24 14:51		
Vanadium	ND	ug/L	5.0	1.6	1	09/05/24 11:50	09/09/24 14:51	7440-62-2	
Zinc	**11.7**	ug/L	10.0	3.0	1	09/05/24 11:50	09/09/24 14:51	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**3.5**	ug/L	1.0	0.14	1	09/03/24 13:00	09/04/24 04:39	7440-48-4	
Iron	**69.9**	ug/L	20.0	3.0	1	09/03/24 13:00	09/04/24 04:39	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	09/03/24 13:00	09/04/24 04:39	7439-92-1	
Lithium	**1.8J**	ug/L	2.5	0.33	1	09/03/24 13:00	09/04/24 04:39	7439-93-2	
Manganese	**1030**	ug/L	20.0	2.4	10	09/03/24 13:00	09/04/24 17:55	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	09/03/24 13:00	09/04/24 04:39	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	09/03/24 13:00	09/04/24 04:39	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	ND	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 13:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**265**	mg/L	25.0	25.0	1		09/03/24 15:30		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	ND	mg/L	0.10	0.031	1		09/10/24 19:15	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Sample: 082824NEPFDDUPLICATE **Lab ID: 92750045007** Collected: 08/28/24 14:00 Received: 08/29/24 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions 48hr	Analytical Method: EPA 9056A Pace Analytical Services - Asheville								
Chloride	**15.3**	mg/L	1.0	0.60	1		08/31/24 14:05	16887-00-6	
Fluoride	**0.095J**	mg/L	0.10	0.050	1		08/31/24 14:05	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/31/24 14:05	14797-55-8	H1
Sulfate	**79.5**	mg/L	1.0	0.50	1		08/31/24 14:05	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 878793
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92750045001

METHOD BLANK: 4526180 Matrix: Water
Associated Lab Samples: 92750045001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.0043	08/28/24 23:12	

LABORATORY CONTROL SAMPLE: 4526181

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.10	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4526182 4526183

Parameter	Units	92750043002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	0.23	0.1	0.1	0.32	0.31	92	82	90-110	3	20	H1,M1

SAMPLE DUPLICATE: 4526184

Parameter	Units	92750045001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	ND	ND		20	H1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879155
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

METHOD BLANK: 4527877 Matrix: Water
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.0043	08/29/24 21:06	

LABORATORY CONTROL SAMPLE: 4527878

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.096	96	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527879 4527880

Parameter	Units	92750045006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	ug/L	0.14	0.1	0.1	0.27	0.25	123	104	90-110	7	20	H1,M1

SAMPLE DUPLICATE: 4527881

Parameter	Units	92750325003 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	ug/L	1.6	1.6	0	20	H1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 880762 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045001, 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

METHOD BLANK: 4536079 Matrix: Water
Associated Lab Samples: 92750045001, 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	09/12/24 12:26	

LABORATORY CONTROL SAMPLE: 4536080

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.4	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4536081 4536082

Parameter	Units	92750045006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.5	2.5	98	98	75-125	0	25	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879448
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92750045001

METHOD BLANK: 4529738 Matrix: Water
Associated Lab Samples: 92750045001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	09/05/24 02:18	
Arsenic	ug/L	ND	10.0	2.5	09/05/24 02:18	
Barium	ug/L	ND	5.0	0.79	09/05/24 02:18	
Beryllium	ug/L	ND	1.0	0.16	09/05/24 02:18	
Boron	ug/L	ND	50.0	4.0	09/05/24 02:18	
Cadmium	ug/L	ND	1.0	0.29	09/05/24 02:18	
Calcium	ug/L	ND	100	14.7	09/05/24 02:18	
Chromium	ug/L	ND	5.0	0.63	09/05/24 02:18	
Copper	ug/L	ND	5.0	0.62	09/05/24 02:18	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	09/05/24 02:18	
Molybdenum	ug/L	ND	5.0	2.6	09/05/24 02:18	
Nickel	ug/L	ND	5.0	0.88	09/05/24 02:18	
Selenium	ug/L	ND	10.0	4.1	09/05/24 02:18	
Silver	ug/L	ND	5.0	0.49	09/05/24 02:18	
Vanadium	ug/L	ND	5.0	1.6	09/05/24 02:18	
Zinc	ug/L	ND	10.0	3.0	09/05/24 02:18	

LABORATORY CONTROL SAMPLE: 4529739

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	512	102	80-120	
Arsenic	ug/L	500	506	101	80-120	
Barium	ug/L	500	540	108	80-120	
Beryllium	ug/L	500	507	101	80-120	
Boron	ug/L	500	512	102	80-120	
Cadmium	ug/L	500	510	102	80-120	
Calcium	ug/L	5000	5410	108	80-120	
Chromium	ug/L	500	516	103	80-120	
Copper	ug/L	500	515	103	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	33800	102	80-120	
Molybdenum	ug/L	500	516	103	80-120	
Nickel	ug/L	500	512	102	80-120	
Selenium	ug/L	500	499	100	80-120	
Silver	ug/L	250	255	102	80-120	
Vanadium	ug/L	500	512	102	80-120	
Zinc	ug/L	500	512	102	80-120	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4529740 4529741

Parameter	Units	92749751001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	522	518	104	103	75-125	1	20	
Arsenic	ug/L	ND	500	500	511	510	102	102	75-125	0	20	
Barium	ug/L	28.5	500	500	544	559	103	106	75-125	3	20	
Beryllium	ug/L	1.1	500	500	512	510	102	102	75-125	0	20	
Boron	ug/L	262	500	500	768	771	101	102	75-125	0	20	
Cadmium	ug/L	ND	500	500	505	503	101	100	75-125	0	20	
Calcium	ug/L	5670	5000	5000	10500	10900	97	104	75-125	3	20	
Chromium	ug/L	ND	500	500	507	507	101	101	75-125	0	20	
Copper	ug/L	16.2	500	500	533	531	103	103	75-125	0	20	
Hardness, Total(SM 2340B)	ug/L	25100	33100	33100	58600	59500	101	104	75-125	1	20	
Molybdenum	ug/L	ND	500	500	510	509	102	102	75-125	0	20	
Nickel	ug/L	14.4	500	500	523	522	102	101	75-125	0	20	
Selenium	ug/L	ND	500	500	519	516	104	103	75-125	0	20	
Silver	ug/L	ND	250	250	254	254	102	101	75-125	0	20	
Vanadium	ug/L	ND	500	500	513	511	102	102	75-125	0	20	
Zinc	ug/L	54.9	500	500	564	563	102	102	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879818
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045006

METHOD BLANK: 4531336 Matrix: Water
Associated Lab Samples: 92750045006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	09/05/24 03:29	
Arsenic	ug/L	ND	10.0	2.5	09/05/24 03:29	
Barium	ug/L	ND	5.0	0.79	09/05/24 03:29	
Beryllium	ug/L	ND	1.0	0.16	09/05/24 03:29	
Boron	ug/L	ND	50.0	4.0	09/05/24 03:29	
Cadmium	ug/L	ND	1.0	0.29	09/05/24 03:29	
Calcium	ug/L	ND	100	14.7	09/05/24 03:29	
Chromium	ug/L	ND	5.0	0.63	09/05/24 03:29	
Copper	ug/L	ND	5.0	0.62	09/05/24 03:29	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	09/05/24 03:29	
Molybdenum	ug/L	ND	5.0	2.6	09/05/24 03:29	
Nickel	ug/L	ND	5.0	0.88	09/05/24 03:29	
Selenium	ug/L	ND	10.0	4.1	09/05/24 03:29	
Silver	ug/L	ND	5.0	0.49	09/05/24 03:29	
Vanadium	ug/L	ND	5.0	1.6	09/05/24 03:29	
Zinc	ug/L	ND	10.0	3.0	09/05/24 03:29	

LABORATORY CONTROL SAMPLE: 4531337

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	488	98	80-120	
Arsenic	ug/L	500	481	96	80-120	
Barium	ug/L	500	486	97	80-120	
Beryllium	ug/L	500	483	97	80-120	
Boron	ug/L	500	490	98	80-120	
Cadmium	ug/L	500	488	98	80-120	
Calcium	ug/L	5000	4900	98	80-120	
Chromium	ug/L	500	493	99	80-120	
Copper	ug/L	500	490	98	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	31500	95	80-120	
Molybdenum	ug/L	500	491	98	80-120	
Nickel	ug/L	500	487	97	80-120	
Selenium	ug/L	500	474	95	80-120	
Silver	ug/L	250	246	98	80-120	
Vanadium	ug/L	500	489	98	80-120	
Zinc	ug/L	500	488	98	80-120	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531338 4531339

Parameter	Units	92750045006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	513	519	102	104	75-125	1	20	
Arsenic	ug/L	ND	500	500	507	517	101	103	75-125	2	20	
Barium	ug/L	55.8	500	500	579	589	105	107	75-125	2	20	
Beryllium	ug/L	ND	500	500	506	512	101	102	75-125	1	20	
Boron	ug/L	141	500	500	657	662	103	104	75-125	1	20	
Cadmium	ug/L	ND	500	500	498	505	99	101	75-125	2	20	
Calcium	ug/L	33300	5000	5000	38400	39200	101	117	75-125	2	20	
Chromium	ug/L	ND	500	500	507	511	101	102	75-125	1	20	
Copper	ug/L	ND	500	500	508	514	101	103	75-125	1	20	
Hardness, Total(SM 2340B)	ug/L	160000	33100	33100	195000	199000	108	118	75-125	2	20	
Molybdenum	ug/L	ND	500	500	506	512	101	102	75-125	1	20	
Nickel	ug/L	2.6J	500	500	493	500	98	99	75-125	1	20	
Selenium	ug/L	ND	500	500	516	520	103	104	75-125	1	20	
Silver	ug/L	ND	250	250	255	257	102	103	75-125	1	20	
Vanadium	ug/L	ND	500	500	507	514	101	103	75-125	1	20	
Zinc	ug/L	ND	500	500	502	510	100	101	75-125	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531340 4531341

Parameter	Units	92750325006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	509	506	101	101	75-125	1	20	
Arsenic	ug/L	ND	500	500	501	498	100	100	75-125	1	20	
Barium	ug/L	5.8	500	500	516	520	102	103	75-125	1	20	
Beryllium	ug/L	ND	500	500	501	498	100	100	75-125	1	20	
Boron	ug/L	ND	500	500	509	506	101	101	75-125	1	20	
Cadmium	ug/L	ND	500	500	497	492	99	98	75-125	1	20	
Calcium	ug/L	26200	5000	5000	31100	31500	98	105	75-125	1	20	
Chromium	ug/L	ND	500	500	503	499	100	100	75-125	1	20	
Copper	ug/L	ND	500	500	500	497	100	99	75-125	1	20	
Hardness, Total(SM 2340B)	ug/L	82800	33100	33100	116000	116000	100	102	75-125	1	20	
Molybdenum	ug/L	ND	500	500	502	498	100	99	75-125	1	20	
Nickel	ug/L	ND	500	500	492	488	98	98	75-125	1	20	
Selenium	ug/L	ND	500	500	509	506	102	101	75-125	1	20	
Silver	ug/L	ND	250	250	250	249	100	100	75-125	1	20	
Vanadium	ug/L	ND	500	500	503	499	101	100	75-125	1	20	
Zinc	ug/L	ND	500	500	502	498	100	99	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 880429
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045007

METHOD BLANK: 4534271 Matrix: Water
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	09/09/24 14:09	
Arsenic	ug/L	ND	10.0	2.5	09/09/24 14:09	
Barium	ug/L	ND	5.0	0.79	09/09/24 14:09	
Beryllium	ug/L	ND	1.0	0.16	09/09/24 14:09	
Boron	ug/L	ND	50.0	4.0	09/09/24 14:09	
Cadmium	ug/L	ND	1.0	0.29	09/09/24 14:09	
Calcium	ug/L	ND	100	14.7	09/09/24 14:09	
Chromium	ug/L	ND	5.0	0.63	09/09/24 14:09	
Copper	ug/L	ND	5.0	0.62	09/09/24 14:09	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	09/09/24 14:09	
Molybdenum	ug/L	ND	5.0	2.6	09/09/24 14:09	
Nickel	ug/L	ND	5.0	0.88	09/09/24 14:09	
Selenium	ug/L	ND	10.0	4.1	09/09/24 14:09	
Silver	ug/L	ND	5.0	0.49	09/09/24 14:09	
Vanadium	ug/L	ND	5.0	1.6	09/09/24 14:09	
Zinc	ug/L	ND	10.0	3.0	09/09/24 14:09	

LABORATORY CONTROL SAMPLE: 4534272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	520	104	80-120	
Arsenic	ug/L	500	507	101	80-120	
Barium	ug/L	500	534	107	80-120	
Beryllium	ug/L	500	509	102	80-120	
Boron	ug/L	500	513	103	80-120	
Cadmium	ug/L	500	506	101	80-120	
Calcium	ug/L	5000	5210	104	80-120	
Chromium	ug/L	500	509	102	80-120	
Copper	ug/L	500	510	102	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	33300	101	80-120	
Molybdenum	ug/L	500	515	103	80-120	
Nickel	ug/L	500	509	102	80-120	
Selenium	ug/L	500	503	101	80-120	
Silver	ug/L	250	252	101	80-120	
Vanadium	ug/L	500	509	102	80-120	
Zinc	ug/L	500	508	102	80-120	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534273 4534274

Parameter	Units	92750043002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	565	556	113	111	75-125	1	20	
Arsenic	ug/L	ND	500	500	546	540	109	108	75-125	1	20	
Barium	ug/L	18.1	500	500	553	553	107	107	75-125	0	20	
Beryllium	ug/L	ND	500	500	549	542	110	108	75-125	1	20	
Boron	ug/L	1350	500	500	1940	1910	119	113	75-125	2	20	
Cadmium	ug/L	ND	500	500	517	510	103	102	75-125	1	20	
Calcium	ug/L	65000	5000	5000	70600	70400	112	109	75-125	0	20	
Chromium	ug/L	ND	500	500	531	524	106	105	75-125	1	20	
Copper	ug/L	ND	500	500	570	564	114	113	75-125	1	20	
Hardness, Total(SM 2340B)	ug/L	286000	33100	33100	327000	325000	125	118	75-125	1	20	
Molybdenum	ug/L	ND	500	500	549	543	109	108	75-125	1	20	
Nickel	ug/L	1.7J	500	500	529	521	105	104	75-125	1	20	
Selenium	ug/L	ND	500	500	563	557	113	111	75-125	1	20	
Silver	ug/L	0.74J	250	250	279	276	111	110	75-125	1	20	
Vanadium	ug/L	ND	500	500	540	533	108	107	75-125	1	20	
Zinc	ug/L	5.2J	500	500	526	519	104	103	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879461
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045001

METHOD BLANK: 4529776 Matrix: Water
Associated Lab Samples: 92750045001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.14	09/03/24 23:12	
Iron	ug/L	ND	20.0	3.0	09/03/24 23:12	
Lead	ug/L	ND	1.0	0.18	09/03/24 23:12	
Lithium	ug/L	ND	2.5	0.33	09/03/24 23:12	
Manganese	ug/L	ND	2.0	0.24	09/03/24 23:12	
Thallium	ug/L	ND	0.20	0.028	09/03/24 23:12	
Tin	ug/L	ND	1.0	0.14	09/03/24 23:12	

LABORATORY CONTROL SAMPLE: 4529777

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	52.5	105	80-120	
Iron	ug/L	1250	1350	108	80-120	
Lead	ug/L	50	50.5	101	80-120	
Lithium	ug/L	50	53.4	107	80-120	
Manganese	ug/L	50	52.1	104	80-120	
Thallium	ug/L	25	25.8	103	80-120	
Tin	ug/L	50	51.3	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4529778 4529779

Parameter	Units	92749751001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	4.3	50	50	57.3	56.8	106	105	75-125	1	20	
Iron	ug/L	18.3J	1250	1250	1350	1350	107	107	75-125	0	20	
Lead	ug/L	ND	50	50	51.3	50.6	103	101	75-125	1	20	
Lithium	ug/L	3.1	50	50	55.3	55.6	104	105	75-125	1	20	
Manganese	ug/L	104	50	50	159	158	110	109	75-125	0	20	
Thallium	ug/L	0.062J	25	25	26.4	26.0	105	104	75-125	2	20	
Tin	ug/L	ND	50	50	52.3	50.4	105	101	75-125	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4529780 4529781

Parameter	Units	92750043002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	ND	50	50	51.9	52.8	104	105	75-125	2	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4529780 4529781

Parameter	Units	92750043002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	261	1250	1250	1590	1610	106	108	75-125	1	20	
Lead	ug/L	ND	50	50	50.9	51.5	102	103	75-125	1	20	
Lithium	ug/L	30.0	50	50	79.8	82.7	100	105	75-125	4	20	
Manganese	ug/L	62.5	50	50	114	117	103	110	75-125	3	20	
Thallium	ug/L	ND	25	25	25.8	26.7	103	107	75-125	3	20	
Tin	ug/L	ND	50	50	50.8	51.4	101	103	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879740
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006

METHOD BLANK: 4531177 Matrix: Water
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.14	09/03/24 15:31	
Iron	ug/L	ND	20.0	3.0	09/03/24 15:31	
Lead	ug/L	ND	1.0	0.18	09/03/24 15:31	
Lithium	ug/L	ND	2.5	0.33	09/03/24 15:31	
Manganese	ug/L	ND	2.0	0.24	09/03/24 15:31	
Thallium	ug/L	ND	0.20	0.028	09/03/24 15:31	
Tin	ug/L	ND	1.0	0.14	09/03/24 15:31	

LABORATORY CONTROL SAMPLE: 4531178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	53.0	106	80-120	
Iron	ug/L	1250	1340	107	80-120	
Lead	ug/L	50	51.2	102	80-120	
Lithium	ug/L	50	53.0	106	80-120	
Manganese	ug/L	50	53.1	106	80-120	
Thallium	ug/L	25	26.5	106	80-120	
Tin	ug/L	50	52.8	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531179 4531180

Parameter	Units	92750045006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	2.1	50	50	54.9	54.4	105	105	75-125	1	20	
Iron	ug/L	342	1250	1250	1710	1700	109	108	75-125	1	20	
Lead	ug/L	ND	50	50	51.6	50.8	103	102	75-125	2	20	
Lithium	ug/L	1.2J	50	50	51.5	51.2	101	100	75-125	1	20	
Manganese	ug/L	578	50	50	626	626	96	95	75-125	0	20	
Thallium	ug/L	ND	25	25	26.7	26.3	107	105	75-125	2	20	
Tin	ug/L	ND	50	50	53.2	52.8	106	106	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879810
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045007

METHOD BLANK: 4531323 Matrix: Water
Associated Lab Samples: 92750045007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.14	09/04/24 04:32	
Iron	ug/L	7.0J	20.0	3.0	09/04/24 04:32	
Lead	ug/L	ND	1.0	0.18	09/04/24 04:32	
Lithium	ug/L	ND	2.5	0.33	09/04/24 04:32	
Manganese	ug/L	0.33J	2.0	0.24	09/04/24 04:32	
Thallium	ug/L	ND	0.20	0.028	09/04/24 04:32	
Tin	ug/L	ND	1.0	0.14	09/04/24 04:32	

LABORATORY CONTROL SAMPLE: 4531324

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	53.6	107	80-120	
Iron	ug/L	1250	1340	107	80-120	
Lead	ug/L	50	50.9	102	80-120	
Lithium	ug/L	50	53.0	106	80-120	
Manganese	ug/L	50	53.8	108	80-120	
Thallium	ug/L	25	26.3	105	80-120	
Tin	ug/L	50	52.3	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531330 4531331

Parameter	Units	92750325006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	ND	50	50	54.3	53.9	109	108	75-125	1	20	
Iron	ug/L	194	1250	1250	1570	1580	110	111	75-125	1	20	
Lead	ug/L	ND	50	50	52.5	52.1	105	104	75-125	1	20	
Lithium	ug/L	2.2J	50	50	54.7	55.1	105	106	75-125	1	20	
Manganese	ug/L	34.8	50	50	89.3	89.0	109	108	75-125	0	20	
Thallium	ug/L	ND	25	25	27.2	26.9	109	108	75-125	1	20	
Tin	ug/L	ND	50	50	52.8	52.8	106	106	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879383
QC Batch Method: SM 2540C-2015
Analysis Method: SM 2540C-2015
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045001

METHOD BLANK: 4529543 Matrix: Water
Associated Lab Samples: 92750045001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	08/30/24 15:22	

LABORATORY CONTROL SAMPLE: 4529544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	234	93	80-120	

SAMPLE DUPLICATE: 4529545

Parameter	Units	92749752001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	152	157	3	25	

SAMPLE DUPLICATE: 4529546

Parameter	Units	92750043002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	694	679	2	25	

SAMPLE DUPLICATE: 4530479

Parameter	Units	92750043003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	328	332	1	25	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879809 | Analysis Method: SM 2540C-2015
QC Batch Method: SM 2540C-2015 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

METHOD BLANK: 4531319 Matrix: Water
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	25.0	25.0	09/03/24 15:27	

LABORATORY CONTROL SAMPLE: 4531320

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	251	266	106	80-120	

SAMPLE DUPLICATE: 4531321

Parameter	Units	92750045002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	374	362	3	25	

SAMPLE DUPLICATE: 4531322

Parameter	Units	92750325006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	135	145	7	25	

SAMPLE DUPLICATE: 4532060

Parameter	Units	92750045006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	217	212	2	25	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 880844
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045001

METHOD BLANK: 4536523 Matrix: Water
Associated Lab Samples: 92750045001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	09/09/24 17:29	

LABORATORY CONTROL SAMPLE: 4536524

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4536525 4536526

Parameter	Units	92749962001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	5.1	5.1	102	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4536527 4536528

Parameter	Units	92750043002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	5.5	5.4	109	109	90-110	0	10	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 881333
QC Batch Method: EPA 350.1 Rev 2.0 1993
Analysis Method: EPA 350.1 Rev 2.0 1993
Analysis Description: 350.1 Ammonia
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

METHOD BLANK: 4538742 Matrix: Water
Associated Lab Samples: 92750045002, 92750045003, 92750045004, 92750045005, 92750045006, 92750045007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	09/10/24 18:52	

LABORATORY CONTROL SAMPLE: 4538743

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4538744 4538745

Parameter	Units	92750276002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	30.0	5	5	34.5	34.0	90	80	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4538746 4538747

Parameter	Units	92750045006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	5	5	5.1	5.0	101	101	90-110	0	10	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879107
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045001

METHOD BLANK: 4527763 Matrix: Water
Associated Lab Samples: 92750045001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/29/24 12:38	
Fluoride	mg/L	ND	0.10	0.050	08/29/24 12:38	
Nitrate as N	mg/L	ND	0.10	0.060	08/29/24 12:38	
Sulfate	mg/L	ND	1.0	0.50	08/29/24 12:38	

LABORATORY CONTROL SAMPLE: 4527764

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.2	102	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Nitrate as N	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	51.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4527765 4527766

Parameter	Units	92750043002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.7	50	50	62.7	61.4	102	99	90-110	2	10	
Fluoride	mg/L	0.10	2.5	2.5	2.6	2.5	98	96	90-110	2	10	
Nitrate as N	mg/L	0.083J	2.5	2.5	2.6	2.5	100	97	90-110	3	10	
Sulfate	mg/L	186	50	50	231	230	91	89	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879691
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045002, 92750045003

METHOD BLANK: 4531035 Matrix: Water
Associated Lab Samples: 92750045002, 92750045003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/31/24 13:28	
Fluoride	mg/L	ND	0.10	0.050	08/31/24 13:28	
Nitrate as N	mg/L	ND	0.10	0.060	08/31/24 13:28	
Sulfate	mg/L	ND	1.0	0.50	08/31/24 13:28	

LABORATORY CONTROL SAMPLE: 4531036

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.2	104	90-110	
Fluoride	mg/L	2.5	2.6	105	90-110	
Nitrate as N	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	53.2	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531037 4531038

Parameter	Units	92750325007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	27.8	50	50	77.2	78.2	99	101	90-110	1	10	
Fluoride	mg/L	0.11	2.5	2.5	2.6	2.7	101	102	90-110	1	10	
Nitrate as N	mg/L	ND	2.5	2.5	2.4	2.4	96	97	90-110	1	10	
Sulfate	mg/L	47.9	50	50	99.7	84.1	104	72	90-110	17	10	M1,R1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531039 4531040

Parameter	Units	92750325006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	53.8	54.5	102	103	90-110	1	10	
Fluoride	mg/L	0.13	2.5	2.5	2.7	2.7	102	103	90-110	1	10	
Nitrate as N	mg/L	0.20	2.5	2.5	2.7	2.7	100	101	90-110	1	10	
Sulfate	mg/L	8.1	50	50	59.7	60.5	103	105	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

QC Batch: 879692
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750045004, 92750045005, 92750045006, 92750045007

METHOD BLANK: 4531041 Matrix: Water
Associated Lab Samples: 92750045004, 92750045005, 92750045006, 92750045007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/31/24 11:47	
Fluoride	mg/L	ND	0.10	0.050	08/31/24 11:47	
Nitrate as N	mg/L	ND	0.10	0.060	08/31/24 11:47	
Sulfate	mg/L	ND	1.0	0.50	08/31/24 11:47	

LABORATORY CONTROL SAMPLE: 4531042

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.6	103	90-110	
Fluoride	mg/L	2.5	2.6	103	90-110	
Nitrate as N	mg/L	2.5	2.5	102	90-110	
Sulfate	mg/L	50	51.9	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531043 4531044

Parameter	Units	92750045006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.9	50	50	66.5	68.8	101	106	90-110	3	10	
Fluoride	mg/L	0.14	2.5	2.5	3.0	3.1	112	118	90-110	5	10	M1
Nitrate as N	mg/L	ND	2.5	2.5	2.6	2.7	100	105	90-110	4	10	H1
Sulfate	mg/L	16.3	50	50	67.2	69.5	102	106	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4531045 4531046

Parameter	Units	92750325005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.6	50	50	53.8	54.7	100	102	90-110	2	10	
Fluoride	mg/L	0.12	2.5	2.5	2.9	3.5	112	134	90-110	18	10	M1,R1
Nitrate as N	mg/L	0.93	2.5	2.5	3.6	3.6	105	107	90-110	1	10	
Sulfate	mg/L	2.6	50	50	53.0	77.9	101	151	90-110	38	10	M1,R1

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

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

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.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92750045001	**082724NMW21**	EPA 7199	878793		
92750045002	**082824NMW19**	EPA 7199	879155		
92750045003	**082824NMW20S**	EPA 7199	879155		
92750045004	**082824NMW20D**	EPA 7199	879155		
92750045005	**082824NMW22**	EPA 7199	879155		
92750045006	**082824NMW23**	EPA 7199	879155		
92750045007	**082824NEPFDDUPLICATE**	EPA 7199	879155		
92750045001	**082724NMW21**	EPA 3010A	879448	EPA 6010D	879619
92750045002	**082824NMW19**	EPA 3010A	880429	EPA 6010D	880630
92750045003	**082824NMW20S**	EPA 3010A	880429	EPA 6010D	880630
92750045004	**082824NMW20D**	EPA 3010A	880429	EPA 6010D	880630
92750045005	**082824NMW22**	EPA 3010A	880429	EPA 6010D	880630
92750045006	**082824NMW23**	EPA 3010A	879818	EPA 6010D	879963
92750045007	**082824NEPFDDUPLICATE**	EPA 3010A	880429	EPA 6010D	880630
92750045001	**082724NMW21**	EPA 3010A	879461	EPA 6020B	879609
92750045002	**082824NMW19**	EPA 3010A	879740	EPA 6020B	879757
92750045003	**082824NMW20S**	EPA 3010A	879740	EPA 6020B	879757
92750045004	**082824NMW20D**	EPA 3010A	879740	EPA 6020B	879757
92750045005	**082824NMW22**	EPA 3010A	879740	EPA 6020B	879757
92750045006	**082824NMW23**	EPA 3010A	879740	EPA 6020B	879757
92750045007	**082824NEPFDDUPLICATE**	EPA 3010A	879810	EPA 6020B	879962
92750045001	**082724NMW21**	EPA 7470A	880762	EPA 7470A	880915
92750045002	**082824NMW19**	EPA 7470A	880762	EPA 7470A	880915
92750045003	**082824NMW20S**	EPA 7470A	880762	EPA 7470A	880915
92750045004	**082824NMW20D**	EPA 7470A	880762	EPA 7470A	880915
92750045005	**082824NMW22**	EPA 7470A	880762	EPA 7470A	880915
92750045006	**082824NMW23**	EPA 7470A	880762	EPA 7470A	880915
92750045007	**082824NEPFDDUPLICATE**	EPA 7470A	880762	EPA 7470A	880915
92750045001	**082724NMW21**	SM 2540C-2015	879383		
92750045002	**082824NMW19**	SM 2540C-2015	879809		
92750045003	**082824NMW20S**	SM 2540C-2015	879809		
92750045004	**082824NMW20D**	SM 2540C-2015	879809		
92750045005	**082824NMW22**	SM 2540C-2015	879809		
92750045006	**082824NMW23**	SM 2540C-2015	879809		
92750045007	**082824NEPFDDUPLICATE**	SM 2540C-2015	879809		
92750045001	**082724NMW21**	EPA 350.1 Rev 2.0 1993	880844		
92750045002	**082824NMW19**	EPA 350.1 Rev 2.0 1993	881333		
92750045003	**082824NMW20S**	EPA 350.1 Rev 2.0 1993	881333		
92750045004	**082824NMW20D**	EPA 350.1 Rev 2.0 1993	881333		
92750045005	**082824NMW22**	EPA 350.1 Rev 2.0 1993	881333		
92750045006	**082824NMW23**	EPA 350.1 Rev 2.0 1993	881333		
92750045007	**082824NEPFDDUPLICATE**	EPA 350.1 Rev 2.0 1993	881333		

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_2SA2024_CCR&VSWMR_E
Pace Project No.: 92750045

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92750045001	**082724NMW21**	EPA 9056A	879107		
92750045002	**082824NMW19**	EPA 9056A	879691		
92750045003	**082824NMW20S**	EPA 9056A	879691		
92750045004	**082824NMW20D**	EPA 9056A	879692		
92750045005	**082824NMW22**	EPA 9056A	879692		
92750045006	**082824NMW23**	EPA 9056A	879692		
92750045007	**082824NEPFDDUPLICATE**	EPA 9056A	879692		

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Pace

Receipt

Effective Date: 5/24/2024

Laboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☑ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☐ **Kernersville** ☐

Sample Condition Upon Receipt

Client Name: DominionEnergy

Project #: WO# : 92750045

92750045

Courier: ☐ Commercial ☑ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

Carrier Tracking Number: _____

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No **Date/Initials Person Examining Contents:** APR 4-28-24

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92707G **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 1.7, 0.6, 1.0 **Correction Factor:** Add / Subtract (°C) 0.0

Corrected Cooler Temp (°C): 1.7, 0.6, 1.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling proce has begun

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

Temp Log: Temp must be maintained at <6 C during login, record temp every 20 minutes.
Time opened: 1009 Temp: 1.7, 0.6, 1.0
Time: put in cooler
Time: Temp:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace ANALYTICAL SERVICES

Receipt

Effective Date: 5/24/2024

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

*****Check all unpreserved Nitrates for chlorine**

Laboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☐ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☐ **Kernersville** ☐

Project #

WO#: 92750045

PM: AMB **Due Date: 09/12/24**

CLIENT: 92-DomEnergy

Client_____ Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG94-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																													
1		1	1		1	1																			2	1			
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	crystal.shadle@wsp.com
Customer Project #:			
Project Name:	Bremo_2SA2024_CCR&VSWMR_E	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50149081
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): Virginia

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested: Standard TAT

Field Filtered (if applicable): [ ] Yes [X] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 2 4 3 10 3 1

Identify Container Preservative Type***: 1 3 2 1 1 2

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals + Hardness	7199 Chromium, Hexavalent	9056 IC - Cl/Fl/SO4/NO3	RADS 226/228				Sample Comment
~~08__24NMW19~~	WT									X	X	X	X	X	X	JD			* ALL SAMPLES
~~08__24NMW20S~~	WT									X	X	X	X	X	X		JD		PRESERVED
~~08__24NMW20D~~	WT									X	X	X	X	X	X	JD			ON ICE *
0827_24NMW21	WT	G			05/27/24	1615	7			X	X	X	X	X	X				
~~08__24NMW22~~	WT									X	X	X	X	X	X		JD		
~~08__24NMW23~~	WT									X	X	X	X	X	X		JD		
~~08__24NMW25S~~	WT									X	X	X	X	X	X		JD		
~~08__24NEPFDDUPLICATE~~	WT									X	X	X	X	X	X		JD		
~~08__24_____MS~~	WT									X	X	X	X	X	X		JD		
~~08__24_____MSD~~	WT									X	X	X	X	X	X		JD		

Lab Use Only

Proj. Mgr: Angela Baioni

AcctNum / Client ID:

Table #:

Profile / Template: 13861

Prelog / Bottle Ord. ID: EZ 3146515

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:

COC ID: Bremo_2SA2024_CCR?VSWMR_E_2_1

Collected By: (Printed Name) J. DAVIS

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

Relinquished by/Company: (Signature) WSP	Date/Time: 05/27/24 1935	Received by/Company: (Signature) AM FedEx Ship	Date/Time: 4-29-24 1009	Tracking Number:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: [ ] In-Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

Hexavalent Chromium pH Adjustment

Project #

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client:_____

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
NMW24	UMM	9.0		11:35		

Pace	DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt
	Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project #: WO# : 92750045

92750045

Courier: ☐ Commercial ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: HHR 8/29/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 92707e

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.4, 1.3, 2.4, 2.0 Correction Factor: Add/Subtract (°C) 0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.4, 1.3, 2.4, 2.0

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☑ Yes	☐ No within	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Pace	DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt
	Effective Date: 05/24/2024

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92750045**

PM: AMB Due Date: 09/12/24
CLIENT: 92-DomEnergy

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Dominion Energy Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP1N	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																														
1		1	1		2	1	1																				1			
2		1	1		2	1	1																				1			
3		1	1		2	1	1																				1			
4		1	1		2	1	1																				1			
5		1	1		2	1	1																				1			
6		1	1		2	1	1																				1			
7		1	1		2	1	1																				1			
8		1	1		2	1	1																				1			
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Hexavalent Chromium pH Adjustment

Project #

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
082824NMW20D	HHM	8.8	9.0	8/29/24 11:22	1 Drop	9210556
082824NMW9		8.9	9.1	8/29/24 11:25	1 Drop	
082824NMW22		8.9	9.1	8/29/24 11:27	1 Drop	
082824NMW12		9.0				
082824NMW1		8.5	9.2	8/29/24 11:30	2 Drops	
082824NMW20S		9.0				
082824NEPEDDUP		9.0				
082824NMW23		8.9	9.3	8/29/24 11:34	1 Drop	

Hexavalent Chromium pH Adjustment

Project #

7199 WH 9.0-9.5
218.6 WH 9.3-9.7

Client: Dominion Energy

Sample ID	Analyst	Initial pH	Adjusted pH	Adjusted Date/Time	Volume Acid/Base Used (Drops)	Lot#/Solvent
082624EPMSD	HHA	8.8	9.0	8/29/24 11:43	2 Drops	92/0556
082624NMW31	HHA	7.8	9.2	8/29/24 11:50	2 DROPS	
082824EPMS	HHA	9.5				

Pace® Location Requested (City/State):
Pace Analytical Charlotte
9800 Kincey Ave. Suite 100, Huntersville, NC 28078

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

Company Name:	Dominion Energy_VA	Contact/Report To:	Kelly Hicks
Street Address:	120 Tredegar Street, Richmond, VA 23219	Phone #:	(804)273-4903
		E-Mail:	kelly.a.hicks@dominionenergy.com
		Cc E-Mail:	crystal.shadle@wsp.com
Customer Project #:			
Project Name:	Bremo_2SA2024_CCR&VSWMR_E	Invoice To:	Kelly Hicks
		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
Site Collection Info/Facility ID (as applicable):		Purchase Order # (if applicable):	50149081
		Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): Virginia

Data Deliverables: [X] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested: Standard TAT

Field Filtered (if applicable): [ ] Yes [X] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **: 2 4 3 10 3 1

Identify Container Preservative Type***: 1 3 2 1 1 2

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only — Proj. Mgr: Angela Baioni; AcctNum / Client ID:; Table #:; Profile / Template: 13861; Prelog / Bottle Ord. ID: EZ 3146515

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	2540C Total Dissolved Solids	350.1 Ammonia	6010/6020/7470 Metals + Hardness	7199 Chromium, Hexavalent	9056 IC - Cl/Fl/SO4/NO3	RADS 226/228					Sample Comment	Preservation non-conformance identified for sample
08[28]24NMW19	WT	G			08/28/24	1200	7			X	X	X	X	X	X					*ALL SAMPLES	
08[28]24NMW20S	WT	G			08/28/24	1200	7			X	X	X	X	X	X					PRESERVED	
08[28]24NMW20D	WT	G			08/28/24	1255	7			X	X	X	X	X	X					ON ICE *	
~~08__24NMW21~~	~~WT~~									X	X	X	X	X	X	30					
08[28]24NMW22	WT	G			08/28/24	1350	7			X	X	X	X	X	X					MS/MSD	
08[28]24NMW23	WT	G			08/28/24	1310	21			X	X	X	X	X	X					taken at	
~~08__24NMW25S~~	~~WT~~									X	X	X	X	X	X	30				MW-23	
08[28]24NEPFDDUPLICATE	WT	G			08/28/24	1400	7			X	X	X	X	X	X						
~~08__24__MS~~	~~WT~~									X	X	X	X	X	X	30				Field Duplicate	
~~08__24__MSD~~	~~WT~~									X	X	X	X	X	X	30				taken at MW-22	

Additional Instructions from Pace®:

LOC ID: Bremo_2SA2024_CCR&VSWMR_E_3.1

Collected By: (Printed Name) J. DAVIS / Z. Mondshine

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
1	92070	0	3.1, 3.2	4.1, 2.0	Y

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
WSP	08/28/24/1805	HHA/Pace HVL	8/29/24 10:05

Tracking Number:

Delivered by: [ ] In-Person [ ] Courier [X] FedEX [ ] UPS [ ] Other

Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

October 04, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1773936
Samples Received:	09/04/2024
Project Number:	92750045
Description:	Bremo_2SA2024_CCR&CCR&VSWMR_E
Site:	001
Report To:	Angela Baioni 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

Entire Report Reviewed By:

Haley Torrence

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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082724NMW21 L1773936-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 16:15	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 21:23	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

082824NMW19 L1773936-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/28/24 12:00	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 21:23	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

082824NMW20S L1773936-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/28/24 12:00	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 21:23	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

082824NMW20D L1773936-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/28/24 12:55	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 22:24	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

082824NMW22 L1773936-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/28/24 13:50	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 22:24	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

082824NMW23 L1773936-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/28/24 13:10	09/04/24 09:00

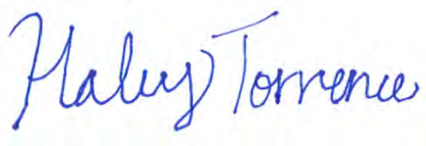
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 22:24	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356942	1	09/11/24 18:43	09/20/24 16:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/20/24 16:03	ASN	Mt. Juliet, TN

082824NEPFDDUPLICATE L1773936-07 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/28/24 14:00	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2357325	1	09/06/24 09:35	09/16/24 22:24	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 21:00	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2357325	1	09/06/24 09:35	09/18/24 21:00	ASN	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.516		0.229	0.371	0.215	0.0741	09/16/2024 21:23	WG2357325
(T) Barium	*101*					*30.0-143*	*09/16/2024 21:23*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.939		0.220	0.427	0.393	0.207	09/18/2024 21:00	WG2356242
(T) Barium	*118*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*91.8*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.46		0.318	0.448	09/18/2024 21:00	WG2357325

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.247	J	0.181	0.324	0.248	0.0907	09/16/2024 21:23	WG2357325
(T) Barium	*102*					*30.0-143*	*09/16/2024 21:23*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	1.42		0.353	0.595	0.638	0.333	09/18/2024 21:00	WG2356242
(T) Barium	*71.0*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*101*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.66		0.397	0.685	09/18/2024 21:00	WG2357325

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.224		0.152	0.294	0.171	0.0522	09/16/2024 21:23	WG2357325
(T) Barium	*105*					*30.0-143*	*09/16/2024 21:23*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.850		0.210	0.408	0.377	0.198	09/18/2024 21:00	WG2356242
(T) Barium	*127*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*101*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.07		0.259	0.414	09/18/2024 21:00	WG2357325

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.693		0.279	0.424	0.284	0.108	09/16/2024 22:24	WG2357325
(T) Barium	*96.7*					*30.0-143*	*09/16/2024 22:24*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	2.20		0.242	0.440	0.398	0.209	09/18/2024 21:00	WG2356242
(T) Barium	*123*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*112*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.89		0.369	0.489	09/18/2024 21:00	WG2357325

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.762		0.271	0.413	0.215	0.0740	09/16/2024 22:24	WG2357325
(T) Barium	*100*					*30.0-143*	*09/16/2024 22:24*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	1.16		0.261	0.469	0.468	0.245	09/18/2024 21:00	WG2356242
(T) Barium	*127*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*91.0*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.92		0.376	0.515	09/18/2024 21:00	WG2357325

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.202	J	0.170	0.313	0.248	0.0906	09/16/2024 22:24	WG2357325
(T) Barium	*102*					*30.0-143*	*09/16/2024 22:24*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.0260	U	0.613	1.08	1.12	0.587	09/20/2024 16:03	WG2356942
(T) Barium	*124*					*30.0-143*	*09/20/2024 16:03*	WG2356942
(T) Yttrium	*114*					*30.0-136*	*09/20/2024 16:03*	WG2356942

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.228	U	0.636	1.15	09/20/2024 16:03	WG2357325

Radiochemistry by Method 903.0/9315

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
Radium-226	0.135	J	0.124	0.267	0.172	0.0524	09/16/2024 22:24	WG2357325
(T) Barium	*99.6*					*30.0-143*	*09/16/2024 22:24*	WG2357325

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.958		0.248	0.456	0.448	0.235	09/18/2024 21:00	WG2356242
(T) Barium	*117*					*30.0-143*	*09/18/2024 21:00*	WG2356242
(T) Yttrium	*90.9*					*30.0-136*	*09/18/2024 21:00*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.09		0.277	0.480	09/18/2024 21:00	WG2357325

Method Blank (MB)

(MB) R4128124-1 09/16/24 20:23

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.000	U	0.0621	0.138	0.0523
(T) Barium	*109*		*109*		

L1773945-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1773945-01 10/03/24 13:40 • (DUP) R4128124-7 10/03/24 13:40

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.285	0.242	0.341	0.118	0.281	0.477	0.864	0.328	1.45	0.00767	U	20	3
(T) Barium	*96.6*				*97.6*	*97.6*							

Laboratory Control Sample (LCS)

(LCS) R4128124-2 09/16/24 20:23

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.39	108	75.0-125	
(T) Barium			*108*		

L1773936-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773936-06 09/16/24 22:24 • (MS) R4128124-3 09/16/24 20:23 • (MSD) R4128124-4 09/16/24 20:23

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.202	21.4	19.3	106	95.6	1	75.0-125			10.3		20
(T) Barium		*102*			*109*	*111*							

Method Blank (MB)

(MB) R4125044-1 09/18/24 17:12

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.290		0.139	0.253	0.133
(T) Barium	*129*		*129*		
(T) Yttrium	*101*		*101*		

L1773940-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1773940-02 09/18/24 21:00 • (DUP) R4125044-5 09/18/24 17:12

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.38	0.394	0.719	0.375	1.27	0.337	0.594	0.311	8.17	0.208		20	3
(T) Barium	*127*				*125*	*125*							
(T) Yttrium	*95.7*				*107*	*107*							

Laboratory Control Sample (LCS)

(LCS) R4125044-2 09/18/24 17:12

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.04	80.7	80.0-120	
(T) Barium			*127*		
(T) Yttrium			*118*		

L1773902-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773902-06 09/18/24 17:12 • (MS) R4125044-3 09/18/24 17:12 • (MSD) R4125044-4 09/18/24 17:12

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	-0.444	15.8	13.5	94.4	80.5	1	70.0-130			15.8		20
(T) Barium		*122*			*125*	*129*							
(T) Yttrium		*109*			*115*	*107*							

Method Blank (MB)

(MB) R4125059-1 09/20/24 16:03

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.430	U	0.181	0.346	0.181
(T) Barium	*122*		*122*		
(T) Yttrium	*93.1*		*93.1*		

L1775404-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1775404-08 09/20/24 16:03 • (DUP) R4125059-5 09/20/24 16:03

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.460	0.343	0.615	0.322	0.664	0.291	0.516	0.272	36.4	0.455		20	3
(T) Barium	*122*				*109*	*109*							
(T) Yttrium	*107*				*103*	*103*							

Laboratory Control Sample (LCS)

(LCS) R4125059-2 09/20/24 16:03

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.18	83.5	80.0-120	
(T) Barium			*123*		
(T) Yttrium			*113*		

L1773936-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773936-06 09/20/24 16:03 • (MS) R4125059-3 09/20/24 16:03 • (MSD) R4125059-4 09/20/24 16:03

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.0260	15.1	12.5	90.4	74.8	1	70.0-130			18.9		20
(T) Barium		*124*			*124*	*98.3*							
(T) Yttrium		*114*			*113*	*110*							

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: ☒ Yes ☐ No

Workorder: 92750045 Workorder Name: Bremo_2SA2024_CCR&VSWMR_E Owner Received Date: 8/28/2024 Results Requested By: 9/12/2024

Report To	Subcontract To
Angela Baioni Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone 612-473-6801	Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HNO3						Requested Analysis Ra 226/903.0	Ra 228/904.0 + Combined Ra											LAB USE ONLY
1	082724NMW21	PS	8/27/2024 16:15	92750045001	Water	2						X	X											01
2	082824NMW19	PS	8/28/2024 12:00	92750045002	Water	2						X	X											02
3	082824NMW20S	PS	8/28/2024 12:00	92750045003	Water	2						X	X											03
4	082824NMW20D	PS	8/28/2024 12:55	92750045004	Water	2						X	X											04
5	082824NMW22	PS	8/28/2024 13:50	92750045005	Water	2						X	X											05
6	082824NMW23	RQS	8/28/2024 13:10	92750045006	Water	6						X	X											06
7	082824NEPFDDUPLICATE	PS	8/28/2024 14:00	92750045007	Water	2						X	X											07

L177 3436

Transfers	Released By	Date/Time	Received By	Date/Time
1	HHB/PCLL HUC	9/3/24 18:00		
2				
3			Christoph H. Stelling	9/4/24 0800

Comments: *MS/MSD required on sample 92750045-006*

Cooler Temperature on Receipt ____°C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

2.0+3=2.3

Sample Receipt Checklist

COC Seal Present/Intact:	X Y N	If Applicable	
COC Signed/Accurate:	X Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	X Y N	Pres. Correct/Check:	Y N
Correct bottles used:	X Y N	18 TOTAL	
Sufficient volume sent:	X Y N		
RA Screen <0.5 mR/hr:	X Y N		

Pace

Ship To:
Pace National
12065 Lebanon Rd
Mt. Juliet, TN 37122
Phone (615) 758-5858

INTER_LABORATORY WORK ORDER # 92750045
(To be completed by sending lab)

Sending Project No:	92750045
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	09/01/24
REQUESTED COMPLETION DATE:	**9/12/2024**

Sending Region	IR92-Charlotte	Sending Project Mgr.	Angela Baioni
Receiving Region	IR850-Pace National	External Client	Dominion Energy_VA
State of Sample Origin	VA	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Wet Cert. Needed _____

WORK REQUESTED

Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Acode	Acode Desc
Ra 226/903.0	BP1N		HNO3	7	SI-38RAD	SUB PASI RAD
Ra 228/904.0 + Combined Ra	BP1N		HNO3	7	SI-38RAD02	SUB PASI RAD

Special Requirements: Report D, QC Limits, MDLs (D),Dominion EQEDD (1616),Golder Equis 5 (34)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: ☐ Yes ☐ No

DISPOSITION of FORM

Original sent to the receiving lab - Copy kept at the sending lab.
When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.

APPENDIX F
HISTORICAL LABORATORY MONITORING RESULTS

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	**Method**	**Unit**										
Ammonia												
09/09-13/2019	E350.1	mg/L	< 0.070 U	< 0.070 U	0.13	0.16	0.12	0.17	0.11	< 0.070 U	< 0.070 U	< 0.070 U
03/02-05/2020	E350.1	mg/L	< 0.070 U	< 0.070 U	0.13	0.15	0.16	0.17	0.12	< 0.070 U	< 0.070 U	< 0.070 U
08/24-28/2020	E350.1	mg/L	< 0.070 U	< 0.070 U	0.094 J	0.14	0.13	0.18	0.14	< 0.070 U	< 0.070 U	< 0.070 U
2/23-26/2021	E350.2	mg/L	< 0.070 U	< 0.070 U	< 0.070 U	0.17	< 0.070 U	0.12	0.18	< 0.070 U	< 0.070 U	< 0.070 U
8/30-9/1-2021	E350.2	mg/L	< 0.031 U	< 0.031 U	0.097 J	0.17	0.075 J	0.14	0.17	0.047 J	< 0.070 U	< 0.070 U
02/07-10/2022	E350.2	mg/L	< 0.027 U	< 0.027 U	0.11	0.20	0.035 J	0.15	0.19	0.059 J	< 0.027 U	< 0.027 U
08/29-09/07/2022	E350.2	mg/L	< 0.027 U	< 0.027 U	< 0.027 U	0.12	< 0.027 U	0.067 J	0.10	< 0.027 U	< 0.027 U	< 0.027 U
02/13-15/2023	E350.2	mg/L	< 0.031 U	< 0.031 U	0.095 J	0.22	< 0.031 U	0.10	0.15	< 0.031 U	< 0.031 U	< 0.031 U
08/21-24/2023	E350.2	mg/L	< 0.031 U	< 0.031 U	0.23	0.22	0.037 J	0.12	0.20	< 0.031 U	< 0.031 U	< 0.031 U
02/12-14/2024	E350.1	mg/L	< 0.031 U	< 0.031 U	0.21	0.22	0.031 J	0.22	0.21	< 0.031 U	< 0.031 U	< 0.031 U
08/26-28/2024	E350.2	mg/L	< 0.031 U	< 0.031 U	0.25	0.24	< 0.031 U	0.14	0.20	< 0.031 U	< 0.031 U	< 0.031 U
Antimony												
10/27-11/01/2016	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	1.3 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	1.2 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	0.11 J	< 0.1	0.22 J	0.14 J	< 0.1	0.7	< 0.1 U
12/05/2017	SW6020	µg/L	--	--	--	< 0.12 U	< 0.12 U	0.17 J	< 0.12 U	< 0.12 U	0.24 J	< 0.12 U
01/29-30/2018	SW6010	µg/L	< 3.90 U	< 3.90 U	< 3.90 U	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	< 0.12 U	< 0.12 U	0.20 J	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
03/26-28/2018	SW6020A	µg/L	--	--	--	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
05/14-15/2018	SW6010	µg/L	--	--	--	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
10/15-16/2018	SW6010D	µg/L	--	--	--	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
09/09-13/2019	SW6010D	µg/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
03/02-05/2020	SW6010D	µg/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
08/24-28/2020	SW6010D	µg/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
2/23-26/2021	SW6010D	µg/L	< 3.0 U	3.3 J	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
8/30-9/1-2021	SW6010D	µg/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
02/07-10/2022	SW6010D	µg/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
08/29/-09/07/2022	SW6010D	µg/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
02/13-15/2023	SW6010D	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
08/21-24/2023	SW6010D	µg/L	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
02/12-14/2024	SW6010D	µg/L	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U
08/26-28/2024	SW6010D	µg/L	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U
Arsenic												
10/27-11/01/2016	SW6020B	µg/L	< 0.50 U	< 0.50 U	< 0.50 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.2	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	0.99 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.3	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	3.8	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	2.4	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	3	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	3.2	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	1.2	14.1	0.87	1.4	0.26	1.5	< 0.05 U
12/05/2017	SW6020	µg/L	--	--	--	1.3	3.7	0.64	1.1	0.41 J	1.4	< 0.21 U
01/29-30/2018	SW6020	µg/L	< 0.21 U	< 0.21 U	4.3	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	1.5	1.4	0.54	1.0	0.37 J	1.4	< 0.21 U
03/26-28/2018	SW6020A	µg/L	--	--	--	1.7	1.5	1.4	0.78	0.54	0.87	< 0.21 U
04/30-05/01/2018	SW6010	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--
05/14-15/2018	SW6010	µg/L	--	--	--	< 5.0 U	< 5.0 U	6.6 J	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
10/15-16/2018	SW6010D	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
09/09-13/2019	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	12.8	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
10/10/2019	SW6010D	µg/L	--	--	--	--	--	< 4.7 U	--	--	--	--
03/02-05/2020	SW6010D	µg/L	< 4.7 U	< 4.7 U	7.1 J	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
08/24-28/2020	SW6010D	µg/L	< 4.7 U	5.7 J+	6.6 J	< 4.7 U	13.1 J+	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	4.9 J
2/23-26/2021	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	13.4	11.3	4.9 J	< 4.7 U	< 4.7 U	< 4.7 U
4/16/2021	SW6010D	µg/L	--	--	--	--	--	< 4.7 U	--	--	--	--
8/30-9/1-2021	SW6010D	µg/L	< 11.4 U	< 4.7 U	< 4.7 U	< 4.7 U	< 10.6 U	< 4.7 U	< 4.7 U	< 4.7 U	< 5.7 U	8.8
02/07-10/2022	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	18.0	8.1 J	< 4.7 U	5.3 J	< 4.7 U	< 4.7 U
08/29/-09/07/2022	SW6010D	µg/L	< 4.7 U	< 4.7 U	5.9 J	6.6 J	16.3	11.7	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/13-15/2023	SW6010D	µg/L	< 3.4 U	< 3.4 U	< 3.4 U	< 4.4 U	8.72 J	< 4.4 U	< 4.4 U	< 3.4 U	< 4.4	< 3.4 U
08/21-24/2023	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	10.7	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/12-14/2024	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	4.0 J	3.7 J	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
08/26-28/2024	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	9.4 J	4.1 J	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
Barium												
10/27-11/01/2016	SW6020B	µg/L	3.6	54	33.5	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	3.6	26.9	45.7	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	3 J	44.3	41.3	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	3.1	45.6	34.2	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	3	42.4	28.3	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	3.2	47.3	35.9	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	2.1 J	51	35.6	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	3.1	45.8	34.7	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	58.7	251	90.3	179	134	108	< 0.11 U
12/05/2017	SW6020	µg/L	--	--	--	56.9	275	136	161	130	110	< 0.14 U
01/29-30/2018	SW6010	µg/L	3.5 J	35.6	33.1	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	58.7	241	132	159	144	110	< 0.14 U
03/26-28/2018	SW6020A	µg/L	--	--	--	55.3	233	98.7	139	137	90.7	0.44
04/30-05/01/2018	SW6010	µg/L	3.1 J	37.3	27.1	--	--	--	--	--	--	--
05/14-15/2018	SW6010	µg/L	--	--	--	53.6	277	92.0	131	126	79.5	< 2.5 U
06/25-26/2018	SW6010D	µg/L	--	--	--	59.7	314	103	136	131	83.7	< 2.5 U
08/15-16/2018	SW6010D	µg/L	--	--	--	52.1	267	100	122	125	72.6	< 2.5 U
10/15-16/2018	SW6010D	µg/L	2.8 J	59.0	33.2	55.8	252	103	125	138	89.6	< 2.5 U
09/09-13/2019	SW6010D	µg/L	2.8 J	29.8	31.9	53.2	227	94.8	122	116	63.0	< 1.0 U
03/02-05/2020	SW6010D	µg/L	3.5 J	40.3	38.8	54.8	211	102	122	125	65.4	< 1.0 U
08/24-28/2020	SW6010D	µg/L	3.6 J	40.4	39.6	60.8	265	112	145	113	63.7	< 3.5 U
2/23-26/2021	SW6010D	µg/L	< 3.5 U	30.1	29.8	56.8	254	94	137	96.7	59.4	< 3.5 U
8/30-9/1-2021	SW6010D	µg/L	4.1 J	21	32.8	64.2	239	88.7	124	89.5	55.3	5.4 J
02/07-10/2022	SW6010D	µg/L	< 3.5 U	22.9	31.6	75.6	272	91.7	122	88.5	58.2	< 3.5 U
08/29/-09/07/2022	SW6010D	µg/L	< 3.5 U	23.0	32.6	91.4	261	91.9	130	83.8	57.3	< 3.5 U
02/13-15/2023	SW6010D	µg/L	3.2 J	31.6	32.6	113	272	93.4	123	75.1	64.5	< 0.84
08/21-24/2023	SW6010D	µg/L	< 3.5 U	17.4	33.7	107	279	103	120	82.7	59.1	< 3.5 U
02/12-14/2024	SW6010D	µg/L	3.3 J	16.5	33.7	101	252	96.2	117	76.5	66.6	< 0.79 U
08/26-28/2024	SW6010D	µg/L	3.0 J	16.6	33.8	133	252	113	125	79.3	55.8	< 0.79 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	**Method**	**Unit**										
Beryllium												
10/27-11/01/2016	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 0.20 U	< 0.20 U	0.35 J	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	0.21 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U
12/05/2017	SW6020	µg/L	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U
01/29-30/2018	SW6010	µg/L	< 0.50 U	< 0.50 U	< 0.50 U	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U
03/26-28/2018	SW6020A	µg/L	--	--	--	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U	< 0.064 U
05/14-15/2018	SW6010	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
10/15-16/2018	SW6010D	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
09/09-13/2019	SW6010D	µg/L	< 0.20 U	0.23 J+	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
03/02-05/2020	SW6010D	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
08/24-28/2020	SW6010D	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
2/23-26/2021	SW6010D	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
8/30-9/1-2021	SW6010D	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
02/07-10/2022	SW6010D	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
08/29/-09/07/2022	SW6010D	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
02/13-15/2023	SW6010D	µg/L	< 0.17 U	< 0.17 U	< 0.17 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.17 U	< 0.33 U	< 0.17 U
08/21-24/2023	SW6010D	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
02/12-14/2024	SW6010D	µg/L	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
08/26-28/2024	SW6010D	µg/L	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
Boron												
10/27-11/01/2016	SW6020B	µg/L	12.9 J	16.2 J	25.6 J	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	15 B	< 5.7 U	64.9 J	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 5.7 U	< 5.7 U	60.7 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	14.4 J	8.5 J	33.8 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 5.7 U	9.5 J	51.7 J+	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	6 J	36.7 J+	45.8 J+	--	--	--	--	--	--	--
06/19-20/2017	SW6010	µg/L	< 25 U	< 25 U	37.2 J	--	--	--	--	--	--	--
07/24-25/2017	SW6010	µg/L	< 25 U	< 25 U	29.4 J	--	--	--	--	--	--	--
09/06/2017	SW6010	µg/L	< 25 U	--	34.6 J	--	--	--	--	--	--	--
10/23/2017	SW6010	µg/L	--	--	--	1300	2290	407	389	216	144	< 25 U
12/05/2017	SW6010	µg/L	--	--	--	1320	2460	1070	363	217	133	< 25 U
02/14/2018	SW6010	µg/L	--	--	--	1580	2660	2420	404	235	149	< 25 U
03/26-28/2018	SW6010	µg/L	--	--	--	1310	2650	2290	353	215	147	< 25 U
04/30-05/01/2018	SW6010	µg/L	< 25 U	< 25 U	54	--	--	--	--	--	--	--
05/14-15/2018	SW6010	µg/L	--	--	--	1200	2800	2400	370	400	140	< 25 U
06/25-26/2018	SW6010D	µg/L	--	--	--	1200	3000	2200	400	350	140	< 25 U
08/15-16/2018	SW6010D	µg/L	--	--	--	1100	2800	2400	340	420	140	< 25 U
10/15-16/2018	SW6010D	µg/L	< 25 U	< 25 U	45 J	990	2500	2500	340	270	140	< 25 U
01/07-08/2019	SW6010D	µg/L	< 25 U	< 25 U	40 J	880	2400	2200	310	180	190	< 25 U
09/09-13/2019	SW6010D	µg/L	< 6.6 U	< 6.6 U	44 J	750	2300	2300	350	390	140	43 J
03/02-05/2020	SW6010D	µg/L	< 6.6 U	< 6.6 U	44 J	710	2400	2100	360	360	190	< 6.6 U
08/24-28/2020	SW6010D	µg/L	< 32.4 U	< 32.4 U	46.8 J	852	2530	1880	387	373	162	< 32.4 U
2/23-26/2021	SW6010D	µg/L	< 32.4 U	< 32.4 U	39.8 J	999	2470	1190	450	257	185	< 32.4 U
8/30-9/1/2021	SW6010D	µg/L	< 32.4 U	< 32.4 U	40.4 J	908	2170	1180	520	436	173	< 32.4 U
02/07-10/2022	SW6010D	µg/L	< 32.4 U	< 32.4 U	38.7 J	971	2270	1100	570	406	167	< 32.4 U
08/29/-09/07/2022	SW6010D	µg/L	< 32.4 U	< 32.4 U	40.4 J	993	1730	857	584	455	160	< 32.4 U
02/13-15/2023	SW6010D	µg/L	< 12.4 U	< 12.4 U	39.2 J	956	1320	827	629	187	167 J	< 12.4 U
08/21-24/2023	SW6010D	µg/L	< 32.4 U	< 32.4 U	48.0 J	1030	1810	947	678	491	159	< 32.4 U
02/12-14/2024	SW6010D	µg/L	< 4.0 U	< 4.0 U	< 40.9 U	969	996	819	468	387	160	24.0 J
08/26-28/2024	SW6010D	µg/L	< 4.0 U	< 4.0 U	47.0 J	987	1490	924	659	505	141	< 4.0 U
Cadmium												
10/27-11/01/2016	SW6020B	µg/L	< 0.60 U	1.0	0.98	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 U
12/05/2017	SW6020	µg/L	--	--	--	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
01/29-30/2018	SW6010	µg/L	< 0.50 U	< 0.50 U	< 0.50 U	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
03/26-28/2018	SW6020A	µg/L	--	--	--	< 0.028 U	0.043 J	< 0.028 U	0.028 J	< 0.028 U	< 0.028 U	< 0.028 U
05/14-15/2018	SW6010	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
10/15-16/2018	SW6010D	µg/L	--	--	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
09/09-13/2019	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
03/02-05/2020	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
08/24-28/2020	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
2/23-26/2021	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	0.81 J	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
8/30-9/1/2021	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
02/07-10/2022	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
08/29/-09/07/2022	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
02/13-15/2023	SW6010D	µg/L	< 0.33 U	< 0.33 U	< 0.33 U	< 0.479 U	< 0.479 U	< 0.479 U	< 0.479 U	< 0.33 U	< 0.479 U	< 0.33 U
08/21-24/2023	SW6010D	µg/L	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
02/12-14/2024	SW6010D	µg/L	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U
08/26-28/2024	SW6010D	µg/L	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	**Method**	**Unit**										
Calcium												
10/27-11/01/2016	SW6020B	µg/L	22800		41300	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	20900	11100	56000	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	23700	19800	51400	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	20700	19500	48000	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	17800	20100	49300	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	19100	20900	52300	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	19400	23600	58900	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	20500	20800	57800	--	--	--	--	--	--	--
09/06/2017	SW6020B	µg/L	22600	--	60800	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	33500	121000	71900	91100	43200	39700	< 103 U
12/05/2017	SW6020	µg/L	--	--	--	36400	130000	96600	79000	43400	42300	< 11.4 U
02/14/2018	SW6020	µg/L	--	--	--	36100	133000	104000	56600	44300	39600	28.1 J
03/26-28/2018	SW6020A	µg/L	--	--	--	37800	138000	113000	53600	46800	34300	< 11.4 U
04/30-05/01/2018	SW6010	µg/L	19600	15800	47300	--	--	--	--	--	--	--
05/14-15/2018	SW6020A	µg/L	--	--	--	34400	165000	111000	46600	41700	30600	< 11 U
06/25-26/2018	SW6010D	µg/L	--	--	--	36700	165000	110000	47500	44000	30600	< 50 U
08/15-16/2018	SW6020A	µg/L	--	--	--	35400	162000	128000	45500	41000	30800	21 J
10/15-16/2018	SW6010D	µg/L	19600	23800	52500	--	--	--	--	--	--	--
10/15-16/2018	SW6020B	µg/L	--	--	--	36000	142000	117000	42500	47400	36700	< 100 U
01/07-08/2019	SW6010D	µg/L	19100	12700	45400	32700	134000	102000	35700	45500	32500	< 50 U
09/09-13/2019	SW6010D	µg/L	19600	12800	48900	32500	129000	105000	43100	40600	29500	< 24 U
03/02-05/2020	SW6010D	µg/L	19700	17400	47400	32900	113000	94400	42400	40200	30200	< 24 U
08/24-28/2020	SW6010D	µg/L	20300	16000	44400	31800	126000	87800	57600	37000	28500	< 94.2 U
2/23-26/2021	SW6010D	µg/L	19700	11600	40900	30500	114000	99500	65400	35900	31200	< 94.2 U
8/30-9/1/2021	SW6010D	µg/L	19500	8900	43000	32400	107000	83200	65300	34300	29100	< 94.2 U
02/07-10/2022	SW6010D	µg/L	20500	10500	42900	40500	106000	95200	68500	37000	31400	< 94.2 U
08/29/-09/07/2022	SW6010D	µg/L	19700	9440	41500	44800	96800	105000	69500	35200	31700	< 94.2 U
02/13-15/2023	SW6010D	µg/L	21200	9890	47500	50000	87400	94400	64900	35900	30300	< 190 U
08/21-24/2023	SW6010D	µg/L	20400	7950	41800	50600	94700	99000	67800	37000	31500	< 94.2 U
02/12-14/2024	SW6010D	µg/L	19900	7310	42200	50600	82500	108000	62600	33700	33400	< 14.7 U
08/26-28/2024	SW6010D	µg/L	20300	7650	40600	59600	84400	99900	70800	36000	33300	< 14.7 U
Chloride												
10/27-11/01/2016	SW9056A	mg/L	8.3	7.8	32.9	--	--	--	--	--	--	--
12/06-07/2016	SW9056A	mg/L	7.3	11.8	40.1	--	--	--	--	--	--	--
01/18-19/2017	SW9056A	mg/L	8.5	24.3	44.4	--	--	--	--	--	--	--
02/28-03/02/2017	SW9056A	mg/L	8.1	30.0	44.3	--	--	--	--	--	--	--
04/10-12/2017	SW9056A	mg/L	8.0	31.8	27.1	--	--	--	--	--	--	--
05/11-12/2017	SW9056A	mg/L	8.2	38.9	58.3	--	--	--	--	--	--	--
06/19-20/2017	SW9056A	mg/L	8.8	44.0	60.3	--	--	--	--	--	--	--
07/24-25/2017	SW9056A	mg/L	8.2	42.4	59.8	--	--	--	--	--	--	--
09/06/2017	E300	mg/L	8.5	--	60.9	--	--	--	--	--	--	--
10/23/2017	SW9056A	mg/L	--	--	--	8.3	5.9	15.4	18.7	18.1	18.1	< 0.50 U
12/05/2017	SW9056A	mg/L	--	--	--	7.9	13.5	12.0	17.4	17.0	17.0	< 0.50 U
02/14/2018	SW9056A	mg/L	--	--	--	7.6	9.6	8.2	14.8	15.5	15.8	< 0.50 U
03/26-28/2018	SW9056A	mg/L	--	--	--	7.9	8.4	8.4	12.5	15.2	16.2	< 0.50 U
04/30-05/01/2018	E300	mg/L	9.4	29.3	45.2	--	--	--	--	--	--	--
05/14-15/2018	SW9056A	mg/L	--	--	--	8.5	7.3	7.7	11.2	15.7	16.5	< 0.50 U
06/25-26/2018	SW9056A	mg/L	--	--	--	9.1	6.6	11.9	11.1	16.2	17.5	< 0.50 U
08/15-16/2018	SW9056A	mg/L	--	--	--	9.2	8.4	8.8	11.1	17.3	17.3	< 0.50 U
10/15-16/2018	E300	mg/L	10.2	45.5	63.4	--	--	--	--	--	--	--
10/15-16/2018	SW9056A	mg/L	--	--	--	8.9	6.9	7.4	9.0	20.8	17.0	< 0.50 U
01/07-08/2019	E300	mg/L	9.7	29.8	58.8	8.9	5.3	11.3	7.2	13.1	17.1	< 0.60 U
09/09-13/2019	SW9056A	mg/L	8.0	18.8	54.3	9.1	5.0	9.5	6.2	16.3	17.1	< 0.60 U
03/02-05/2020	SW9056A	mg/L	8.2	28.6	50.2	9.2	7.2	9.8	6.1	16.3	16.6	< 0.60 U
08/24-28/2020	SW9056A	mg/L	8.8	27.7	39.5	8.9	6.5	10.3	6.5	16.1	16.3	< 0.60 U
2/23-26/2021	SW9056A	mg/L	9.9	20.1	36.3	9.2	7.6	11.8	9.1	15.3	17.4	< 0.60 U
8/30-9/1/2021	SW9056A	mg/L	7.7	12.3	37.1	8.6	7.0	11.1	10.7	15	16.4	< 0.60 U
02/07-10/2022	SW9056A	mg/L	9.0	15.3	38.5	8.4	7.4	11.2	10.8	13.9	15.8	< 0.60 U
08/29/-09/07/2022	SW9056A	mg/L	9.7	14.6	47.3	8.1	6.8	12.0	11.6	14.2	16.2	< 0.60 U
02/13-15/2023	SW9056A	mg/L	10.5	15.2	58.9	8.1	6.5	11.8	11.2	17.5	15.5	< 0.60 U
08/21-24/2023	SW9056A	mg/L	11.0	11.3	43.6	8.0	6.9	11.7	11.4	13.9	15.3	< 0.60 U
02/12-14/2024	SW9056A	mg/L	11.4	10.9	42.1	8.5	6.4	11.9	12.8	15.3	16.1	< 0.60 U
08/26-28/2024	SW9056A	mg/L	11.2	10.1	42.9	8.8	7.2	11.8	11.3	15.6	15.9	< 0.60 U
Chromium												
10/27-11/01/2016	SW6020B	µg/L	< 1.00 U	1.7 J	< 1.00 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	1.2 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 1.00 U	1.2 J	< 1.00 U	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 1.00 U	1.9 J+	< 1.00 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	1.1 J+	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	1.2 J+	1.3 J	< 1.00 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	1.3 J+	0.69 J+	2.6 J+	0.7 J+	0.52 J+	0.38 J+	0.12 J
12/05/2017	SW6020	µg/L	--	--	--	0.65	0.34 J	2.1	0.25 J	0.37 J	0.42 J	< 0.13 U
01/29-30/2018	SW6010	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	0.67	0.36 J	1.4	0.38 J	0.35 J	0.38 J	< 0.13 U
03/26-28/2018	SW6020A	µg/L	--	--	--	0.43 J	0.26 J	0.55	0.35 J	0.53	0.18 J	< 0.13 U
05/14-15/2018	SW6010	µg/L	--	--	--	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
10/15-16/2018	SW6010D	µg/L	--	--	--	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
09/09-13/2019	SW6010D	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
03/02-05/2020	SW6010D	µg/L	< 1.0 U	1.6 J	2.2 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
08/24-28/2020	SW6010D	µg/L	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
2/23-26/2021	SW6010D	µg/L	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
8/30-9/1/2021	SW6010D	µg/L	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
02/07-10/2022	SW6010D	µg/L	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
08/29/-09/07/2022	SW6010D	µg/L	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
02/13-15/2023	SW6010D	µg/L	< 1.7 U	< 1.7 U	< 1.7 U	1.84 J	< 1.4 U	1.70 J	2.04 J	< 1.7 U	< 1.4 U	< 1.7 U
08/21-24/2023	SW6010D	µg/L	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
02/12-14/2024	SW6010D	µg/L	< 0.63 U	1.1 J	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	0.90 J	< 0.63 U	< 0.63 U
08/26-28/2024	SW6010D	µg/L	< 0.63 U	0.99 J	< 0.63 U	< 0.63 U	< 0.63 U	0.74 J	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	Method	Unit										
Cobalt												
10/27-11/01/2016	SW6020B	µg/L	0.89 J	6.5	1.4	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	2.6	4.3	1.5	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	1.3	5.4	1.6	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	0.88 J	4.3	1.1	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	0.42 J	3.4	0.24 J	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	0.66 J	3.1	0.99 J	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	0.38 J	2.7	0.86 J	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	0.22 J	2	0.79 J	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	0.67 J+	1.1 J+	0.78 J+	8.2 J+	3.3 J+	4.5 J+	< 0.01 U
12/05/2017	SW6020	µg/L	--	--	--	0.45 J	0.84	0.72	4.7	3.6	14.5	< 0.15 U
01/29-30/2018	SW6020	µg/L	0.62	1.2	0.55	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	0.63	3.0	0.72	14.7	9.6	21.3	< 0.15 U
03/26-28/2018	SW6020A	µg/L	--	--	--	0.90	6.0	0.64	18.7	47.9	10.2	< 0.15 U
04/30-05/01/2018	SW6010	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	--	--	--	--	--	--	--
05/14-15/2018	SW6010	µg/L	--	--	--	< 2.5 U	7.1	< 2.5 U	21.5	74.2	6.6	< 2.5 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 2.5 U	10.6	3.2 J	31.3	54.7	6.4	< 2.5 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 2.5 U	8.5	12.2	17.0	53.8	5.2	< 2.5 U
10/15-16/2018	SW6010D	µg/L	--	--	--	< 2.5 U	9.0	11.5	14.8	54.8	7.3	< 2.5 U
10/15-16/2018	SW6020A	µg/L	0.42 J	0.82	0.76	--	--	--	--	--	--	--
09/09-13/2019	SW6020B	µg/L	0.34	0.28	0.34	0.52	0.12 J	4.7	17.4	30.4	2.9	< 0.050 U
03/02-05/2020	SW6020B	µg/L	1.2	0.78	0.37	3.1	13.0	5.2	18.3	27.2	3.5	< 0.050 U
08/24-28/2020	SW6020B	µg/L	0.60	0.28	0.26	3.5	14.3	7.0 J	19.5	12.5	3.0	< 0.050 U
2/23-26/2021	SW6020B	µg/L	0.50 J	0.39 J	0.36 J	2.2	22.1	6.1	12.1	8.9	2.8	< 0.050 U
8/30-9/1/2021	SW6020B	µg/L	0.39 J	0.12 J	0.42 J	4.6	15.9	7.6 J	10.9	5.7	2.6	< 0.050 U
02/07-10/2022	SW6020B	µg/L	1.4	0.23 J	0.45 J	2.9	15.0	4.3	9.6	3.8	2.5	< 0.050 U
08/29/-09/07/2022	SW6020B	µg/L	0.26 J	0.16 J	0.50 J	3.4	28.6	1.6	7.6	4.3	2.5	< 0.050 U
02/13-15/2023	SW6020B	µg/L	1.1	0.40 J	0.65 J	3.1	65.9	2.6	8.8	4.0	3.3	< 0.050 U
08/21-24/2023	SW6020B	µg/L	0.24 J	0.11 J	0.18 J	4.4	61.2	3.0	6.6	3.5	2.5	< 0.050 U
02/12-14/2024	SW6020B	µg/L	0.34 J	0.070 J	0.43 J	2.3	40.8	2.4	6.5	3.6	2.9	< 0.050 U
08/26-28/2024	SW6020B	µg/L	0.39 J	< 0.14 U	0.21 J	3.7	49.7	2.4	5.7	3.4	2.1	< 0.14 U
Copper												
10/27-11/01/2016	SW6020B	µg/L	< 1.20 U	6.9	11.2	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	5.5	< 1.20 U	1.4 J	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	2.4 J	< 1.20 U	< 1.20 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	3.2 J	3.2 J	2.7 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 1.20 U	< 1.20 U	< 1.20 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	2.3 J	1.5 J	2.3 J	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 1.20 U	< 1.20 U	< 1.20 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 1.20 U	< 1.20 U	< 1.20 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	0.99 J+	9.9 J+	1 J+	0.39 J+	< 0.12	1.1 J+	0.61
12/05/2017	SW6020	µg/L	--	--	--	0.46 J+	0.29 J+	0.28 J+	< 0.2 U	< 0.2 U	0.67 J+	0.57 J
02/14/2018	SW6020	µg/L	--	--	--	0.74 J+	< 0.20	0.24 J+	0.38 J+	< 0.20	< 0.20	0.40 J
03/26-28/2018	SW6020A	µg/L	--	--	--	0.51 J+	0.24 J+	0.22 J+	0.28 J+	0.36 J+	0.31 J	1.1
05/14-15/2018	SW6020A	µg/L	--	--	--	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	0.36 J+	1.2 J+	1.4
06/25-26/2018	SW6020A	µg/L	--	--	--	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U	0.65 J
08/15-16/2018	SW6020A	µg/L	--	--	--	< 0.22 U	0.71 J+	< 0.22 U	< 0.22 U	0.32 J+	< 0.22 U	0.46 J
10/15-16/2018	SW6020B	µg/L	--	--	--	< 0.12 U	< 0.12 U	1.1 J+	0.22 J+	1.6 J+	< 0.12 U	0.77
09/09-13/2019	SW6010D	µg/L	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
03/02-05/2020	SW6010D	µg/L	3.5 J	2.3 J	3.6 J	< 2.1 U	< 2.1 U	2.6 J	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
08/24-28/2020	SW6010D	µg/L	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
2/23-26/2021	SW6010D	µg/L	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
8/30-9/1/2021	SW6010D	µg/L	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
02/07-10/2022	SW6010D	µg/L	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
08/29/-09/07/2022	SW6010D	µg/L	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
02/13-15/2023	SW6010D	µg/L	< 2.6 U	< 3.5 U	< 2.6 U	< 3.68 U	< 3.68 U	< 3.68 U	< 3.68 U	< 2.6 U	< 3.68 U	2.8 J
08/21-24/2023	SW6010D	µg/L	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	17.2	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
02/12-14/2024	SW6010D	µg/L	2.5 J	< 0.62 U	1.4 J	< 0.62 U	< 1.5 U	< 0.62 U	< 0.62 U	< 0.62 U	< 0.62 U	< 0.62 U
08/26-28/2024	SW6010D	µg/L	0.76 J	< 0.62 U	0.81 J	< 0.62 U	< 0.62 U	< 0.62 U	< 0.62 U	< 0.62 U	< 0.62 U	< 0.62 U
Fluoride												
10/27-11/01/2016	SW9056A	mg/L	< 0.020 U	0.064 J	0.067 J	--	--	--	--	--	--	--
12/06-07/2016	SW9056A	mg/L	< 0.020 U	0.034 J	0.075 J	--	--	--	--	--	--	--
01/18-19/2017	SW9056A	mg/L	< 0.020 U	0.041 J	0.090 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW9056A	mg/L	< 0.020 U	0.040 J	0.034 J	--	--	--	--	--	--	--
04/10-12/2017	SW9056A	mg/L	< 0.020 U	0.025 J	0.10	--	--	--	--	--	--	--
05/11-12/2017	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.10	--	--	--	--	--	--	--
06/19-20/2017	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.10	--	--	--	--	--	--	--
07/24-25/2017	SW9056A	mg/L	< 0.050 U	< 0.050 U	< 0.050 U	--	--	--	--	--	--	--
09/06/2017	E300	mg/L	< 0.050 U	--	0.065 J	--	--	--	--	--	--	--
10/23/2017	SW9056A	mg/L	--	--	--	0.064 J	0.14	0.050 J	0.063 J	0.068 J	0.085 J	< 0.050 U
12/05/2017	SW9056A	mg/L	--	--	--	0.077 J	0.15	0.051 J	0.063 J	0.085 J	0.084 J	< 0.050 U
01/29-30/2018	E300	mg/L	< 0.050 U	< 0.050 U	0.11	--	--	--	--	--	--	--
02/14/2018	SW9056A	mg/L	--	--	--	0.074 J	0.15	0.059 J	< 0.050 U	0.062 J	0.094 J	< 0.050 U
03/26-28/2018	SW9056A	mg/L	--	--	--	0.060 J	0.15	0.065 J	< 0.050 U	0.061 J	0.077 J	< 0.050 U
04/30-05/01/2018	E300	mg/L	< 0.050 U	< 0.050 U	0.15	--	--	--	--	--	--	--
05/14-15/2018	SW9056A	mg/L	--	--	--	0.087 J	0.15	0.062 J	< 0.050 U	0.067 J	0.085 J	< 0.050 U
06/25-26/2018	SW9056A	mg/L	--	--	--	0.064 J	0.14	0.066 J	< 0.050 U	0.052 J	0.080 J	< 0.050 U
08/15-16/2018	SW9056A	mg/L	--	--	--	0.075 J	0.16	0.068 J	< 0.050 U	0.050 J	0.095 J	< 0.050 U
10/15-16/2018	E300	mg/L	< 0.050 U	< 0.050 U	0.11	--	--	--	--	--	--	--
10/15-16/2018	SW9056A	mg/L	--	--	--	0.078 J	0.15	0.061 J	< 0.050 U	0.068 J	0.092 J	< 0.050 U
01/07-08/2019	E300	mg/L	< 0.050 U	0.40	0.15	0.081 J	0.14	0.081 J	0.053 J	0.073 J	0.10	< 0.050 U
09/09-13/2019	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.12	0.073 J	0.13	0.073 J	< 0.050 U	< 0.050 U	0.12	< 0.050 U
03/02-05/2020	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.10	0.070 J	0.14	0.070 J	0.054 J	0.058 J	0.10	< 0.050 U
08/24-28/2020	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.12	0.070 J	0.14	0.072 J	0.060 J	0.051 J	0.088 J	< 0.050 U
2/23-26/2021	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.16	0.077 J	0.21	0.055 J	0.072 J	0.081 J	0.14	< 0.050 U
8/30-9/1/2021	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.094 J	0.080 J	0.15 J	0.079 J	0.086 J	0.077 J	0.11 J	< 0.050 U
02/07-10/2022	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.11	0.071 J	0.12	0.059 J	0.062 J	0.062 J	0.085 J	< 0.050 U
08/29/-09/07/2022	SW9056A	mg/L	0.052 J	0.050 J	0.12	0.15	0.18	0.14	0.18	0.12	0.21	< 0.050 U
02/13-15/2023	SW9056A	mg/L	< 0.050 U	0.051 J	0.11	0.090 J	0.12	0.14	0.091 J	0.12	0.18	< 0.050 U
08/21-24/2023	SW9056A	mg/L	< 0.050 U	0.053 J	0.13	0.095 J	0.12	0.080 J	0.086 J	0.081 J	0.11	< 0.050 U
02/12-14/2024	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.12	0.092 J	0.10	0.075 J	0.077 J	0.084 J	0.11	< 0.050 U
08/26-28/2024	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.13	0.059 J	0.10	0.098 J	0.061 J	0.10	0.14	< 0.050 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	Method	Unit										
Hardness												
09/09-13/2019	SW6010D	µg/L	101000	42500	168000	122000	470000	350000	157000	161000	146000	<131 U
03/02-05/2020	SM2340B	µg/L	104000	57900	164000	125000	420000	322000	155000	164000	155000	<131 U
08/24-28/2020	SM2340B	µg/L	106000	53300	156000	123000	456000	306000	202000	154000	145000	<131 U
2/23-26/2021	SM2340B	µg/L	104000	39100	143000	122000	415000	333000	225000	155000	157000	<131 U
8/30-9/1/2021	SM2340B	µg/L	104000	29800	152000	123000	367000	283000	220000	144000	151000	<131 U
02/07-10/2022	SM2340B	µg/L	107000	35100	149000	153000	371000	315000	224000	152000	156000	154 J
08/29/-09/07/2022	SM2340B	µg/L	104000	31700	14400	165000	348000	344000	229000	146000	157000	<131 U
02/13-15/2023	SM2340B	µg/L	107000	34200	161000	211000	356000	345000	198000	146000	147000	< 506 U
08/21-24/2023	SM2340B	µg/L	104000	26400	148000	186000	344000	328000	224000	152000	157000	<131 U
02/12-14/2024	SM2340B	µg/L	103000	24200	147000	196000	313000	478000	210000	139000	166000	< 36.8 U
08/26-28/2024	SM2340B	µg/L	103000	25300	143000	222000	305000	331000	229000	146000	160000	< 36.8 U
Hexavalent Chromium												
09/09-13/2019	SW7196A	µg/L	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
11/18-20/2019	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	5	6	< 5 U
12/18/2019	SW7196A	µg/L	--	--	--	--	--	--	< 5 U	--	--	--
03/02-05/2020	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
06/02-05/2020	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
08/24-28/2020	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 50 U	< 5 U	< 5 U	< 5 U
12/01-03/2020	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	68	< 5 U	< 5 U	< 5 U	< 5 U
2/23-26/2021	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
6/8/2021	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	7	< 5 U	< 5 U	< 5 U
8/30-9/1/2021	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	14	< 5 U	10	< 5 U	< 5 U	< 5 U
02/07-10/2022	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
08/29/-09/07/2022	SW7196A	µg/L	< 5 U	10	13	13	< 5 U	< 5 U	27	< 5 U	< 5 U	< 5 U
02/13-15/2023	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	7	< 5 U	19	11	< 5 U	< 5 U	< 5 U
08/21-24/2023	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 5 U
02/12-14/2024	SW7199	µg/L	0.085	0.50	< 0.025 U	< 0.025 U	< 0.025 U	< 0.025 U	< 0.0043 U	0.096	< 0.025 UJ	< 0.025 U
08/26-28/2024	SW7199	µg/L	1.1 J	1.0 J	0.38 J	< 0.10 U	< 0.010 U	0.13	< 0.0043 UJ	0.42 J	0.14	0.025
Iron												
09/09-13/2019	SW6020B	µg/L	204	62.9	748	596	421	5940	6310	743	652	< 7.5 U
03/02-05/2020	SW6020B	µg/L	1180	234	737	5580	1810	8520	7130	1160	806	< 7.5 U
08/24-28/2020	SW6020B	µg/L	593	268	926	6930	3150	10100	8830	395	615	< 20.9 U
2/23-26/2021	SW6020B	µg/L	502	764	702	5060	1090	13700	9900	378	667	< 20.9 U
8/30-9/1/2021	SW6020B	µg/L	193	< 67.1 U	796	6980	2160	12100	11100	167	445	< 20.9 U
02/07-10/2022	SW6020B	µg/L	1280	207	862	8260	1190	9900	10200	67.1	464	< 20.9 U
08/29/-09/07/2022	SW6020B	µg/L	130	306	545	8180	1140	8070	10100	83.2	434	< 20.9 U
02/13-15/2023	SW6020B	µg/L	1010	847	481	13000	1340	10500	9310	115	601	< 20.9 U
08/21-24/2023	SW6020B	µg/L	232	136	355	9070	1120	10500	10400	71.6	426	< 20.9 U
02/12-14/2024	SW6020B	µg/L	313	84.1	418	9810	455	9980	10300	76.5	462	< 20.9 U
08/26-28/2024	SW6020B	µg/L	393	201	471	11400	1180	9870	10300	63.2	342	< 3.0 U
Lead												
10/27-11/01/2016	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	0.081 J	0.16	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U
12/05/2017	SW6020	µg/L	--	--	--	0.029 J	0.056 J	0.052 J	< 0.028 U	< 0.028	0.045 J	< 0.028 U
01/29-30/2018	SW6020	µg/L	0.032 J+	0.045 J+	0.38 J+	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	0.050 J	< 0.028 U	0.051 J	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
03/26-28/2018	SW6020A	µg/L	--	--	--	0.032 J	0.043 J	< 0.028 U	0.044 J	0.22	0.034 J	< 0.028 U
04/30-05/01/2018	SW6010	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	--	--	--	--	--	--	--
05/14-15/2018	SW6010	µg/L	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
10/15-16/2018	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
09/09-13/2019	SW6020B	µg/L	< 0.050 U	< 0.050 U	0.11 J	0.13	0.11 J	0.054 J	< 0.050	0.14 J	< 0.050 U	< 0.050 U
03/02-05/2020	SW6020B	µg/L	0.050 J	0.077 J	0.30	< 0.050 U	0.12	0.080 J	0.23	0.20	< 0.050 U	< 0.050 U
08/24-28/2020	SW6020B	µg/L	< 0.077 U	< 0.077 U	0.19	< 0.077 U	< 0.077 U	< 0.077 U	0.15	< 0.077 U	< 0.077 U	< 0.077 U
2/23-26/2021	SW6020B	µg/L	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	<0.38	<0.15 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U
8/30-9/1/2021	SW6020B	µg/L	< 0.077 U	< 0.077 U	0.089 J	< 0.077 U	< 0.14 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U
02/07-10/2022	SW6020B	µg/L	0.13 J	< 0.077 U	0.11 J	< 0.077 U	0.13 J	< 0.077 U	0.12 J	< 0.077 U	< 0.077 U	< 0.077 U
08/29/-09/07/2022	SW6020B	µg/L	< 0.077 U	< 0.077 U	0.087 J	< 0.077 U	< 0.077 U	< 0.077 U	0.12 J	< 0.077 U	< 0.077 U	< 0.077 U
02/13-15/2023	SW6020B	µg/L	< 0.092 U	< 0.12 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	1.3
08/21-24/2023	SW6020B	µg/L	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	0.69 J	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U
02/12-14/2024	SW6020B	µg/L	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	0.13 J	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U
08/26-28/2024	SW6020B	µg/L	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
Lithium												
10/27-11/01/2016	SW6020B	µg/L	1 J	2.3 J	2.8 J	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	3.5 B	< 0.7 U	7.6 B	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 0.7 U	< 0.7 U	5.2 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.7 U	0.86 B	2.9 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.7 U	< 0.7 U	< 0.7 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	3.9 J+	2.3 J	4.2 J	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.7 U	1.2 J	3.7 J	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	0.79 J	1.3 J	3 J	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	1.9 J+	348 J+	19.1 J+	2.4 J+	2.5 J+	2.8 J+	0.078 J
12/05/2017	SW6020	µg/L	--	--	--	1.5	509	18.9	1.8	2.1	2.1	< 0.17 U
01/29-30/2018	SW6020	µg/L	0.43 J	0.75	2.7	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	1.5	468	197	1.6	2.0	2.3	< 0.17 U
03/26-28/2018	SW6020A	µg/L	--	--	--	1.6	445	198	1.7	2.0	1.8	< 0.17 U
04/30-05/01/2018	SW6020A	µg/L	0.48 J	0.80	2.0	--	--	--	--	--	--	--
05/14-15/2018	SW6020A	µg/L	--	--	--	0.84 J	500	243	1.2 J	1.5 J	1.2 J	< 0.17 U
06/25-26/2018	SW6010C	µg/L	--	--	--	5.6 J+	460	186	5.5 J+	5.8 J+	4.9 J+	4.2 J+
08/15-16/2018	SW6010C	µg/L	--	--	--	< 4.6 U	523	228	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
10/15-16/2018	SW6020B	µg/L	0.43 J	0.77 J	2.1 J	1.3 J	356	203	1.9 J	2.1 J	1.6 J	< 0.070 U
09/09-13/2019	SW6020B	µg/L	< 0.42 U	0.50 J	2.2 J	49.1	6.9	139	1.3 J	1.7 J	1.2 J	< 0.42 U
10/10/2019	SW6020B	µg/L	--	--	--	1.1	--	--	--	--	--	--
03/02-05/2020	SW6020B	µg/L	< 0.42 U	< 0.42 U	1.4 J	1.3 J	330	121	1.5 J	1.8 J	1.4 J	0.57 J+
08/24-28/2020	SW6020B	µg/L	< 0.39 U	0.56 J	1.6 J	1.0 J	351	91.7	1.3 J	1.5 J	1.2 J	< 0.39 U
2/23-26/2021	SW6020B	µg/L	< 0.50 U	0.78 J	1.7 J	1.1 J	277	64.1	1.6 J	1.7 J	1.1 J	< 0.50 U
8/30-9/1/2021	SW6020B	µg/L	< 0.50 U	0.54 J	1.6 J	2.0 J	188	69.4 J	1.6 J	1.9 J	1.3 J	< 0.50 U
02/07-10/2022	SW6020B	µg/L	< 0.50 U	0.54 J	1.5 J	1.3 J	177	49.7	1.3 J	1.5 J	1.1 J	< 0.50 U
08/29/-09/07/2022	SW6020B	µg/L	< 0.50 U	0.63 J	1.5 J	1.9 J	188	28.5	1.3 J	1.7 J	1.2 J	< 0.50 U
02/13-15/2023	SW6020B	µg/L	< 0.50 U	0.57 J	1.2 J	1.5 J	228	33.3	1.2 J	1.4 J	1.2 J	< 0.50 U
08/21-24/2023	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.1 J	2.7	186	40.9	1.5 J	2.0 J	1.5 J	< 0.50 U
02/12-14/2024	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.3 J	1.6 J	219	32.4	1.3 J	1.7 J	1.2 J	< 0.50 U
08/26-28/2024	SW6020B	µg/L	0.44 J	0.53 J	1.2 J	2.2 J	165	37.7	1.3 J	1.8 J	1.2 J	< 0.33 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	Method	Unit										
Manganese												
09/09-13/2019	SW6020B	µg/L	3.5	151	1740	1200	25.1	911	1760	1770	1050	< 0.14 U
03/02-05/2020	SW6020B	µg/L	12.8	209	1310	474	696	749	1310	1140	525	< 0.14 U
08/24-28/2020	SW6020B	µg/L	6.5	99.2	1300	564	956	745	1650	1090	855	< 0.47 U
2/23-26/2021	SW6020B	µg/L	6.2	39.8	1320	403	567	1040	1710	1010	502	< 1.0 U
8/30-9/1/2021	SW6020B	µg/L	4.5	15	1210	582	745	859	1780	1150	588	< 1.0 U
02/07-10/2022	SW6020B	µg/L	13.2	26.0	1060	534	579	656	1610	863	637	< 1.0 U
08/29/-09/07/2022	SW6020B	µg/L	2.3	12.3	870	573	587	823	1510	953	570	< 1.0 U
02/13-15/2023	SW6020B	µg/L	11.8	24.7	942	782	659	835	1590	927	666	< 1.0 U
08/21-24/2023	SW6020B	µg/L	2.2	7.7	846	675	690	725	1570	942	730	< 1.0 U
02/12-14/2024	SW6020B	µg/L	3.0	4.9	913	640	871	748	1540	1090	628	< 1.0 U
08/26-28/2024	SW6020B	µg/L	3.7	4.6	918	707	827	697	1550	1020	578	< 0.24 U
Mercury												
10/27-11/01/2016	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
12/06-07/2016	SW7470	µg/L	< 0.1 U	0.1 J	0.14 J	--	--	--	--	--	--	--
01/18-19/2017	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
04/10-12/2017	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
05/11-12/2017	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
06/19-20/2017	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
07/24-25/2017	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
10/23/2017	SW7470	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
12/05/2017	SW7470	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
01/29-30/2018	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
02/14/2018	SW7470	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
03/26-28/2018	SW7470	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
04/30-05/01/2018	SW7470	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	--	--	--	--	--	--	--
05/14-15/2018	SW7470	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
06/25-26/2018	SW7470A	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
08/15-16/2018	SW7470A	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
10/15-16/2018	SW7470A	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
08/15-16/2018	SW7470A	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
10/15-16/2018	SW7470A	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
09/09-13/2019	SW7470A	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
03/02-05/2020	SW7470A	µg/L	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
08/24-28/2020	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	0.13 J	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
2/23-26/2021	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
8/30-9/1/2021	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 R	< 0.12 R	< 0.12 R	< 0.12 R	< 0.12 R	< 0.12 R	< 0.12 R
02/07-10/2022	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	0.28	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
08/29/-09/07/2022	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
02/13-15/2023	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
08/21-24/2023	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
02/12-14/2024	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
08/26-28/2024	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Molybdenum												
10/27-11/01/2016	SW6020B	µg/L	< 1.10 U	7.6	46.1	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 1.10 U	2 J	15.7	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 1.10 U	1.7 J	16.4	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 1.10 U	1.3 J	12.8	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 1.10 U	1.4 J	3.5 J	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 1.10 U	< 1.10 U	5.5	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 1.10 U	< 1.10 U	3.8 J	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 1.10 U	< 1.10 U	3.3 J	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	13.4	140	25.3	3.2	0.77	1.9	< 0.11 U
12/05/2017	SW6020	µg/L	--	--	--	11.8	223	16.1	1.3	0.67	1	< 0.08 U
01/29-30/2018	SW6010	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	9.6	238	51.9	0.48 J	0.58	0.70	< 0.080 U
03/26-28/2018	SW6020A	µg/L	--	--	--	10.5	237	70.2	0.35 J	0.74	0.44 J	< 0.080 U
04/30-05/01/2018	SW6010	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	--	--	--	--	--	--	--
05/14-15/2018	SW6010	µg/L	--	--	--	10.2	229	99.4	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
06/25-26/2018	SW6010D	µg/L	--	--	--	11.2	191	92.0	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
08/15-16/2018	SW6010D	µg/L	--	--	--	9.1	196	118	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
10/15-16/2018	SW6010D	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	7.6	160	132	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
09/09-13/2019	SW6010D	µg/L	< 0.90 U	< 0.90 U	7.7	8.1	136	139	< 0.90 U	< 0.90 U	< 0.90 U	< 0.90 U
03/02-05/2020	SW6010D	µg/L	< 0.90 U	< 0.90 U	9.3	7.6	137	114	< 0.90 U	< 0.90 U	1.7 J	< 0.90 U
08/24-28/2020	SW6010D	µg/L	< 3.9 U	< 3.9 U	7.8	12.5	131	80.7	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
2/23-26/2021	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	13.9	166	43.4	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
8/30-9/1/2021	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	11.6 J+	93.9 J+	53.1 J	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/07-10/2022	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	15.6	117	57.9	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
08/29/-09/07/2022	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	11.2	105	26.6	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/13-15/2023	SW6010D	µg/L	< 1.6 U	< 1.6 U	< 1.6 U	18.1	93.5	35.3	< 1.16 U	2.2 J	< 1.16 U	< 1.6 U
08/21-24/2023	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	11.0	89.9	41.0	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/12-14/2024	SW6010D	µg/L	< 2.6 U	< 2.6 U	< 2.6 U	12.9	60.6	35.1	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
08/26-28/2024	SW6010D	µg/L	< 2.6 U	< 2.6 U	< 2.6 U	14.4	69.0	41.7	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
Nickel												
10/27-11/01/2016	SW6020B	µg/L	< 4.50 U	< 4.50 U	7.9	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 4.50 U	< 4.50 U	6.4	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 4.50 U	4.5 J	6.5	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	4.7 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	2.3	2.2	4.2	4.4	2.5	2.8	< 0.45 U
12/05/2017	SW6020	µg/L	--	--	--	0.8	0.67	2.1	0.78	2.3	1.7	0.13 J
02/14/2018	SW6020	µg/L	--	--	--	0.61	0.56	1.5	1.7	1.2	1.8	2.8
03/26-28/2018	SW6020A	µg/L	--	--	--	0.71	0.69	0.67	1.9	2.4	1.6	< 0.12 U
05/14-15/2018	SW6020A	µg/L	--	--	--	0.31 J	0.45 J	0.69	1.9	3.1	1.1	< 0.12 U
06/25-26/2018	SW6020A	µg/L	--	--	--	0.43 J	0.52	0.47 J	2.1	1.7	1.2	0.15 J
08/15-16/2018	SW6020A	µg/L	--	--	--	0.34 J	0.82	0.37 J	2.0	3.9	1.6	< 0.11 U
10/15-16/2018	SW6020B	µg/L	--	--	--	0.52	0.62	0.56	1.8	2.5	1.4	< 0.45 U
09/09-13/2019	SW6010D	µg/L	< 0.90 U	1.5 J	< 0.90 U	< 0.90 U	< 0.90 U	< 0.90 U	1.0 J	6.6	1.3 J	< 0.90 U
03/02-05/2020	SW6010D	µg/L	< 0.90 U	1.6 J	3.6 J	< 0.90 U	< 0.90 U	< 0.90 U	2.7 J	4.1 J	< 0.90	< 0.90 U
08/24-28/2020	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	6.3	< 3.5 U	< 3.5 U
2/23-26/2021	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	7.5	< 3.5 U	< 3.5 U
8/30-9/1/2021	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	7.0	< 3.5 U	< 3.5 U
02/07-10/2022	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	7.9	< 3.5 U	< 3.5 U
08/29/-09/07/2022	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	10.4	< 3.5 U	< 3.5 U
02/13-15/2023	SW6010D	µg/L	1.7 J	< 1.0 U	5.0	< 1.61 U	2.49 J	< 1.61 U	< 1.61 U	8.7	2.17 J	< 1.0 U
08/21-24/2023	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	10.1	< 3.5 U	< 3.5 U
02/12-14/2024	SW6010D	µg/L	< 0.88 U	< 0.88 U	2.6 J	< 0.88 U	1.8 J	< 0.88 U	0.97 J	8.7	2.3 J	< 0.88 U
08/26-28/2024	SW6010D	µg/L	< 0.88 U	< 0.88 U	1.5 J	1.3 J	2.2 J	< 0.88 U	1.1 J	9.8	2.6 J	< 0.88 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	**Method**	**Unit**										
Nitrate												
09/09-13/2019	SW9056A	mg/L	0.14	3.4	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U
03/02-05/2020	SW9056A	mg/L	< 0.060 U	4.8	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U
08/24-28/2020	SW9056A	mg/L	< 0.060 U	4.7	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	0.31	< 0.060 U	< 0.060 U
2/23-26/2021	SW9056A	mg/L	< 0.060 U	2.9	< 0.060 U	< 0.060 U	1.0	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U
8/30-9/1/2021	SW9056A	mg/L	< 0.060 U	1.7	< 0.060 U	< 0.060 UJ	4.3 J-	< 0.060 UJ	< 0.060 UJ	< 0.060 UJ	< 0.060 UJ	< 0.060 U
02/07-10/2022	SW9056A	mg/L	< 0.060 U	2.1	< 0.060 U	< 0.060 U	0.37	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U
08/29/-09/07/2022	SW9056A	mg/L	< 0.061 U	1.9	< 0.060 U	< 0.060 U	6.2	< 0.061 U	0.062 J	< 0.060 U	< 0.060 U	< 0.060 U
02/13-15/2023	SW9056A	mg/L	0.060 J	2.0	< 0.060 U	< 0.060 U	6.2	< 0.060 U	0.073 J	0.14	< 0.060 U	< 0.060 U
08/21-24/2023	SW9056A	mg/L	0.061 J	1.4	< 0.060 U	< 0.060 U	2.3	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U
02/12-14/2024	SW9056A	mg/L	0.061 J	1.3	< 0.060 U	< 0.060 U	2.8	< 0.060 U	< 0.060 U	0.067 J	< 0.060 U	< 0.060 U
08/26-28/2024	SW9056A	mg/L	< 0.060 UJ	1.2 J	0.093 J	< 0.060 UJ	0.84 J	< 0.060 UJ	0.10	< 0.060 UJ	< 0.060 UJ	< 0.060 UJ
pH												
10/27-11/01/2016	FIELD	SU	5.13	6.26	6.52	--	--	--	--	--	--	--
12/06-07/2016	FIELD	SU	5.12	5.49	6.82	--	--	--	--	--	--	--
01/18-19/2017	FIELD	SU	5.21	5.70	6.48	--	--	--	--	--	--	--
02/28-03/02/2017	FIELD	SU	4.93	5.56	6.87	--	--	--	--	--	--	--
04/10-12/2017	FIELD	SU	4.49	5.64	6.94	--	--	--	--	--	--	--
05/11-12/2017	FIELD	SU	5.03	5.64	6.78	--	--	--	--	--	--	--
06/19-20/2017	FIELD	SU	5.36	5.73	6.91	--	--	--	--	--	--	--
07/24-25/2017	FIELD	SU	5.64	5.82	6.98	--	--	--	--	--	--	--
09/06/2017	FIELD	SU	5.29	--	6.69	--	--	--	--	--	--	--
10/23/2017	FIELD	SU	--	--	--	6.59	7.38	7.40	6.59	6.37	6.53	--
12/05/2017	FIELD	SU	--	--	--	6.64	7.35	7.50	6.43	6.15	6.39	--
01/29-30/2018	FIELD	SU	5.33	5.97	6.80	--	--	--	--	--	--	--
02/14/2018	FIELD	SU	--	--	--	6.55	7.45	7.79	6.01	6.30	6.36	--
03/26-28/2018	FIELD	SU	5.36	5.82	7.25	6.26	7.17	7.11	5.90	6.24	6.15	--
04/30-05/01/2018	FIELD	SU	4.94	5.72	6.93	--	--	--	--	--	--	--
05/14-15/2018	FIELD	SU	5.50	5.94	7.18	6.43	7.20	7.35	6.02	6.10	6.17	--
06/25-26/2018	FIELD	SU	5.08	5.64	6.79	6.40	7.16	7.10	5.99	6.12	6.16	--
08/15-16/2018	FIELD	SU	5.33	5.71	6.83	6.51	7.15	7.30	6.00	6.00	6.24	--
10/15-16/2018	FIELD	SU	5.32	5.70	6.99	6.48	7.01	7.36	5.99	6.37	6.29	--
11/28-29/2018	FIELD	SU	5.20	5.67	7.09	7.54	6.70	7.10	5.74	6.27	6.01	--
01/07-08/2019	FIELD	SU	4.97	--	6.86	6.40	6.89	7.05	5.79	6.62	6.17	--
09/09-13/2019	FIELD	SU	5.20	5.53	6.65	6.07	6.64	6.91	5.83	5.92	5.60	--
11/18-20/2019	FIELD	SU	5.63	5.47	6.85	6.45	7.06	7.15	--	6.11	6.19	--
12/18/2019	FIELD	SU	--	--	--	--	--	--	5.80	--	--	--
03/02-05/2020	FIELD	SU	5.18	5.58	6.75	6.80	6.94	7.29	6.16	5.97	6.15	--
06/02-05/2020	FIELD	SU	5.16	5.54	6.77	6.36	7.09	7.08	5.91	5.98	6.11	--
08/24-28/2020	FIELD	SU	8.07	5.40	6.93	6.02	6.70	6.94	5.93	6.17	6.36	--
12/01-03/2020	FIELD	SU	5.31	5.81	7.19	6.55	6.73	7.26	6.51	6.31	6.35	--
2/23-26/2021	FIELD	SU	5.01	5.52	8.84	9.33	7.00	8.66	6.50	6.24	6.17	--
8/30-9/1/2021	FIELD	SU	5.27	5.58	6.66	6.18	6.44	7.08	6.37	5.79	6.06	--
02/07-10/2022	FIELD	SU	5.41	5.44	6.84	6.25	6.75	7.26	6.41	5.93	6.14	--
08/29/-09/07/2022	FIELD	SU	5.41	5.40	7.44	5.99	6.79	7.21	6.33	5.77	6.15	--
02/13-15/2023	FIELD	SU	5.03	4.86	6.41	6.21	6.75	7.00	6.44	6.14	6.23	--
08/21-24/2023	FIELD	SU	5.22	5.29	7.03	6.06	6.61	6.93	6.37	5.74	5.91	--
10/11/2023	FIELD	SU	--	--	--	--	--	--	--	--	6.03	--
02/12-14/2024	FIELD	SU	5.02	5.62	7.05	6.29	6.66	7.13	6.36	5.82	6.04	--
08/26-28/2024	FIELD	SU	5.14	5.35	7.12	5.97	6.40	6.95	6.33	5.71	6.06	--
Radium 226 and 228 combined												
10/27-11/01/2016	CALC	pCi/L	0.858 U	0.624 U	0.537 U	--	--	--	--	--	--	--
12/06-07/2016	CALC	pCi/L	0.0837 U	0.169 U	1.27 U	--	--	--	--	--	--	--
01/18-19/2017	CALC	pCi/L	0.526 U	0.865 U	0.329 U	--	--	--	--	--	--	--
02/28-03/02/2017	CALC	pCi/L	0.00490 U	0.729 U	1.39 U	--	--	--	--	--	--	--
04/10-12/2017	CALC	pCi/L	0.367 U	0.672 U	1.28	--	--	--	--	--	--	--
05/11-12/2017	CALC	pCi/L	0.205 U	0.602 U	0.381 U	--	--	--	--	--	--	--
06/19-20/2017	CALC	pCi/L	0.796 U	0.743 U	1.32 U	--	--	--	--	--	--	--
07/24-25/2017	CALC	pCi/L	0.233 U	0.288 U	0.303 U	--	--	--	--	--	--	--
10/23/2017	CALC	pCi/L	--	--	--	1.43	0.848 U	0.537 U	1.79	0.754 U	0.981 U	0.885
12/05/2017	CALC	pCi/L	--	--	--	1.08	0.576 U	0.0818 U	1.44 U	0.932 U	0.358 U	0.646
01/29-30/2018	CALC	pCi/L	0.477 U	1.01 U	0.635 U	--	--	--	--	--	--	--
02/14/2018	CALC	pCi/L	--	--	--	0.729 U	1.00 U	1.69	0.970 U	0.709 U	0.986 U	0.219 U
03/26-28/2018	CALC	pCi/L	--	--	--	0.103 U	0.561 U	0.693 U	0.648 U	1.83	0.681 U	0.857 U
04/30-05/01/2018	CALC	pCi/L	0.287 U	0.0797 U	0.864 U	--	--	--	--	--	--	--
05/14-15/2018	CALC	pCi/L	--	--	--	0.322 U	1.86	1.13	0.317 U	0.761 U	0.456 U	0.131 U
06/25-26/2018	CALC	pCi/L	--	--	--	0.904 U	0.855 U	0.848 U	1.34 U	1.63 U	0 U	0.370 U
08/15-16/2018	RA226RA228	pCi/L	--	--	--	0.455 U	1.70	1.34 U	1.08 U	0.958 U	1.56	1.15 U
10/15-16/2018	RA226RA228	pCi/L	1.37	0.534	1.27	1.47 U	0.0661 U	1.26 U	0.713 U	0.777 U	0.592 U	0.519 U
09/09-13/2019	RA226RA228	pCi/L	0.883 U	0.385 U	1.58	1.23 U	1.37	1.66	1.76	1.99	1.04 U	0.504 U
03/02-05/2020	RA226RA228	pCi/L	0.374 U	0.813 U	4.16	1.11 UJ	1.39 J	1.73	1.65	0.867 UJ	0.519 U	0.672 U
08/24-28/2020	RA226RA228	pCi/L	0.371 U	1.21	1.95	0.296 U	0.592 U	0.814 U	1.51	0.446 U	0.226 U	0.449 U
2/23-26/2021	RA226RA228	pCi/L	0.235 U	0.241 U	0.792 J	1.12 U	1.38 J	2.16	1.08 J	0.267 U	1.20 J	0.574 U
8/30-9/1/2021	RA226RA228	pCi/L	1.03 J	1.68 J	1.40 J	1.28 J	1.53 J	1.91 J	0.881 U	0.000 U	0.142 U	1.54 J
02/07-10/2022	RA226RA228	pCi/L	0.0765 U	0.145 U	1.43 J	1.37 J	2.05 J	1.64 J	1.07 U	0.360 UJ	0.0544 U	0.696 J
08/29/-09/07/2022	RA226RA228	pCi/L	0.404 U	1.05	1.46	0.888 J	0.681 J	1.48	1.48	1.71	0.301	0.160 U
02/13-15/2023	RA226RA228	pCi/L	0.662 U	0.331 UJ	2.37 J	1.41 J	1.10 J	1.86 J	1.19 J	0.159 U	0.601 U	0.978 J
08/21-24/2023	RA226RA228	pCi/L	1.09 U	0.847 U	1.37 U	0.965 U	1.01 U	2.37 J	0.459 U	0.387 U	0.708 U	1.33 J+
02/12-14/2024	RA226RA228	pCi/L	0.717 U	0.635 J	1.44 J	1.17 J	0.589 J	1.78 J	0.894 J	0.317 U	1.11 J	0.841 J
08/26-28/2024	RA226RA228	pCi/L	0.590 U	1.07 J	2.45 J+	1.66 J	1.07 J	2.89 J	1.46 J	1.92 J	0.228 U	0.285 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	**Method**	**Unit**										
Selenium												
10/27-11/01/2016	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.32 U	< 0.32 U	< 0.32 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U	< 0.32 U
12/05/2017	SW6020	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
01/29-30/2018	SW6010	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
03/26-28/2018	SW6020A	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
05/14-15/2018	SW6010	µg/L	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
06/25-26/2018	SW6010D	µg/L	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
08/15-16/2018	SW6010D	µg/L	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
10/15-16/2018	SW6010D	µg/L	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
09/09-13/2019	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
03/02-05/2020	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
08/24-28/2020	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
2/23-26/2021	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
8/30-9/1/2021	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/07-10/2022	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
08/29/-09/07/2022	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	5.0 J	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/13-15/2023	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	< 7.35 U	< 7.35 U	< 7.35 U	< 7.35 U	< 3.9 U	< 7.35 U	< 3.9 U
08/21-24/2023	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/12-14/2024	SW6010D	µg/L	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U
08/26-28/2024	SW6010D	µg/L	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U
Silver												
10/27-11/01/2016	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	1.8 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	1.5 J	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U
12/05/2017	SW6020	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
02/14/2018	SW6020	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
03/26-28/2018	SW6020A	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
05/14-15/2018	SW6020A	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
06/25-26/2018	SW6020A	µg/L	--	--	--	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
08/15-16/2018	SW6020A	µg/L	--	--	--	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
10/15-16/2018	SW6020B	µg/L	--	--	--	< 0.080 U	< 0.080 U	< 0.080 U	< 0.080 U	< 0.080 U	< 0.080 U	< 0.080 U
09/09-13/2019	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
03/02-05/2020	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
08/24-28/2020	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
2/23-26/2021	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
8/30-9/1/2021	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
02/07-10/2022	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
08/29/-09/07/2022	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
02/13-15/2023	SW6010D	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.54 U	< 1.54 U	< 1.54 U	< 1.54 U	< 1.0 U	< 1.54 U	< 1.0 U
08/21-24/2023	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
02/12-14/2024	SW6010D	µg/L	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
08/26-28/2024	SW6010D	µg/L	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
Sulfate												
10/27-11/01/2016	SW9056A	mg/L	6.5	35.2	64.2	--	--	--	--	--	--	--
12/06-07/2016	SW9056A	mg/L	7.0	13.5	169	--	--	--	--	--	--	--
01/18-19/2017	SW9056A	mg/L	7.1	24.2	179	--	--	--	--	--	--	--
02/28-03/02/2017	SW9056A	mg/L	7.1	28.1	152	--	--	--	--	--	--	--
04/10-12/2017	SW9056A	mg/L	6.1	29.7	134	--	--	--	--	--	--	--
05/11-12/2017	SW9056A	mg/L	7.4	35.0	128	--	--	--	--	--	--	--
06/19-20/2017	SW9056A	mg/L	8.2	40.3	138	--	--	--	--	--	--	--
07/24-25/2017	SW9056A	mg/L	6.6	37.2	118	--	--	--	--	--	--	--
09/06/2017	E300	mg/L	6.7	--	118	--	--	--	--	--	--	--
10/23/2017	SW9056A	mg/L	--	--	--	125	68.4	15.0	62.0	94.6	15.4	< 0.50 U
12/05/2017	SW9056A	mg/L	--	--	--	123	81.7	22.9	62.9	95.5	14.0	< 0.50 U
02/14/2018	SW9056A	mg/L	--	--	--	121	72.3	38.8	56.5	84.3	9.5	< 0.50 U
03/26-28/2018	SW9056A	mg/L	--	--	--	93.4	74.8	51.3	59.7	87.0	11.7	< 0.50 U
04/30-05/01/2018	E300	mg/L	6.2	26.2	99.6	--	--	--	--	--	--	--
05/14-15/2018	SW9056A	mg/L	--	--	--	99.3	74.1	56.9	60.4	85.1	14.4	< 0.50 U
06/25-26/2018	SW9056A	mg/L	--	--	--	98.3	79.9	56.6	64.7	88.8	14.6	< 0.50 U
08/15-16/2018	SW9056A	mg/L	--	--	--	94.7	79.7	50.1	58.4	94.6	13.7	< 0.50 U
10/15-16/2018	E300	mg/L	6.5	49.4	112	--	--	--	--	--	--	--
10/15-16/2018	SW9056A	mg/L	--	--	--	82.1	79.2	55.4	56.5	88.7	13.9	< 0.50 U
01/07-08/2019	E300	mg/L	7.0	24.4	105	77.8	73.0	53.8	54.2	59.8	12.3	< 0.50 U
09/09-13/2019	SW9056A	mg/L	7.3	19.8	95.6	60.5	72.5	43.9	61.6	94.5	13.5	< 0.50 U
03/02-05/2020	SW9056A	mg/L	7.3	29.9	91.3	55.0	77.1	49.5	60.5	95.6	12.2	< 0.50 U
08/24-28/2020	SW9056A	mg/L	6.8	27.2	73.4	56.8	71.0	44.2	60.7	93.2	12.4	< 0.50 U
2/23-26/2021	SW9056A	mg/L	7.4	20.5	66.7	75.7	70.4	46.8	61.6	80.7	15.7	< 0.50 U
8/30-9/1/2021	SW9056A	mg/L	5.2	10.8	59.4	80.5	67.9	43.0	56.0	82.4	14.7	< 0.50 U
02/07-10/2022	SW9056A	mg/L	6.5	15.4	60.2	99.0	62.9	38.4	51.2	75.0	13.6	< 0.50 U
08/29/-09/07/2022	SW9056A	mg/L	5.2	14.3	61.9	107	49.8	39.0	51.3	75.0	14.4	< 0.50 U
02/13-15/2023	SW9056A	mg/L	5.0	15.4	74.9	134	39.9	36.1	45.4	72.5	13.6	< 0.50 U
08/21-24/2023	SW9056A	mg/L	5.3	8.6	39.9	118	43.1	34.3	44.1	72.3	14.7	< 0.50 U
02/12-14/2024	SW9056A	mg/L	6.3	7.5	26.4	120	31.3	34.0	47.2	75.5	14.4	< 0.50 U
08/26-28/2024	SW9056A	mg/L	5.0	9.3	27.3	121	44.4	31.0	41.2	80.3	16.3	< 0.50 U

Appendix F
Historical Laboratory Monitoring Results
Bremo Power Station, East Pond
Solid Waste Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	**Method**	**Unit**										
Thallium												
10/27-11/01/2016	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 0.20 U	< 0.20 U	0.32 J	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.20 U	0.26 J	< 0.20 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U
12/05/2017	SW6020	µg/L	--	--	--	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
01/29-30/2018	SW6020	µg/L	< 0.028 U	< 0.028 U	< 0.028 U	--	--	--	--	--	--	--
02/14/2018	SW6020	µg/L	--	--	--	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
03/26-28/2018	SW6020A	µg/L	--	--	--	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
05/14-15/2018	SW6010	µg/L	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
06/25-26/2018	SW6020A	µg/L	--	--	--	0.029 J	< 0.026 U	< 0.026 U	< 0.026 U	< 0.026 U	< 0.026 U	< 0.026 U
08/15-16/2018	SW6020A	µg/L	--	--	--	< 0.026 U	< 0.026 U	< 0.026 U	< 0.026 U	< 0.026 U	< 0.026 U	< 0.026 U
10/15-16/2018	SW6020B	µg/L	--	--	--	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U
09/09-13/2019	SW6020B	µg/L	< 0.060 U	< 0.060 U	< 0.12 U	< 0.060 U	< 0.090 U	< 0.060 U	< 0.060 U	< 0.12	< 0.060 U	< 0.060 U
03/02-05/2020	SW6020B	µg/L	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U
08/24-28/2020	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
2/23-26/2021	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	<0.25 U	<0.10 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
8/30-9/1/2021	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
02/07-10/2022	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
08/29/-09/07/2022	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
02/13-15/2023	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
08/21-24/2023	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
02/12-14/2024	SW6020B	µg/L	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
08/26-28/2024	SW6020B	µg/L	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
Tin												
10/27-11/01/2016	SW6020B	µg/L	< 0.70 U	< 0.70 U	0.85 J	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	0.8 J	1.2 J	1.9 J	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	3.2 B	2.6 B	12.8	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	2.5 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	1 J+	1.8 J+	3 J	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	1.2 J	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	1 J	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	0.2 J	0.088 J	0.32 J	0.18 J	< 0.07 U	0.59	< 0.07 U
12/05/2017	SW6020	µg/L	--	--	--	0.14 J	0.12 J	0.6	< 0.11 U	< 0.11 U	0.5	< 0.11 U
02/14/2018	SW6020	µg/L	--	--	--	0.14 J	< 0.11 U	0.59	0.14 J	< 0.11	0.26 J	< 0.11 U
03/26-28/2018	SW6020A	µg/L	--	--	--	< 0.11 U	0.19 J	0.21 J	0.11 J	0.18 J	< 0.11 U	< 0.11 U
05/14-15/2018	SW6020A	µg/L	--	--	--	< 0.11 U	< 0.11 U	0.26 J	0.12 J	0.15 J	< 0.11 U	< 0.11 U
06/25-26/2018	SW6020A	µg/L	--	--	--	< 0.16 U	< 0.16 U	0.26 J	< 0.16 U	< 0.16 U	0.17 J	0.18 J
08/15-16/2018	SW6020A	µg/L	--	--	--	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
10/15-16/2018	SW6020B	µg/L	--	--	--	< 0.070 U	< 0.070 U	0.086 J	< 0.070 U	0.12 J	< 0.070 U	< 0.070 U
09/09-13/2019	SW6020B	µg/L	< 0.090 U	< 0.090 U	0.45 J	1.0	< 0.14 U	0.35 J	< 0.090 U	< 0.18 U	< 0.090 U	< 0.090 U
03/02-05/2020	SW6020B	µg/L	< 0.090 U	0.16 J	1.3	0.19 J	0.13 J	0.14 J	0.13 J	< 0.090 U	< 0.090 U	< 0.090 U
08/24-28/2020	SW6020B	µg/L	< 0.24 U	< 0.24 U	0.65	< 0.24 U	0.25 J	0.27 J	< 0.24 U	0.26 J	< 0.24 U	< 0.24 U
2/23-26/2021	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	<2.1 U	< 0.85 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
8/30-9/1/2021	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
02/07-10/2022	SW6020B	µg/L	< 0.43 U	< 0.43 U	0.50 J	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
08/29/-09/07/2022	SW6020B	µg/L	< 0.43 U	< 0.43 U	0.50 J	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
02/13-15/2023	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
08/21-24/2023	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
02/12-14/2024	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
08/26-28/2024	SW6020B	µg/L	< 0.14 U	< 0.14 U	0.24 J	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
Total Dissolved Solids												
10/27-11/01/2016	SM2540C	mg/L	148	199	179	--	--	--	--	--	--	--
12/06-07/2016	SM2540C	mg/L	360	142	540	--	--	--	--	--	--	--
01/18-19/2017	SM2540C	mg/L	127	161	518	--	--	--	--	--	--	--
02/28-03/02/2017	SM2540C	mg/L	134	194	544	--	--	--	--	--	--	--
04/10-12/2017	SM2540C	mg/L	150	209	549	--	--	--	--	--	--	--
05/11-12/2017	SM2540C	mg/L	132	200	525	--	--	--	--	--	--	--
06/19-20/2017	SM2540C	mg/L	148	220	570	--	--	--	--	--	--	--
07/24-25/2017	SM2540C	mg/L	129	211	542	--	--	--	--	--	--	--
09/06/2017	SM2540C	mg/L	136	--	541	--	--	--	--	--	--	--
10/23/2017	SM2540C	mg/L	--	--	--	261	508	382	420	316	243	< 25.0 U
12/05/2017	SM2540C	mg/L	--	--	--	262	598	374	388	306	233	< 25.0 U
02/14/2018	SM2540C	mg/L	--	--	--	263 J+	594	438 J+	310	326 J+	245 J+	121
03/26-28/2018	SM2540C	mg/L	--	--	--	272	596	462	293	326	222	< 25.0 U
04/30-05/01/2018	SM2540C	mg/L	141	178	612	--	--	--	--	--	--	--
05/14-15/2018	SM2540C	mg/L	--	--	--	256	670	463	275	315	187	< 25.0 U
06/25-26/2018	SM2540C	mg/L	--	--	--	241	688	481	258	291	215	< 25.0 U
08/15-16/2018	SM2540C	mg/L	--	--	--	261	692	504	262	299	226	< 25.0 U
10/15-16/2018	SM2540C	mg/L	145	250	559	251	610	502	259	355	238	< 25.0 U
01/07-08/2019	SM2540C	mg/L	138	167	546	238	570	460	236	317	224	< 25.0 U
09/09-13/2019	SM2540C	mg/L	41.0	152	580	115	484	360	395 J	72.0	179	< 25.0 U
03/02-05/2020	SM2540C	mg/L	131	169	498	227	526	452	263	271	221	< 25.0 U
08/24-28/2020	SM2540C	mg/L	144	196	492	235	570	421 J	327	296	223	27.0
2/23-26/2021	SM2540C	mg/L	153	169	257	236	484	437	349	287	236	< 25.0 U
8/30-9/1/2021	SM2540C	mg/L	137	126	429	222	434	393	335	267	218	< 25.0 U
02/07-10/2022	SM2540C	mg/L	133	137	447	276	438	406	328	265	209	< 25.0 U
08/29/-09/07/2022	SM2540C	mg/L	138	143	429	281	432	430	337	259	213	< 25.0 U
02/13-15/2023	SM2540C	mg/L	145	144	435	362	418	430	345	277	229 J	< 25.0 U
08/21-24/2023	SM2540C	mg/L	153	135	488	338	406	431	332	261	224	< 25.0 U
02/12-14/2024	SM2540C	mg/L	149	124	467	326	374	418	319	262	225	< 10.0 U
08/26-28/2024	SM2540C	mg/L	152	119	448	374	375	402	329	261	217	< 25.0 U

		Location	MW-11	MW-29S	MW-29D	MW-19	MW-20S	MW-20D	MW-21	MW-22	MW-23	Field Blank
Sample Date	Method	Unit										
Vanadium												
10/27-11/01/2016	SW6020B	µg/L	12.1	6.4	2.6 J	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	22.5	< 0.70 U	< 0.70 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	15	< 0.70 U	0.96 J	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	12.8	0.85 J	0.99 J	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	10.7	0.88 J	1.2 J	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	11.7	0.86 J	0.86 J	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	10.4	< 0.70 U	< 0.70 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	9.1	< 0.70 U	< 0.70 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	0.78 J+	0.48 J+	0.16 J+	0.16 J+	0.17 J+	0.094 J+	0.2 J
12/05/2017	SW6020	µg/L	--	--	--	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U
02/14/2018	SW6020	µg/L	--	--	--	0.61 J	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U
03/26-28/2018	SW6020A	µg/L	--	--	--	0.50 J	< 0.27 U	< 0.27 U	< 0.27 U	0.35 J	< 0.27 U	< 0.27 U
05/14-15/2018	SW6020A	µg/L	--	--	--	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U
06/25-26/2018	SW6020A	µg/L	--	--	--	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U
08/15-16/2018	SW6020A	µg/L	--	--	--	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U
10/15-16/2018	SW6020A	µg/L	--	--	--	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U	1.0 J	< 0.27 U	< 0.27 U
09/09-13/2019	SW6010D	µg/L	10.6	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U
03/02-05/2020	SW6010D	µg/L	16.2	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U
08/24-28/2020	SW6010D	µg/L	11.3	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
2/23-26/2021	SW6010D	µg/L	13.0	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
8/30-9/1/2021	SW6010D	µg/L	12.5	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/07-10/2022	SW6010D	µg/L	19.1	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
08/29/-09/07/2022	SW6010D	µg/L	11.8	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/13-15/2023	SW6010D	µg/L	9.9 J	1.9 J	1.6 J	0.28 J	0.42 J	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 1.0 U
08/21-24/2023	SW6010D	µg/L	10.6	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/12-14/2024	SW6010D	µg/L	15.9	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
08/26-28/2024	SW6010D	µg/L	11.2	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
Zinc												
10/27-11/01/2016	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
12/06-07/2016	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
01/18-19/2017	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
02/28-03/02/2017	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
04/10-12/2017	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
05/11-12/2017	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
06/19-20/2017	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
07/24-25/2017	SW6020B	µg/L	< 24 U	< 24 U	< 24 U	--	--	--	--	--	--	--
10/23/2017	SW6020B	µg/L	--	--	--	< 2.4 U	< 2.4 U	5.8 J+	< 2.4 U	< 2.4 U	6 J+	< 2.4 U
12/05/2017	SW6020	µg/L	--	--	--	0.94 J	1.8 J	1.8 J	2 J	2 J	2.2 J	< 0.82 U
02/14/2018	SW6020	µg/L	--	--	--	1.3 J+	< 0.82 U	1.8 J	17.9 J+	1.0 J	1.3 J	1.1 J
03/26-28/2018	SW6020A	µg/L	--	--	--	2.5 J+	1.8 J	1.9 J+	4.0 J+	8.6 J+	2.5 J+	1.1 J
05/14-15/2018	SW6020A	µg/L	--	--	--	1.7 J+	< 0.82 U	1.4 J	4.2 J+	5.8 J+	1.7 J	1.8 J
06/25-26/2018	SW6020A	µg/L	--	--	--	2.6 J+	< 1.9 U	< 1.9 U	3.4 J+	4.1 J+	2.5 J+	3.3 J
08/15-16/2018	SW6020A	µg/L	--	--	--	2.4 J+	2.8 J+	2.2 J+	4.9 J+	8.7 J+	3.6 J+	1.9 J
10/15-16/2018	SW6020B	µg/L	--	--	--	2.7 J	< 2.4 U	< 2.4 U	4.1 J	16.9	2.7 J	< 2.4 U
09/09-13/2019	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	11.5	< 3.9 U	< 3.9 U
03/02-05/2020	SW6010D	µg/L	< 3.9 U	< 3.9 U	11.5	< 3.9 U	< 3.9 U	< 3.9 U	11.5	4.6 J	< 3.9 U	< 3.9 U
08/24-28/2020	SW6010D	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
2/23-26/2021	SW6010D	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
8/30-9/1/2021	SW6010D	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
02/07-10/2022	SW6010D	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
08/29/-09/07/2022	SW6010D	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
02/13-15/2023	SW6010D	µg/L	< 11.0 U	< 11.0 U	< 11.0 U	< 6.52 U	< 6.52 U	< 6.52 U	< 6.52 U	< 11.0 U	10.9 J	< 11.0 U
08/21-24/2023	SW6010D	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	10.8	< 9.5 U	< 9.5 U	11.2	11.8	< 9.5 U
10/11/2023	SW6010D	µg/L	--	--	--	--	--	--	--	--	< 9.5 U	--
02/12-14/2024	SW6010D	µg/L	< 3.0 U	< 3.0 U	5.8 J	< 3.0 U	< 3.0 U	< 3.0 U	3.4 J	11.4	< 3.0 U	< 3.0 U
08/26-28/2024	SW6010D	µg/L	< 3.0 U	< 3.0 U	4.8 J	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	10.7	< 3.0 U	< 3.0 U

Notes:
µg/L = Microgram per liter
mg/L = Milligram per liter
pCi/L = picoCurie per liter
SU = Standard Units
J = Quantitation is approximate due to limitations encountered during data validation
J+ = Result is estimated, may be biased high
U = Not detected above the level of the reported sample quantitation limit
-- = Not Sampled

APPENDIX G
DATA VALIDATION FORMS

APPENDIX G.1
DATA VALIDATION FORMS
FIRST SEMI-ANNUAL GROUNDWATER MONITORING EVENT

ENVIRONMENTAL® STANDARDS
Montrose Environmental Group

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 2/12/2024 and 2/14/2024

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

92712987

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
021224NMW11	MW-11	N	SW-846 6010D	Barium	T	3.3	J	RL	0.79	5.0		ug/L
021224NMW11	MW-11	N	SW-846 6010D	Copper	T	2.5	J	RL	0.62	5.0		ug/L
021224NMW11	MW-11	N	SW-846 6020B	Cobalt	T	0.34	J	RL	0.050	1.0		ug/L
021224NMW11	MW-11	N	SW-846 9056A	Nitrate as N	N	0.061	J	RL	0.060	0.10		mg/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.

RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92712987

Lab Sample ID	92712987001
Sys Sample Code	021224NMW11
Sample Name	021224NMW11
Sample Date	2/12/2024 1:20:00 PM
Location	BPS-BKGD-MW-11 / MW-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	103000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	149				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	3.3	J	RL		0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L		U			4.0	4.0	50.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	19900				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L	2.5	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L	15.9				1.6	1.6	5.0	Y	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.34	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	313				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L		U			0.50	0.50	2.5	N	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	3.0				1.0	1.0	2.0	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.085				0.025	0.025	0.025	Y	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	11.4				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.050	0.050	0.10	N	Yes	1	NA

Lab Sample ID	92712987001
Sys Sample Code	021224NMW11
Sample Name	021224NMW11
Sample Date	2/12/2024 1:20:00 PM
Location	BPS-BKGD-MW-11 / MW-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	0.061	J	RL		0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	6.3				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92712987

Lab Sample ID	L1706899-01
Sys Sample Code	021224NMW11
Sample Name	021224NMW11
Sample Date	2/12/2024 1:20:00 PM
Location	BPS-BKGD-MW-11 / MW-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.717	U		0.385				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.239	U		0.248	0.339	0.339	0.339	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.478	U		0.294	0.523	0.523	0.523	N	Y	1	NA

ENVIRONMENTAL® STANDARDS
Montrose Environmental Group

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 2/12/2024 and 2/14/2024

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

92712991

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
021224NFBBLANK	Field Blank	FB	SW-846 6010D	Boron	T	24.0	J	RL	4.0	50.0		ug/L
021224NFBBLANK	Field Blank	FB	CALC	Combined Radium	N	0.841	J	Y,S			0.310	pCi/L
021224NFBBLANK	Field Blank	FB	SW-846 9320	RADIUM-228	N	0.662	J+	Y	0.461	0.461	0.262	pCi/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.

S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92712991

Lab Sample ID	92712991001
Sys Sample Code	021224NFBBLANK
Sample Name	021224NFBBLANK
Sample Date	2/12/2024 12:40:00 PM
Location	BPS-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L		U			36.8	36.8	662	N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			10.0	10.0	10.0	N	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L		U			0.79	0.79	5.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	24.0	J	RL		4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			14.7	14.7	100	N	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L		U			0.050	0.050	1.0	N	Yes	1	NA
	Iron	7439-89-6	T	ug/L		U			20.9	20.9	50.0	N	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L		U			0.50	0.50	2.5	N	Yes	1	NA
	Manganese	7439-96-5	T	ug/L		U			1.0	1.0	2.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U			0.025	0.025	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L		U			0.60	0.60	1.0	N	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.050	0.050	0.10	N	Yes	1	NA
	Nitrate as N	14797-55-8	N	mg/L		U			0.060	0.060	0.10	N	Yes	1	NA

Facility: Bremo Power Station
SDG: 92712991

Lab Sample ID	92712991001
Sys Sample Code	021224NFBBLANK
Sample Name	021224NFBBLANK
Sample Date	2/12/2024 12:40:00 PM
Location	BPS-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Sulfate	14808-79-8	N	mg/L		U			0.50	0.50	1.0	N	Yes	1	NA

Facility: Bremo Power Station
SDG: 92712991

Lab Sample ID	L1706897-01
Sys Sample Code	021224NFBBLANK
Sample Name	021224NFBBLANK
Sample Date	2/12/2024 12:40:00 PM
Location	BPS-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.841	J	Y,S	0.310				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.179	U		0.165	0.186	0.186	0.186	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.662	J+	Y	0.262	0.461	0.461	0.461	Y	Y	1	NA

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 2/12/2024 and 2/14/2024

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92713535

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
021424NMW19	MW-19	N	SW-846 6020B	Lithium	T	1.6	J	RL	0.50	2.5		ug/L
021424NMW19	MW-19	N	SW-846 9056A	Fluoride	N	0.092	J	RL	0.050	0.10		mg/L
021424NMW20S	MW-20S	N	EPA 350.1	Nitrogen, Ammonia	N	0.031	J	RL	0.031	0.10		mg/L
021424NMW20S	MW-20S	N	SW-846 6010D	Arsenic	T	4.0	J	RL	2.5	10.0		ug/L
021424NMW20S	MW-20S	N	SW-846 6010D	Copper	T		U	BL	1.5	5.0		ug/L
021424NMW20S	MW-20S	N	SW-846 6010D	Nickel	T	1.8	J	RL	0.88	5.0		ug/L
021424NMW20D	MW-20D	N	SW-846 6010D	Arsenic	T	3.7	J	RL	2.5	10.0		ug/L
021424NMW20D	MW-20D	N	SW-846 6020B	Lead	T	0.13	J	RL	0.077	1.0		ug/L
021424NMW20D	MW-20D	N	SW-846 9056A	Fluoride	N	0.075	J	RL	0.050	0.10		mg/L
021424NMW21	MW-21	N	SW-846 6010D	Nickel	T	0.97	J	RL	0.88	5.0		ug/L
021424NMW21	MW-21	N	SW-846 6010D	Zinc	T	3.4	J	RL	3.0	10.0		ug/L
021424NMW21	MW-21	N	SW-846 6020B	Lithium	T	1.3	J	RL	0.50	2.5		ug/L
021424NMW21	MW-21	N	SW-846 9056A	Fluoride	N	0.077	J	RL	0.050	0.10		mg/L
021424NMW22	MW-22	N	SW-846 6010D	Chromium	T	0.90	J	RL	0.63	5.0		ug/L
021424NMW22	MW-22	N	SW-846 6020B	Lithium	T	1.7	J	RL	0.50	2.5		ug/L
021424NMW22	MW-22	N	SW-846 9056A	Fluoride	N	0.084	J	RL	0.050	0.10		mg/L
021424NMW22	MW-22	N	SW-846 9056A	Nitrate as N	N	0.067	J	RL	0.060	0.10		mg/L
021424NMW23	MW-23	N	SW-846 6010D	Nickel	T	2.3	J	RL	0.88	5.0		ug/L
021424NMW23	MW-23	N	SW-846 6020B	Lithium	T	1.2	J	RL	0.50	2.5		ug/L
021424NMW23	MW-23	N	SW-846 7199	Chromium, Hexavalent	D		UJ	FD	0.025	0.025		ug/L
021424NEPFDDUPLICATE	MW-23	FD	SW-846 6010D	Nickel	T	2.9	J	RL	0.88	5.0		ug/L
021424NEPFDDUPLICATE	MW-23	FD	SW-846 6020B	Lithium	T	1.2	J	RL	0.50	2.5		ug/L
021424NEPFDDUPLICATE	MW-23	FD	SW-846 7199	Chromium, Hexavalent	D	0.12	J	FD	0.025	0.025		ug/L
021424NMW19	MW-19	N	CALC	Combined Radium	N	1.17	J	BF,BL,Y			0.417	pCi/L
021424NMW19	MW-19	N	SW-846 9320	RADIUM-228	N	0.670	U	BF,BL,Y	0.670	0.670	0.262	pCi/L
021424NMW20S	MW-20S	N	CALC	Combined Radium	N	0.589	J	S			0.456	pCi/L
021424NMW20D	MW-20D	N	CALC	Combined Radium	N	1.78	J	BF,BL,Y			0.569	pCi/L
021424NMW20D	MW-20D	N	SW-846 9320	RADIUM-228	N	0.695	U	BF,BL,Y	0.695	0.695	0.317	pCi/L
021424NMW21	MW-21	N	CALC	Combined Radium	N	0.894	J	S			0.403	pCi/L

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
021424NMW23	MW-23	N	CALC	Combined Radium	N	1.11	J	BF,BL,FD,Y			0.358	pCi/L
021424NMW23	MW-23	N	SW-846 9320	RADIUM-228	N	0.608	U	BF,BL,FD,Y	0.608	0.608	0.193	pCi/L
021424NEPFDDUPLICATE	MW-23	FD	CALC	Combined Radium	N	0.451	UJ	FD			0.361	pCi/L
021424NEPFDDUPLICATE	MW-23	FD	SW-846 9320	RADIUM-228	N	0.251	UJ	FD	0.430	0.430	0.242	pCi/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	92713535001
Sys Sample Code	021424NMW19
Sample Name	021424NMW19
Sample Date	2/14/2024 3:25:00 PM
Location	BPS-EAP-MW-19 / MW-19
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.22				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	196000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	326				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	101				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	969				4.0	4.0	50.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	12.9				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6010D	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	50600				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
SW-846 6020B	Iron	7439-89-6	T	ug/L	9810				105	105	250	Y	Yes	5	NA
	Manganese	7439-96-5	T	ug/L	640				5.1	5.1	10.0	Y	Yes	5	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	2.3				0.050	0.050	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.6	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U			0.025	0.025	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Sulfate	14808-79-8	N	mg/L	120				1.5	1.5	3.0	Y	Yes	3	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	8.5				0.60	0.60	1.0	Y	Yes	1	NA

Lab Sample ID	92713535001
Sys Sample Code	021424NMW19
Sample Name	021424NMW19
Sample Date	2/14/2024 3:25:00 PM
Location	BPS-EAP-MW-19 / MW-19
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Fluoride	16984-48-8	N	mg/L	0.092	J	RL		0.050	0.050	0.10	Y	Yes	1	NA
	Nitrate as N	14797-55-8	N	mg/L		U			0.060	0.060	0.10	N	Yes	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	92713535002
Sys Sample Code	021424NMW20S
Sample Name	021424NMW20S
Sample Date	2/14/2024 4:00:00 PM
Location	BPS-EAP-MW-20S / MW-20S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.031	J	RL		0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	313000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	374				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	4.0	J	RL		2.5	2.5	10.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	252				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	996				4.0	4.0	50.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	60.6				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	1.8	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6010D	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	82500				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U	BL		1.5	1.5	5.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
SW-846 6020B	Lithium	7439-93-2	T	ug/L	219				1.0	1.0	5.0	Y	Yes	2	NA
	Manganese	7439-96-5	T	ug/L	871				10.2	10.2	20.0	Y	Yes	10	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	40.8				0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	455				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U			0.025	0.025	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	6.4				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.10				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713535002
Sys Sample Code	021424NMW20S
Sample Name	021424NMW20S
Sample Date	2/14/2024 4:00:00 PM
Location	BPS-EAP-MW-20S / MW-20S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	2.8				0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	31.3				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	92713535003
Sys Sample Code	021424NMW20D
Sample Name	021424NMW20D
Sample Date	2/14/2024 4:30:00 PM
Location	BPS-EAP-MW-20D / MW-20D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.22				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	478000				184	184	3310	Y	Yes	5	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	418				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	3.7	J	RL		2.5	2.5	10.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	96.2				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	819				4.0	4.0	50.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	35.1				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6010D	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
SW-846 6010D	Calcium	7440-70-2	T	ug/L	108000				73.7	73.7	500	Y	Yes	5	NA
SW-846 6020B	Iron	7439-89-6	T	ug/L	9980				105	105	250	Y	Yes	5	NA
	Manganese	7439-96-5	T	ug/L	748				5.1	5.1	10.0	Y	Yes	5	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	2.4				0.050	0.050	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.13	J	RL		0.077	0.077	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	32.4				0.50	0.50	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U			0.025	0.025	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	11.9				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.075	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713535003
Sys Sample Code	021424NMW20D
Sample Name	021424NMW20D
Sample Date	2/14/2024 4:30:00 PM
Location	BPS-EAP-MW-20D / MW-20D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		U			0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	34.0				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	92713535004
Sys Sample Code	021424NMW21
Sample Name	021424NMW21
Sample Date	2/14/2024 1:30:00 PM
Location	BPS-EAP-MW-21 / MW-21
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.21				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	210000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	319				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	468				4.0	4.0	50.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	117				0.79	0.79	5.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	62600				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	0.97	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L	3.4	J	RL		3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6010D	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
SW-846 6020B	Iron	7439-89-6	T	ug/L	10300				105	105	250	Y	Yes	5	NA
	Manganese	7439-96-5	T	ug/L	1540				20.4	20.4	40.0	Y	Yes	20	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	6.5				0.050	0.050	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.3	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U			0.0043	0.0043	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	12.8				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.077	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713535004
Sys Sample Code	021424NMW21
Sample Name	021424NMW21
Sample Date	2/14/2024 1:30:00 PM
Location	BPS-EAP-MW-21 / MW-21
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		U			0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	47.2				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713535005
Sys Sample Code	021424NMW22
Sample Name	021424NMW22
Sample Date	2/14/2024 4:10:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	139000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	262				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	387				4.0	4.0	50.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	76.5				0.79	0.79	5.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	33700				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	0.90	J	RL		0.63	0.63	5.0	Y	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	8.7				0.88	0.88	5.0	Y	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L	11.4				3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6010D	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	1090				10.2	10.2	20.0	Y	Yes	10	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	3.6				0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	76.5				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.7	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.096				0.025	0.025	0.025	Y	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	15.3				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.084	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713535005
Sys Sample Code	021424NMW22
Sample Name	021424NMW22
Sample Date	2/14/2024 4:10:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	0.067	J	RL		0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	75.5				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713535006
Sys Sample Code	021424NMW23
Sample Name	021424NMW23
Sample Date	2/14/2024 2:50:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	166000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	225				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	160				4.0	4.0	50.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	66.6				0.79	0.79	5.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	33400				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	2.3	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6010D	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	628				5.1	5.1	10.0	Y	Yes	5	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	2.9				0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	462				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.2	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		UJ	FD		0.025	0.025	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	16.1				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.11				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713535006
Sys Sample Code	021424NMW23
Sample Name	021424NMW23
Sample Date	2/14/2024 2:50:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		U			0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	14.4				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	92713535007
Sys Sample Code	021424NEPFDDUPLICATE
Sample Name	021424NEPFDDUPLICATE
Sample Date	2/14/2024 3:00:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	FD
Matrix	GW
Parent Sample	021424NMW23

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	171000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	232				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	164				4.0	4.0	50.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	68.2				0.79	0.79	5.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	34400				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	2.9	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6010D	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	615				5.1	5.1	10.0	Y	Yes	5	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	2.9				0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	454				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.2	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.12	J	FD		0.025	0.025	0.025	Y	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	16.1				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.11				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713535007
Sys Sample Code	021424NEPFDDUPLICATE
Sample Name	021424NEPFDDUPLICATE
Sample Date	2/14/2024 3:00:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	FD
Matrix	GW
Parent Sample	021424NMW23

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		U			0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	14.4				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	L1706883-01
Sys Sample Code	021424NMW19
Sample Name	021424NMW19
Sample Date	2/14/2024 3:25:00 PM
Location	BPS-EAP-MW-19 / MW-19
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.17	J	BF,BL,Y	0.417				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.502			0.325	0.347	0.347	0.347	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.670	U	BF,BL,Y	0.262	0.670	0.670	0.670	N	Y	1	NA

Lab Sample ID	L1706883-02
Sys Sample Code	021424NMW20S
Sample Name	021424NMW20S
Sample Date	2/14/2024 4:00:00 PM
Location	BPS-EAP-MW-20S / MW-20S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.589	J	S	0.456				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.589			0.325	0.237	0.237	0.237	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	-0.0345	U		0.320	0.280	0.280	0.280	N	Y	1	NA

Lab Sample ID	L1706883-03
Sys Sample Code	021424NMW20D
Sample Name	021424NMW20D
Sample Date	2/14/2024 4:30:00 PM
Location	BPS-EAP-MW-20D / MW-20D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.78	J	BF,BL,Y	0.569				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	1.09			0.472	0.413	0.413	0.413	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.695	U	BF,BL,Y	0.317	0.695	0.695	0.695	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	L1706883-04
Sys Sample Code	021424NMW21
Sample Name	021424NMW21
Sample Date	2/14/2024 1:30:00 PM
Location	BPS-EAP-MW-21 / MW-21
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.894	J	S	0.403				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.630			0.356	0.338	0.338	0.338	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.264	U		0.189	0.345	0.345	0.345	N	Y	1	NA

Lab Sample ID	L1706883-05
Sys Sample Code	021424NMW22
Sample Name	021424NMW22
Sample Date	2/14/2024 4:10:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.317	U		0.361				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.283	U		0.263	0.345	0.345	0.345	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.0333	U		0.248	0.447	0.447	0.447	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	L1706883-06
Sys Sample Code	021424NMW23
Sample Name	021424NMW23
Sample Date	2/14/2024 2:50:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.11	J	BF,BL,FD,Y	0.358				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.501			0.302	0.242	0.242	0.242	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.608	U	BF,BL,FD,Y	0.193	0.608	0.608	0.608	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92713535

Lab Sample ID	L1706883-07
Sys Sample Code	021424NEPFDDUPLICATE
Sample Name	021424NEPFDDUPLICATE
Sample Date	2/14/2024 3:00:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	FD
Matrix	GW
Parent Sample	021424NMW23

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.451	UJ	FD	0.361				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.199	U		0.268	0.418	0.418	0.418	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.251	UJ	FD	0.242	0.430	0.430	0.430	N	Y	1	NA

ENVIRONMENTAL® STANDARDS
Montrose Environmental Group

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 2/12/2024 and 2/14/2024

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

92712988

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
021224NMW29S	MW-29S	N	SW-846 6010D	Chromium	T	1.1	J	RL	0.63	5.0		ug/L
021224NMW29S	MW-29S	N	SW-846 6020B	Cobalt	T	0.070	J	RL	0.050	1.0		ug/L
021224NMW29D	MW-29D	N	SW-846 6010D	Boron	T		U	BF	40.9	50.0		ug/L
021224NMW29D	MW-29D	N	SW-846 6010D	Copper	T	1.4	J	RL	0.62	5.0		ug/L
021224NMW29D	MW-29D	N	SW-846 6010D	Nickel	T	2.6	J	RL	0.88	5.0		ug/L
021224NMW29D	MW-29D	N	SW-846 6010D	Zinc	T	5.8	J	RL	3.0	10.0		ug/L
021224NMW29D	MW-29D	N	SW-846 6020B	Cobalt	T	0.43	J	RL	0.050	1.0		ug/L
021224NMW29D	MW-29D	N	SW-846 6020B	Lithium	T	1.3	J	RL	0.50	2.5		ug/L
021224NMW29S	MW-29S	N	CALC	Combined Radium	N	0.635	J	S			0.368	pCi/L
021224NMW29D	MW-29D	N	CALC	Combined Radium	N	1.44	J	S			0.470	pCi/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.

L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92712988

Lab Sample ID	92712988001
Sys Sample Code	021224NMW29S
Sample Name	021224NMW29S
Sample Date	2/12/2024 1:15:00 PM
Location	BPS-BKGD-MW-29S / MW-29S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	24200				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	124				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	16.5				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L		U			4.0	4.0	50.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	7310				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	1.1	J	RL		0.63	0.63	5.0	Y	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.070	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	84.1				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L		U			0.50	0.50	2.5	N	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	4.9				1.0	1.0	2.0	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.50				0.10	0.10	0.10	Y	Yes	4	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	10.9				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.050	0.050	0.10	N	Yes	1	NA

Lab Sample ID	92712988001
Sys Sample Code	021224NMW29S
Sample Name	021224NMW29S
Sample Date	2/12/2024 1:15:00 PM
Location	BPS-BKGD-MW-29S / MW-29S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	1.3				0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	7.5				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92712988002
Sys Sample Code	021224NMW29D
Sample Name	021224NMW29D
Sample Date	2/12/2024 1:00:00 PM
Location	BPS-BKGD-MW-29D / MW-29D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.21				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	147000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	467				10.0	10.0	10.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	33.7				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L		U	BF		40.9	40.9	50.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	42200				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L	1.4	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	2.6	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L	5.8	J	RL		3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.43	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	418				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.077	0.077	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.3	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.050	0.050	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.43	0.43	1.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	913				10.2	10.2	20.0	Y	Yes	10	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U			0.025	0.025	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	42.1				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.12				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92712988002
Sys Sample Code	021224NMW29D
Sample Name	021224NMW29D
Sample Date	2/12/2024 1:00:00 PM
Location	BPS-BKGD-MW-29D / MW-29D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		U			0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	26.4				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92712988

Lab Sample ID	L1706891-01
Sys Sample Code	021224NMW29S
Sample Name	021224NMW29S
Sample Date	2/12/2024 1:15:00 PM
Location	BPS-BKGD-MW-29S / MW-29S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.635	J	S	0.368				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.383			0.252	0.275	0.275	0.275	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.252	U		0.268	0.468	0.468	0.468	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92712988

Lab Sample ID	L1706891-02
Sys Sample Code	021224NMW29D
Sample Name	021224NMW29D
Sample Date	2/12/2024 1:00:00 PM
Location	BPS-BKGD-MW-29D / MW-29D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.44	J	S	0.470				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	1.12			0.372	0.191	0.191	0.191	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.319	U		0.287	0.511	0.511	0.511	N	Y	1	NA

APPENDIX G.2
DATA VALIDATION FORMS
SECOND SEMI-ANNUAL GROUNDWATER MONITORING EVENT

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 8/26/2024 and 8/29/2024

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

92749755

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
082624NFBBLANK	Field Blank	FB	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082624NFBBLANK	Field Blank	FB	CALC	Combined Radium	N	0.285	U	S			0.331	pCi/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.

S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92749755

Lab Sample ID	92749755001
Sys Sample Code	082624NFBBLANK
Sample Name	082624NFBBLANK
Sample Date	8/26/2024 12:30:00 PM
Location	BPS-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L		U			36.8	36.8	662	N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			25.0	25.0	25.0	N	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L		U			0.79	0.79	5.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L		U			4.0	4.0	50.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			14.7	14.7	100	N	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
	Iron	7439-89-6	T	ug/L		U			3.0	3.0	20.0	N	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L		U			0.33	0.33	2.5	N	Yes	1	NA
	Manganese	7439-96-5	T	ug/L		U			0.24	0.24	2.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.025				0.0043	0.0043	0.025	Y	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L		U			0.60	0.60	1.0	N	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.050	0.050	0.10	N	Yes	1	NA
	Nitrate as N	14797-55-8	N	mg/L		UJ	H		0.060	0.060	0.10	N	Yes	1	NA

Facility: Bremo Power Station
SDG: 92749755

Lab Sample ID	92749755001
Sys Sample Code	082624NFBBLANK
Sample Name	082624NFBBLANK
Sample Date	8/26/2024 12:30:00 PM
Location	BPS-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Sulfate	14808-79-8	N	mg/L		U			0.50	0.50	1.0	N	Yes	1	NA

Facility: Bremo Power Station
SDG: 92749755

Lab Sample ID	L1773945-01
Sys Sample Code	082624NFBBLANK
Sample Name	082624NFBBLANK
Sample Date	8/26/2024 12:30:00 PM
Location	BPS-FB / Field Blank
Sample Type	FB
Matrix	AQ
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.285	U	S	0.331				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.285	U		0.242	0.341	0.341	0.341	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	-0.0109	U		0.226	0.418	0.418	0.418	N	Y	1	NA

ENVIRONMENTAL® STANDARDS
Montrose Environmental Group

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 8/26/2024 and 8/29/2024

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

92749752

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
082624NMW11	MW-11	N	SW-846 6010D	Barium	T	3.0	J	RL	0.79	5.0		ug/L
082624NMW11	MW-11	N	SW-846 6010D	Copper	T	0.76	J	RL	0.62	5.0		ug/L
082624NMW11	MW-11	N	SW-846 6020B	Cobalt	T	0.39	J	RL	0.14	1.0		ug/L
082624NMW11	MW-11	N	SW-846 6020B	Lithium	T	0.44	J	RL	0.33	2.5		ug/L
082624NMW11	MW-11	N	SW-846 7199	Chromium, Hexavalent	D	1.1	J	H	0.086	0.50		ug/L
082624NMW11	MW-11	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits

MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92749752

Lab Sample ID	92749752001
Sys Sample Code	082624NMW11
Sample Name	082624NMW11
Sample Date	8/26/2024 12:05:00 PM
Location	BPS-BKGD-MW-11 / MW-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	103000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	152				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	3.0	J	RL		0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L		U			4.0	4.0	50.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	20300				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L	0.76	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L	11.2				1.6	1.6	5.0	Y	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.39	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	393				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	0.44	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	3.7				0.24	0.24	2.0	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	1.1	J	H		0.086	0.086	0.50	Y	Yes	20	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	11.2				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.050	0.050	0.10	N	Yes	1	NA

Lab Sample ID	92749752001
Sys Sample Code	082624NMW11
Sample Name	082624NMW11
Sample Date	8/26/2024 12:05:00 PM
Location	BPS-BKGD-MW-11 / MW-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		UJ	H		0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	5.0				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92749752

Lab Sample ID	L1773939-01
Sys Sample Code	082624NMW11
Sample Name	082624NMW11
Sample Date	8/26/2024 12:05:00 PM
Location	BPS-BKGD-MW-11 / MW-11
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.590	U		0.290				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.201	U		0.180	0.275	0.275	0.275	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.389	U		0.227	0.426	0.426	0.426	N	Y	1	NA

ENVIRONMENTAL® STANDARDS
Montrose Environmental Group

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 8/26/2024 and 8/29/2024

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

92749753

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
082624NMW29S	MW-29S	N	SW-846 6010D	Chromium	T	0.99	J	RL	0.63	5.0		ug/L
082624NMW29S	MW-29S	N	SW-846 6020B	Lithium	T	0.53	J	RL	0.33	2.5		ug/L
082624NMW29S	MW-29S	N	SW-846 7199	Chromium, Hexavalent	D	1.0	J	H	0.086	0.50		ug/L
082624NMW29S	MW-29S	N	SW-846 9056A	Nitrate as N	N	1.2	J	H	0.060	0.10		mg/L
082624NMW29D	MW-29D	N	SW-846 6010D	Boron	T	47.0	J	RL	4.0	50.0		ug/L
082624NMW29D	MW-29D	N	SW-846 6010D	Copper	T	0.81	J	RL	0.62	5.0		ug/L
082624NMW29D	MW-29D	N	SW-846 6010D	Nickel	T	1.5	J	RL	0.88	5.0		ug/L
082624NMW29D	MW-29D	N	SW-846 6010D	Zinc	T	4.8	J	RL	3.0	10.0		ug/L
082624NMW29D	MW-29D	N	SW-846 6020B	Cobalt	T	0.21	J	RL	0.14	1.0		ug/L
082624NMW29D	MW-29D	N	SW-846 6020B	Lithium	T	1.2	J	RL	0.33	2.5		ug/L
082624NMW29D	MW-29D	N	SW-846 6020B	Tin	T	0.24	J	RL	0.14	1.0		ug/L
082624NMW29D	MW-29D	N	SW-846 7199	Chromium, Hexavalent	D	0.38	J	H	0.0086	0.050		ug/L
082624NMW29D	MW-29D	N	SW-846 9056A	Nitrate as N	N	0.093	J	H	0.060	0.10		mg/L
082624NMW29S	MW-29S	N	CALC	Combined Radium	N	1.07	J	Y,S			0.299	pCi/L
082624NMW29S	MW-29S	N	SW-846 9320	RADIUM-228	N	0.860	J+	Y	0.458	0.458	0.251	pCi/L
082624NMW29D	MW-29D	N	CALC	Combined Radium	N	2.45	J+	Y			0.509	pCi/L
082624NMW29D	MW-29D	N	SW-846 9320	RADIUM-228	N	1.38	J+	Y	0.719	0.719	0.394	pCi/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
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Reason Codes and Explanations	
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BF	Field blank contamination.
BL	Laboratory blank contamination.
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L	LCS and LCSD recoveries outside of acceptance limits
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LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92749753

Lab Sample ID	92749753001
Sys Sample Code	082624NMW29S
Sample Name	082624NMW29S
Sample Date	8/26/2024 12:25:00 PM
Location	BPS-BKGD-MW-29S / MW-29S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	25300				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	119				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	16.6				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L		U			4.0	4.0	50.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	7650				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	0.99	J	RL		0.63	0.63	5.0	Y	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
	Iron	7439-89-6	T	ug/L	201				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	0.53	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	4.6				0.24	0.24	2.0	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	1.0	J	H		0.086	0.086	0.50	Y	Yes	20	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	10.1				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.050	0.050	0.10	N	Yes	1	NA

Lab Sample ID	92749753001
Sys Sample Code	082624NMW29S
Sample Name	082624NMW29S
Sample Date	8/26/2024 12:25:00 PM
Location	BPS-BKGD-MW-29S / MW-29S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	1.2	J	H		0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	9.3				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92749753

Lab Sample ID	92749753002
Sys Sample Code	082624NMW29D
Sample Name	082624NMW29D
Sample Date	8/26/2024 1:35:00 PM
Location	BPS-BKGD-MW-29D / MW-29D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.25				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	143000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	448				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	33.8				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	47.0	J	RL		4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	40600				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L	0.81	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	1.5	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L	4.8	J	RL		3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.21	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	471				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.2	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L	0.24	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	918				2.4	2.4	20.0	Y	Yes	10	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.38	J	H		0.0086	0.0086	0.050	Y	Yes	2	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	42.9				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.13				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92749753002
Sys Sample Code	082624NMW29D
Sample Name	082624NMW29D
Sample Date	8/26/2024 1:35:00 PM
Location	BPS-BKGD-MW-29D / MW-29D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	0.093	J	H		0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	27.3				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92749753

Lab Sample ID	L1773940-01
Sys Sample Code	082624NMW29S
Sample Name	082624NMW29S
Sample Date	8/26/2024 12:25:00 PM
Location	BPS-BKGD-MW-29S / MW-29S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.07	J	Y,S	0.299				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.207	U		0.162	0.220	0.220	0.220	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.860	J+	Y	0.251	0.458	0.458	0.458	Y	Y	1	NA

Facility: Bremo Power Station
SDG: 92749753

Lab Sample ID	L1773940-02
Sys Sample Code	082624NMW29D
Sample Name	082624NMW29D
Sample Date	8/26/2024 1:35:00 PM
Location	BPS-BKGD-MW-29D / MW-29D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	2.45	J+	Y	0.509				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	1.08			0.322	0.248	0.248	0.248	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.38	J+	Y	0.394	0.719	0.719	0.719	Y	Y	1	NA

This quality assurance (QA) review is based upon an examination of the data generated from the analyses of the samples collected as part of:

Bremo Power Station Groundwater Sampling
Samples Collected between: 8/26/2024 and 8/29/2024

This review was performed with guidance from the associated US EPA data validation guidelines and in accordance with the Quality Assurance Program Plan. These validation guidance documents specifically address analyses performed in accordance with the Contract Laboratory Program (CLP) analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the US EPA, SW-846, and Standard Methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the usability of the analytical results and compliance relative to the US EPA, SW-846, and Standard Methods utilized by the laboratory. This QA review was performed on the data associated with Job Number:

92750045

The findings offered in this report are based on a review of holding times and preservation, method blank results, field blank results, filter blank results, equipment blank results, tubing blank results, matrix spike/matrix spike duplicate recoveries and precision, laboratory control sample/laboratory control sample duplicate recoveries and precision, laboratory and field duplicate precision, total and dissolved results comparisons, and/or positive results between the method detection limit and quantitation limit.

The following results were qualified based on the data verification effort:

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
082724NMW21	MW-21	N	SW-846 6010D	Nickel	T	1.1	J	RL	0.88	5.0		ug/L
082724NMW21	MW-21	N	SW-846 6020B	Lithium	T	1.3	J	RL	0.33	2.5		ug/L
082724NMW21	MW-21	N	SW-846 7199	Chromium, Hexavalent	D		UJ	H	0.0043	0.025		ug/L
082724NMW21	MW-21	N	SW-846 9056A	Fluoride	N	0.061	J	RL	0.050	0.10		mg/L
082824NMW19	MW-19	N	SW-846 6010D	Nickel	T	1.3	J	RL	0.88	5.0		ug/L
082824NMW19	MW-19	N	SW-846 6020B	Lithium	T	2.2	J	RL	0.33	2.5		ug/L
082824NMW19	MW-19	N	SW-846 7199	Chromium, Hexavalent	D		U	BF	0.10	0.10		ug/L
082824NMW19	MW-19	N	SW-846 9056A	Fluoride	N	0.059	J	RL	0.050	0.10		mg/L
082824NMW19	MW-19	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082824NMW20S	MW-20S	N	SW-846 6010D	Arsenic	T	9.4	J	RL	2.5	10.0		ug/L
082824NMW20S	MW-20S	N	SW-846 6010D	Nickel	T	2.2	J	RL	0.88	5.0		ug/L
082824NMW20S	MW-20S	N	SW-846 7199	Chromium, Hexavalent	D		U	BF,H	0.010	0.025		ug/L
082824NMW20S	MW-20S	N	SW-846 9056A	Nitrate as N	N	0.84	J	H	0.060	0.10		mg/L
082824NMW20D	MW-20D	N	SW-846 6010D	Arsenic	T	4.1	J	RL	2.5	10.0		ug/L
082824NMW20D	MW-20D	N	SW-846 6010D	Chromium	T	0.74	J	RL	0.63	5.0		ug/L
082824NMW20D	MW-20D	N	SW-846 9056A	Fluoride	N	0.098	J	RL	0.050	0.10		mg/L
082824NMW20D	MW-20D	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082824NMW22	MW-22	N	SW-846 6020B	Lithium	T	1.8	J	RL	0.33	2.5		ug/L
082824NMW22	MW-22	N	SW-846 7199	Chromium, Hexavalent	D	0.42	J	H	0.022	0.12		ug/L
082824NMW22	MW-22	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082824NMW23	MW-23	N	SW-846 6010D	Nickel	T	2.6	J	RL	0.88	5.0		ug/L
082824NMW23	MW-23	N	SW-846 6020B	Lithium	T	1.2	J	RL	0.33	2.5		ug/L
082824NMW23	MW-23	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082824NEPFDDUPLICATE	MW-22	FD	SW-846 6010D	Chromium	T	0.72	J	RL	0.63	5.0		ug/L
082824NEPFDDUPLICATE	MW-22	FD	SW-846 6020B	Lithium	T	1.8	J	RL	0.33	2.5		ug/L
082824NEPFDDUPLICATE	MW-22	FD	SW-846 7199	Chromium, Hexavalent	D	0.35	J	H	0.0086	0.050		ug/L
082824NEPFDDUPLICATE	MW-22	FD	SW-846 9056A	Fluoride	N	0.095	J	RL	0.050	0.10		mg/L
082824NEPFDDUPLICATE	MW-22	FD	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082724NMW21	MW-21	N	CALC	Combined Radium	N	1.46	J	Y			0.318	pCi/L
082724NMW21	MW-21	N	SW-846 9320	RADIUM-228	N	0.939	J+	Y	0.393	0.393	0.220	pCi/L

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
082824NMW19	MW-19	N	CALC	Combined Radium	N	1.66	J	S			0.397	pCi/L
082824NMW20S	MW-20S	N	CALC	Combined Radium	N	1.07	J	Y			0.259	pCi/L
082824NMW20S	MW-20S	N	SW-846 9320	RADIUM-228	N	0.850	J+	Y	0.377	0.377	0.210	pCi/L
082824NMW20D	MW-20D	N	CALC	Combined Radium	N	2.89	J	Y			0.369	pCi/L
082824NMW20D	MW-20D	N	SW-846 9320	RADIUM-228	N	2.20	J+	Y	0.398	0.398	0.242	pCi/L
082824NMW22	MW-22	N	CALC	Combined Radium	N	1.92	J	Y,FD			0.376	pCi/L
082824NMW22	MW-22	N	SW-846 9315	Radium-226	N	0.762	J	FD	0.215	0.215	0.271	pCi/L
082824NMW22	MW-22	N	SW-846 9320	RADIUM-228	N	1.16	J+	Y	0.468	0.468	0.261	pCi/L
082824NEPFDDUPLICATE	MW-22	FD	CALC	Combined Radium	N	1.09	J	Y,FD,S			0.277	pCi/L
082824NEPFDDUPLICATE	MW-22	FD	SW-846 9315	Radium-226	N	0.135	UJ	FD	0.172	0.172	0.124	pCi/L
082824NEPFDDUPLICATE	MW-22	FD	SW-846 9320	RADIUM-228	N	0.958	J+	Y	0.448	0.448	0.248	pCi/L

Data Qualifiers	
U	The analyte was not detected above the level of the sample reporting limit.
J	Quantitation is approximate due to limitations identified during data validation.
J+	The result is an estimated quantity; the result may be biased high.
J-	The result is an estimated quantity; the result may be biased low.
UJ	The analyte was not detected; the reporting limit is approximate and may be inaccurate or imprecise.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination.
BF	Field blank contamination.
BL	Laboratory blank contamination.
BN	Negative laboratory blank contamination.
FD	Field duplicate imprecision.
FG	Total versus Dissolved Imprecision.
H	Holding time exceeded.
L	LCS and LCSD recoveries outside of acceptance limits
LD	Laboratory duplicate imprecision.
LP	LCS/LCSD imprecision.
M	MS and MSD recoveries outside of acceptance limits
MP	MS/MSD imprecision.
Q	Chemical Preservation issue.
RL	Reported Results between the MDL and QL.
S	Radium-226+228 flagged due to reporting protocol for combined results
T	Temperature preservation issue.
X	Percent solids < 50%.
Y	Chemical yield outside of acceptance limits
ZZ	Other

Facility: Bremo Power Station
SDG: 92750045

Lab Sample ID	92750045001
Sys Sample Code	082724NMW21
Sample Name	082724NMW21
Sample Date	8/27/2024 4:15:00 PM
Location	BPS-EAP-MW-21 / MW-21
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.20				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	229000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	329				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	125				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	659				4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	70800				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	1.1	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Iron	7439-89-6	T	ug/L	10300				9.0	9.0	60.0	Y	Yes	3	NA
	Manganese	7439-96-5	T	ug/L	1550				2.4	2.4	20.0	Y	Yes	10	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	5.7				0.14	0.14	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.3	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		UJ	H		0.0043	0.0043	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	11.3				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.061	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750045001
Sys Sample Code	082724NMW21
Sample Name	082724NMW21
Sample Date	8/27/2024 4:15:00 PM
Location	BPS-EAP-MW-21 / MW-21
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	0.10				0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	41.2				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92750045

Lab Sample ID	92750045002
Sys Sample Code	082824NMW19
Sample Name	082824NMW19
Sample Date	8/28/2024 12:00:00 PM
Location	BPS-EAP-MW-19 / MW-19
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.24				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	222000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	374				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	133				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	987				4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	59600				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	14.4				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	1.3	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	3.7				0.14	0.14	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	2.2	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 6020B	Iron	7439-89-6	T	ug/L	11400				14.9	14.9	100	Y	Yes	5	NA
	Manganese	7439-96-5	T	ug/L	707				1.2	1.2	10.0	Y	Yes	5	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U	BF		0.10	0.10	0.10	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	8.8				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.059	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750045002
Sys Sample Code	082824NMW19
Sample Name	082824NMW19
Sample Date	8/28/2024 12:00:00 PM
Location	BPS-EAP-MW-19 / MW-19
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		UJ	H		0.060	0.060	0.10	N	Yes	1	NA
SW-846 9056A	Sulfate	14808-79-8	N	mg/L	121				1.5	1.5	3.0	Y	Yes	3	NA

Lab Sample ID	92750045003
Sys Sample Code	082824NMW20S
Sample Name	082824NMW20S
Sample Date	8/28/2024 12:00:00 PM
Location	BPS-EAP-MW-20S / MW-20S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	305000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	375				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	9.4	J	RL		2.5	2.5	10.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	252				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	1490				4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	84400				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	69.0				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	2.2	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	49.7				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	1180				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	165				0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	827				1.2	1.2	10.0	Y	Yes	5	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U	BF,H		0.010	0.010	0.025	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	7.2				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.10				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750045003
Sys Sample Code	082824NMW20S
Sample Name	082824NMW20S
Sample Date	8/28/2024 12:00:00 PM
Location	BPS-EAP-MW-20S / MW-20S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L	0.84	J	H		0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	44.4				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92750045

Lab Sample ID	92750045004
Sys Sample Code	082824NMW20D
Sample Name	082824NMW20D
Sample Date	8/28/2024 12:55:00 PM
Location	BPS-EAP-MW-20D / MW-20D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L	0.14				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	331000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	402				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	4.1	J	RL		2.5	2.5	10.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	113				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	924				4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	99900				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	0.74	J	RL		0.63	0.63	5.0	Y	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	41.7				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L		U			0.88	0.88	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	2.4				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	9870				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	37.7				0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	697				1.2	1.2	10.0	Y	Yes	5	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.13				0.0043	0.0043	0.025	Y	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	11.8				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.098	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750045004
Sys Sample Code	082824NMW20D
Sample Name	082824NMW20D
Sample Date	8/28/2024 12:55:00 PM
Location	BPS-EAP-MW-20D / MW-20D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		UJ	H		0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	31.0				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92750045005
Sys Sample Code	082824NMW22
Sample Name	082824NMW22
Sample Date	8/28/2024 1:50:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	146000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	261				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	79.3				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	505				4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	36000				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	9.8				0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L	10.7				3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	3.4				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	63.2				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.8	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	1020				2.4	2.4	20.0	Y	Yes	10	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.42	J	H		0.022	0.022	0.12	Y	Yes	5	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	15.6				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.10				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750045005
Sys Sample Code	082824NMW22
Sample Name	082824NMW22
Sample Date	8/28/2024 1:50:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		UJ	H		0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	80.3				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92750045006
Sys Sample Code	082824NMW23
Sample Name	082824NMW23
Sample Date	8/28/2024 1:10:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	160000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	217				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	55.8				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	141				4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	33300				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.63	0.63	5.0	N	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	2.6	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	2.1				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	342				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.2	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	578				1.2	1.2	10.0	Y	Yes	5	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.14				0.0043	0.0043	0.025	Y	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	15.9				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.14				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750045006
Sys Sample Code	082824NMW23
Sample Name	082824NMW23
Sample Date	8/28/2024 1:10:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		UJ	H		0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	16.3				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92750045007
Sys Sample Code	082824NEPFDDUPLICATE
Sample Name	082824NEPFDDUPLICATE
Sample Date	8/28/2024 2:00:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	FD
Matrix	GW
Parent Sample	082824NMW22

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
EPA 350.1	Nitrogen, Ammonia	7664-41-7	N	mg/L		U			0.031	0.031	0.10	N	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	145000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	265				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Antimony	7440-36-0	T	ug/L		U			3.6	3.6	5.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	78.6				0.79	0.79	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.16	0.16	1.0	N	Yes	1	NA
	Boron	7440-42-8	T	ug/L	512				4.0	4.0	50.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.29	0.29	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	35500				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	0.72	J	RL		0.63	0.63	5.0	Y	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U			0.62	0.62	5.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			2.6	2.6	5.0	N	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	10.2				0.88	0.88	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			4.1	4.1	10.0	N	Yes	1	NA
	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L		U			1.6	1.6	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L	11.7				3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	3.5				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	69.9				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.18	0.18	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.8	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.028	0.028	0.20	N	Yes	1	NA
	Tin	7440-31-5	T	ug/L		U			0.14	0.14	1.0	N	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	1030				2.4	2.4	20.0	Y	Yes	10	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.35	J	H		0.0086	0.0086	0.050	Y	Yes	2	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.12	0.12	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	15.3				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.095	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750045007
Sys Sample Code	082824NEPFDDUPLICATE
Sample Name	082824NEPFDDUPLICATE
Sample Date	8/28/2024 2:00:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	FD
Matrix	GW
Parent Sample	082824NMW22

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW-846 9056A	Nitrate as N	14797-55-8	N	mg/L		UJ	H		0.060	0.060	0.10	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	79.5				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92750045

Lab Sample ID	L1773936-01
Sys Sample Code	082724NMW21
Sample Name	082724NMW21
Sample Date	8/27/2024 4:15:00 PM
Location	BPS-EAP-MW-21 / MW-21
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.46	J	Y	0.318				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.516			0.229	0.215	0.215	0.215	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.939	J+	Y	0.220	0.393	0.393	0.393	Y	Y	1	NA

Lab Sample ID	L1773936-02
Sys Sample Code	082824NMW19
Sample Name	082824NMW19
Sample Date	8/28/2024 12:00:00 PM
Location	BPS-EAP-MW-19 / MW-19
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.66	J	S	0.397				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.247	U		0.181	0.248	0.248	0.248	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.42			0.353	0.638	0.638	0.638	Y	Y	1	NA

Lab Sample ID	L1773936-03
Sys Sample Code	082824NMW20S
Sample Name	082824NMW20S
Sample Date	8/28/2024 12:00:00 PM
Location	BPS-EAP-MW-20S / MW-20S
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.07	J	Y	0.259				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.224			0.152	0.171	0.171	0.171	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.850	J+	Y	0.210	0.377	0.377	0.377	Y	Y	1	NA

Lab Sample ID	L1773936-04
Sys Sample Code	082824NMW20D
Sample Name	082824NMW20D
Sample Date	8/28/2024 12:55:00 PM
Location	BPS-EAP-MW-20D / MW-20D
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	2.89	J	Y	0.369				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.693			0.279	0.284	0.284	0.284	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	2.20	J+	Y	0.242	0.398	0.398	0.398	Y	Y	1	NA

Lab Sample ID	L1773936-05
Sys Sample Code	082824NMW22
Sample Name	082824NMW22
Sample Date	8/28/2024 1:50:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.92	J	Y,FD	0.376				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.762	J	FD	0.271	0.215	0.215	0.215	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.16	J+	Y	0.261	0.468	0.468	0.468	Y	Y	1	NA

Lab Sample ID	L1773936-06
Sys Sample Code	082824NMW23
Sample Name	082824NMW23
Sample Date	8/28/2024 1:10:00 PM
Location	BPS-EAP-MW-23 / MW-23
Sample Type	N
Matrix	GW
Parent Sample	

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	0.228	U		0.636				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.202	U		0.170	0.248	0.248	0.248	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.0260	U		0.613	1.12	1.12	1.12	N	Y	1	NA

Lab Sample ID	L1773936-07
Sys Sample Code	082824NEPFDDUPLICATE
Sample Name	082824NEPFDDUPLICATE
Sample Date	8/28/2024 2:00:00 PM
Location	BPS-EAP-MW-22 / MW-22
Sample Type	FD
Matrix	GW
Parent Sample	082824NMW22

Analytic Method	Chemical Name	CAS Rn	Fraction	Result Unit	Final Result	Final Qual	Reason code	Uncertainty	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Combined Radium	RA226/228	N	pCi/L	1.09	J	Y,FD,S	0.277				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.135	UJ	FD	0.124	0.172	0.172	0.172	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.958	J+	Y	0.248	0.448	0.448	0.448	Y	Y	1	NA